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**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON LEADERSHIP STYLE OF BANKING SECTOR"
AT
OM URBAN CO-OPERATIVE CREDIT SOCIETY LTD, NASALAPUR**

**Submitted to
RANI CHANNAMMA UNIVERSITY, BELAGAVI**



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

Miss. Anita Shinde

M.COM-IV SEMESTER

REGISTER NO: MC191602

UNDER THE GUIDANCE OF

SHRI. V. S. KHOT

K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201
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CERTIFICATE

This is to certify that Miss. Anita Shinde has satisfactorily completed the Project Report Entitled "A Study on Leadership Styles of banking Sector" At Om Urban Co-operative Credit Society Ltd, Nasalapur for the partial fulfilment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year 2020-2021.

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Dist : Belgaum

Ref. No.: 64/2021/1000

Date: 9 SEP 2021

CERTIFICATE



To whom so ever it may concern

This is certify that **Miss. ANITA SHINDE** (Reg. No. MC191602) M.COM 4th SEM Student of **K.L.E. Society's Basavaprbhu Kore Arts, Science and Commerce College Chikodi-591201**, Dist: Belgaum has successfully complited the project on "A Study At Leadership Style of Banking Sector" in our Society from 25/06/2021 To 31/08/2021.

During the period of project he fond sincerer hard working.

We wish here all success for her bright future.


Manager

Nasalapur Urban Co-op Credit Society Ltd.
Nasalapur

DECLARATION

I declare that the project report entitled "A Study on Leadership Style of Banking Sector" At Om Urban Co-operative society Ltd, Nasalapur is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. V. S. Khot, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 21/09/2021

Place: Chikodi



Miss. Anita Shinde

Register No: MC191602

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

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Miss. Anita Shinde

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CHAPTER – 1

INRODUCTION & RESEARCH DESIGN

- 1.1 Introduction
- 1.2 Review of Literature
- 1.3 Statement of the problem
- 1.4 Need of the study
- 1.5 Objective of the study
- 1.6 Scope of the study
- 1.7 Research Methodology
- 1.8 Limitations of the study
- 1.9 Chapter Scheme

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION:

Leadership styles in banking sector, which refers to a leadership styles in banking sector of particular service of Om urban co-operative credit society, leading an organisation can be compared to conducting an orchestra. The leader directs the various parts of the orchestra-the string, brass, woodwind, and percussion sections-indicating when and how they should play. It's fairly easy to pick up a baton, cue each section, and strike up the band of Om urban co-operative Credit society.

Leadership style is a leader to be effective among his followers is to consciously explore one's personal mastery of different approaches and adapt to various approaches based on the situation for effectiveness as a leader. Task and relationship behaviour is central to the idea of the leadership style of individual leaders and their effectiveness depends on how they use their styles to the situation. Leadership style is a key determinant towards the success or failure of the organization and is the behavioural approach of the leader to provide motivation and direction to his people. After the emergence of behavioural theory, Psychologists identified three major leadership styles, namely, democratic, autocratic and laissez-faire styles as leadership styles is considered being the most important determinant to increase employee motivation. In organizations, leadership style can affect the employee positively and negatively and also has its own consequences on the employee behaviour with respect to attitude, motivation, which in turn impacts the organizational performance. Autocratic leaders make a decision without involving their followers and laissez-faire leaders allow followers to make a decision by not being part of the process and democratic leaders involve their followers before making his decision. It is also one of the factors that intensify the commitment of the individuals towards the organization in Om urban co-operative society.

1.2 REVIEW OF LITERATURE:

a) Malik et, al., (2016) : These leaders practice the art of delegation, in which the leaders are hands-off and allow group members to take decision. There is not much interference between leaders and followers, they usually avoid responsibility, can't have feedback mechanism and delay the decision making. This style of functioning doesn't involve in the meaning full transaction and does nothing to affect the follower's behaviour outcomes. They usually avoid getting involved in

the decision making and work progress and allow things to happen and also have a weak relationship with organisational citizenship behaviour.

b) **Ozera, et, al. (2014):** describe the research on strategic leadership is mostly theoretical and case studies, not much work is done using empirical studies. Based on recent researches on the leadership behaviour, many styles are relevant to strategic leadership. The strategic leader need to influence others to enhance their performance towards the success of long-term organizational goals by managing change, handling ambiguity and providing right direction to the group by aligning workgroups to implement change.

c) **Yukl (2011) :** looks at how leaders enhance the meaning of spirituality in their day to day work involving the followers, Spiritual leadership is a blending of natural and spiritual qualities utilized for influencing God's people to accomplish God's purpose. Spiritual leadership doesn't focus on leader-centric approaches but more on "engaging all group members to meet spiritual needs to enhance organizational commitment and performance". Besides the spiritual aspect, engaging followers to achieving the desired goals is the key feature, which is common with both the transformational and servant leadership theory.

d) **Michael, (2010) & Ojokuku R.et.al :** In this style decision making is decentralized, the leader includes his followers in the decision-making process of planning and execution. The leader is concerned with maintaining group effectiveness and encourages members to express their ideas for task accomplishment. While democratic leadership sounds good in theory, but often is bogged down in its own slow process and workable results usually require an enormous amount of effort. Democratic leadership style stimulates more organisational citizenship behaviour among the employees. They are committed to procedures, systems and believe the same from their followers. Certain aspects of leadership like motivating and developing people are ignored by bureaucratic leaders.

e) **Robert K. Greenleaf 1970:** While servant leadership is a timeless concept, the phrase "Servant Leadership" was coined by Robert K. Greenleaf in "The Servant as Leader", first published in 1970. Chanakya, 4th century BCE, wrote in his book Arthashastra: "the king shall consider as good, not what pleases himself but what pleases his subjects. The king is a paid servant and enjoys the resources of the state together with the peoples". It is debated that transformational leaders focus on organization and organizational goals, whereas the servant leaders focus on followers.

1.3 STATEMENT OF THE PROBLEM:

Analysing Leadership styles in Banking sector with special reference Om Urban Co-operative Credit Society with the help of questionnaires for analysing how leadership impacting on performance organizational and it's staff.

1.4 NEED FOR THE STUDY:

The research study is needed to identify, explore and explain the character and relationship patterns among the organizational cultures, leadership styles, and performances. Implementing a suitable leadership style should adhere to the organizational culture to achieve the expected performance.

1.5 OBJECTIVE OF THE STUDY:

- To study relationship between managerial positions in the hierarchy and their leadership styles.
- To test, whether leadership styles depends on size of the organization,
- To test leadership styles and joining of bank Managers are correlated.
- To study how personality traits of bank managers affect the leadership styles followed.

1.6 SCOPE OF THE STUDY:

The scope of Leadership is a framework of competencies that enable leaders to lead as coaches. It focuses leaders on developing their people and their people's capabilities. They enable a leadership ability and approach that leaders use to improve and leverage their number one asset- their people. Retail banking is booming at the largest pace. The most prospective career opportunities for retail banking aspirants, The top skills and qualifications needed in Banking.

1.7 RESEARCH METHODOLOGY:

Methodology is the systematic approach to the given problem. In other words, it is the way in which we go for the collection of data. Therefore, the better way of collecting data is more important than the data collected, because ultimately the data collected id depend upon how we approach the data. The data has been collected in the following ways.

*** Tools for data collection:**

The tools for data collection are divided into two parts i.e.

- ❖ Primary Data
- ❖ Secondary Data

A) Primary data:

The data collected with the help and guidance of Shri Annasaba H Patil manager of the Om Urban Co-op Credit society ltd. Nasalapur Branch. The conversation helped to have an idea about the society, its functions and other aspects of the society.

*** Source of primary data:**

- 1) Observation
- 2) Discussion
- 3) Questionnaires

B) Secondary data:

Secondary data is data which has already collected by someone else and which is used for the study purpose.

- Secondary data includes books, journals, newsletters of Om Urban Co-op Credit society ltd. Nasalapur.

***Source of Secondary data:**

- 1) Internet
- 2) Books
- 3) Reference material

1.8 LIMITATIONS OF THE STUDY:

It is not possible for any leadership study to make it accurate due to many hurdles in the collection and computation of data. Some limitations of the study are listed below;

- ❖ Limitation of the study is sample size.
- ❖ Findings of the study are based on the assumption that respondents have disclosed in the questionnaire.
- ❖ It was very hard to get appointment from them.

- ❖ It is the limitation of the study it may not fit in other institution in the financial sector such as insurance companies, brokerage house in stock exchange, and leasing firms. There is a limitation of the leadership styles.

1.9 CHAPTER SCHEME:

CHAPTER - 1 INTRODUCTION AND RESEARCH DESIGN

The first chapter gives details on Introduction, Review of Literature, Statement of the problem, Need of the study, Objective of the study, Scope of the study, Research Methodology and Limitation of the study of Om urban Co-op Credit Society.

CHAPTER – 2 CONCEPTUAL FRAME WORK

It deals with introduction, Meaning, Definitions of the banks, Concept of leadership, strength of leadership, Styles of leadership, Types of leadership, Banking Entrepreneurs, Important of leadership and advantages and disadvantages of leadership Approaches of leadership in Om urban Co-op Credit Society.

CHAPTER – 3 COMPANY PROFILE

Introduction, features of co-operative, profile of bank, bank profile, origin of Om urban co-operative society, nature of society, aims and objectives of the society, history of bank: Indian banking structure, establishment of Society, board of directors, vision, mission of the society, product and service profile, strategy, swot analysis and requirement to open an account

CHAPTER – 4 DATA ANALYSIS AND INTERPRETATION

This chapter gives details regarding analysis and interpretation of data collected.

CHAPTER – 5 FINDING, SUGGESTION AND CONCLUSION

It deals with findings, suggestions conclusion of the study.

CHAPTER – 2

CONCEPTUAL FRAMEWORK

2.1 Meaning and definition of Leadership

2.2 Concept of Leadership

2.3 Leadership Strength

2.4 Styles of Leadership

2.5 Types of Leadership

2.6 Banking Entrepreneurs

2.7 Important of Leadership

2.8 Advantages of Leadership

2.9 Disadvantages of Leadership

2.10 Approaches of Leadership

2.11 Essential Leadership Qualities That Help Leaders to Achieve Greater Success

2.12 Features of Leadership

2.13 Qualities of a Leader

CONCEPTUAL FRAMEWORK

MEANING OF BANK:



A bank is an institution which deals in money and credit. In other words, a bank is an institution accepting money as deposit for lending.

Meaning of co-operative:

A co-operative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. Co-operative is organized group of people and democratically controlled enterprises.

They exist to serve their members and deposits and produce better benefits and service for them. Professionalism in co-operative banks reflects the co-existence of high level of skills and standards in performing, duties interested to an individual. Om Urban Co-op credit society need current future development. In information technology it is indeed necessary for co-operative banks to devotes attention to maximising their returns on every unit of recourses. In India, They play a very important role in the financial system. The co-operative banks in India from the integral part of our money market today therefore, a brief resume of their development should be taken in to account. The history of co-operative banks goes back to the 1904.

2.1 MEANING AND DEFINIATION OF LEADERSHIP

Leadership is all about harnessing people power for the attainment of a desired goal and thus the concept of leadership cannot be restricted to the Organizational context.

It pervades through all realms of society, whether it be in politics, religion or the corporate world.

Leadership is the ability of an individual or a group of individuals to influence and guide followers or other members of an organization.

DEFINITION OF LEADERSHIP:

- ❖ "The activity of influencing people to strive willingly for group objectives." – George R. Terry.
- ❖ "It is interpersonal influence exercised in a situation and directed through the communication process towards the attainment of specialized goals." – Robert Tannenbaum.
- ❖ "Leadership is influencing people to follow in the achievement of a common goal." – Koontz O' Donnell.
- ❖ "Leadership is the process whereby one individual influences other group members towards the attainment of defined group or organizational goals." – Baron & Greenberg

2.2 CONCEPT OF LEADERSHIP:

There are four major factors in leadership:-

1) Follower:

Different people require different styles of leadership. For example, a new hire requires more supervision than an experienced employee. A person who lacks motivation requires a different approach than one with a high degree of motivation. You must know your people! The fundamental starting point is having a good understanding of human nature, such as needs, emotions, and motivation.

2) Leader:

You must have an honest understanding of who you are, what you know, determines if a leader is successful. If they do not trust or lack confidence in their leader, then they will be uninspired. To be successful you have to convince your followers, not yourself or your superior, that you are worthy of being followed in leadership.

3) Communication:

You lead through two-way communication. Much of it is nonverbal. For instance, when you "set the example," that communicates to your people that you would not ask them to perform anything that you would not be willing to do. What and how you communicate either builds or harm the relationship between you and your employees.

4) Situation:

All are different. What you do in one situation will not always work in another, you must use your judgement to decide the best course of action and the leadership style needed for each situation.

2.3 LEADERSHIP STRENGTH:

Leadership is the ability of a person to guide people in group towards achieving a task at hand. There are many leadership qualities that help you to become a good leader. These are certain leadership strengths a person needs to capitalize on to be able to execute effective leadership. So,

Given below is a list that entails the important strengths of leadership that you need to keep in mind to be a good leader.

KEY LEADER STRENGTHS:

*** TASK EXECUTION:**

Coming up with a brilliant idea and executing that idea are two completely different things. Bringing an idea to life is not easier said than done. An idea really comes to life only when it is executed to perfection. Thus, this is one of the most important leadership strengths.

*** ENVISION:**

Before you go on to put any kind of strategy into place, you need to understand and envision what you wish to achieve.

*** LISTEN:**

Being the leader does not mean that you own the people you work with. Many people tend to get carried away and do not listen to their team members.

*** RELATIONSHIP BUILDING:**

No two people are alike and hence, even the thinking of no two people will match. Hence, there is always scope for discord and dispute within group members in leadership.

*** ACCEPT MISTAKES:**

There will be times when as a leader and as a group, you may fail. This will be a hard time for you but you need to understand that you have been patient.

2.4 STYLES OF LEADERSHIP:

Through history, great leaders have emerged with particular leadership styles in providing direction, implementing plans and motivating people. These can be broadly grouped in to 5 categories:

1) Authoritarian leadership:

Authoritarian leadership styles allow a leader to impose expectations and define outcomes. A one-person show can turn out to be Successful In situations when a leader is the most knowledgeable in the team.

2) Participative leadership:

Participative leadership styles are rooted in democratic theory. The essence is to involve team members thus feel included, engaged and motivated to contribute.

3) Delegative leadership:

Also known as "laissez-faire leadership" a delegative leadership style focuses on delegating initiative to team members. This can be successful strategy if team members are competent, take responsibility and prefer engaging in individual work.

4) Transactional leadership:

Transactional leadership styles use "transactions" between a leader and his or her followers – rewards, punishments and other exchanges – to get the job done.

5) Charismatic Leadership:

Charismatic leadership is defined by a leader who uses their communication skills, persuasiveness, and charm to influence others.

2.5 TYPES OF LEADERSHIP:

Leadership style is the results of a leader's philosophy, personality, and experience and value system. Leadership style based on authority can be 4 types:

1) Autocratic Leadership:

Autocratic leadership relies on coercion, and its style is paternalism, arbitrariness, command, and compliance. The autocratic leader gives orders which must be obeyed by the subordinates.

2) Democratic Leadership:

A democratic leader usually gives instructions only after consulting with the group. He sees to it that policies are worked out in group discussion and with the acceptance of the group.

3) Paternalistic Leadership:

Under paternalistic leadership, the leader assumes that his function is paternal. This style has been successful, particularly in Om urban Co-operative society because of its cultural background.

4) Free-Rein Leadership:

The leadership style which allows maximum freedom to followers may be called free-rein leadership. It gives employees a high degree of independence in their operations.

2.6 BANKING ENTREPRENEURS:

Entrepreneurial leadership is the ability to influence others to manage resources strategically in order to emphasize both opportunity-seeking and advantage seeking behaviours.

Banks will help in providing working capital assistance that becomes the lifeline of companies. Apart from that, banks will also provide financial help on regular basis like during expansion or play the role of middleman to connect entrepreneurs. Banks can connect people with huge pockets to people with great ideas.

Om urban co-operative credit society grants financial assistance to technically qualified, trained and experienced entrepreneurs for setting up new viable industrial projects. Loans are extended to technocrats who are unable to meet the normal margin requirements under the liberalized schemes.

2.7 IMPORTANT OF LEADERSHIP

1. Communication

Leaders help to communicate the vision and mission of the firm to employees. This provides direction and helps everybody identify the roles that best fit skills and experiences. Through clear communication, leaders encourage their subordinates to act for the actualization of objectives.

2. Decision Making

Decision making is one of the top leadership skill. Successful leadership takes the best decision for the organization in all situations. Leaders are experts at taking the right decisions based on the prevailing circumstances. They weigh their organization's strengths and weaknesses to ensure that their choices put them at an advantage now and in the future.

3. Passion

Leaders are passionate about their vision and infect others with their energy to achieve it. Effective leadership inspires others to buy into the company's objectives and provide a powerful reason for everybody to remain dedicated to their duties.

4. Guidance

Once employees know what to do to deliver on projects, effective leaders oversee their work to ensure they perform their roles effectively. Leaders make sure employee efforts align with organizational goals for improved efficiency.

5. Commitment

Effective leaders are committed to the success of their organization and its employees. They remain focused on the company's long-term goals and do not allow temporary setbacks to dampen their spirits. When they face a setback, good leaders motivate their teams and help them see beyond the problems preventing them from reaching the common goal.

6. Integrity

Successful leadership teaches the organization ethical values. Regardless of their problems, successful leaders do the right things to achieve their goals. For them, integrity, truthfulness and fairness are core attributes they want to see in their company and its relations with contractors and clients.

7. Confidence

Leaders help subordinates to excel at their work and every aspect of life by expressing confidence in their abilities. They listen to employees' worries about their work, provide positive feedback and ensure the office environment brings out the best in them.

8. Morale

Leadership boosts staff morale by winning their trust. It assures employees of the leader's confidence in their abilities to deliver on the vision and mission of the organization. High morale among employees reduces distraction and motivates them to devote their energies to achieve organizational goals.

9. Growth

The best leaders create an environment where others can grow. They are open to new ideas and methods of achieving results and are flexible enough to admit their mistakes. Successful leaders encourage subordinates to provide inputs on how to improve work processes and reward excellence to increase creativity and loyalty.

10. Coordination

Effective leadership balances personal interests with organizational objectives. Leaders know that employees have personal reasons for working with their company. They create an environment where the organization can achieve its goals without sacrificing employee satisfaction.

2.8 ADVANTAGES OF LEADERSHIP:

1) Faster decision-making:

Sometimes practicing being fast with small decisions can help you build your decision making muscle so you can do the heavy-lifting on the big ones. And remember, you'll never be a perfect decision maker.

2) Strong motivation to the leader:

One of the most powerful motivational tactics you can use is to lead by example. Working hard, showing professional integrity, and having a can-do attitude are all qualities that will have a positive effect on your team members.

3) Suitability:

Both financial advisors and broker-dealers must fulfil a suitability obligation, which means making recommendations that are consistent with the best interest of the underlying customer.

4) It helps to solve complex problems:

Leaders wouldn't be brought into their role if they didn't know how to solve problems. There is a difference, however, in being able to solve a problem and solving it with the best possible solution

5)It builds team-based relationship:

People who work with leaders that use democratic methods tend to form closer relationships with those in charge. Those relationships are necessary because without them, there would be no team loyalty. The team feels like they are in situations together, solving problems, and everyone works harder to make sure something positive is available at the other side

6. It makes honesty a top priority:

With a democratic leadership style in place, leaders come to their teams with an authentic problem that needs to be solved. There are no "what ifs" or "hypotheticals" presented at the team meeting. When an honest issue is being addressed, team members feel more engaged with the process. It connects them on a personal level to the bank.

7. It improves the relevant knowledge of the team:

Because each person is given a chance, if they wish, to contribute their own experiences and knowledge to any given situation, every other team member is able to benefit. Knowledge comes from shared information that is offered in relevant situations. Team leaders improve the overall capabilities of their team through democratic leadership styles because every situation becomes an opportunity to learn.

8. It give team member a look at the bigger picture:

In many workplaces, the entry-level employees are not always privy to the long-term goals or vision that an organization is pursuing. Through democratic leadership styles, it becomes easier for everyone on the team to see what is going on. Even when there is dissent within the team, there is common ground present because everyone is working toward the good of the company

9. It creates higher levels of job satisfaction:

When people feel like their experiences matter, then it gives them more personal satisfaction over the work being done. The process fosters passion, which improves the quality and quantity of work in some employees.

2.9 DISADVANTAGES OF LEADERSHIP:

1) No role in decision making:

Decision making is the process of making choices by identifying a decision, gathering information, and assessing alternative resolutions.

2) Exploitation of employees:

It is through making claims on revenue, effort or dignity that actors are able to take. Sometimes exploitative claims-making is naked. And open for all to see. refusing to pay workers state-mandated overtime or full minimum.

3) No opportunity for creativity:

Creativity and imagination are what's needed in life to see things beyond what's visible.

4) Frustration:

The older generation is not able to cope up with newer techniques that are put in their systems. It is taking a heavy toll in functioning & efficiency of banks.

5) No development of leadership skill:

Development depends on more than technical skills and a willingness to work hard. You also need a few soft skills, not the least of which is the ability to take on leadership role.

2.10 APPROACHES OF LEADERSHIP:

The various approaches could also be classified under the following heads:

1) CHRISMATIC LEADERSHIP:

Attributes of charismatic leaders that indicate a more transformational viewpoint:

- * Vision and articulation
- * Sensitivity to the environment

- * Sensitivity to members needs
- * Personal risk taking
- * Performing unconventional behaviour

2) PARTICIPATIVE LEADERSHIP:

A Participative leader, rather than taking autocratic decisions, seek to involves other people in the process, possibly including subordinates, peers, superiors and other stakeholders. The level of participation may also depend on the type of decision making made.

3) SITUATIONAL LEADERSHIP:

When a decision needed, an effective leader does not just fall into a single preferred style, such as using transactional or transformational methods. In practice, as they say, things are not that simple. In their six variables:

- Subordinate effort
- Subordinate ability and role clarity
- Organization of the work
- Cooperation and cohesiveness
- Resources and support
- External coordination

4) TRANSACTIONAL LEADERSHIP:

The transactional Leaders works through creating clear structures whereby it is clear what required of their subordinates, and the rewards that they get for following orders. Punishments are not always mentioned, but they are also well understood and formal systems of discipline are usually in place.

5) TRANSFORMATIONAL LEADERSHIP:

Working for a transformational leader can be a wonderful and uplifting experience. They put passion and energy into everything. They care about you and want you to succeed. Transformational leadership starts with the development of a vision, a view of the further that will excite and convert potential followers.

6) THE QUIET LEADER:

The approach of quiet leaders is the antithesis of the classic charismatic leaders in that they base their success not on ego and force of character but on their thoughts and actions. Although they are strongly task-focused, they are neither bullies nor unnecessarily unkind and may persuade people through rational argument and a form of benevolent transactional leadership.

7) SERVANT LEADERSHIP:

The servant leader serves others, rather than others serving the leader. Serving others thus comes by helping them to achieve and improve.

Principles of servant leadership defined by the alliance for servant Leadership is:

- ◆ Transformation as a vehicle for personal and institutional growth.
- ◆ Personal growth of a route to better serves others.
- ◆ Enabling environments that empower and encourage service.
- ◆ Service as a fundamental goal.
- ◆ Trusting relationship as a basic platform for a collaboration and service.
- ◆ Creating commitment as a way to collaborative activity.
- ◆ Community buildings as a way to create environments in which people can trust each other and work together.
- ◆ Nurturing the spirits as a way to provide joy and fulfilment in meaning full work.

2.11 Here is the list of essential leadership qualities that help leaders to achieve greater success

- Integrity. Integrity is a core quality that every leader must possess
- Innovative
- Honesty
- Active Listening
- Self-Confidence
- Visionary
- Strong Communicator
- Delegation
- Essential Qualities of a Good Leader

1. Communicate frequently.

It shouldn't come as a surprise that communication is top of the list for essential leadership qualities. Communication can make or break your efforts to connect with your team, manage and coordinate initiatives, and build trust within your organization.

Good leaders communicate with an employee-first lens. They communicate based on the needs and preferences of their team members and seek to listen to and understand the employee experience.

There are countless ways to build a culture of good communication, but good leaders often employ the following strategies:

Conduct regular one-on-ones with employees

Use multiple communication tools, such as email, chat, project management software, and meetings

Avoid gossip

Connect work back to the team or organization's goals, values, or mission

Follow up and follow through with action

2. Have a vision for the future.

Vision provides focus, motivation, and direction to move through change and obstacles. What is your purpose? What goal are you trying to reach—as an individual, team, or organization?

Good leaders have a clear vision and are able to articulate the path forward to their team.

Leaders should be able to connect the work on the ground to the bigger picture and provide the why behind everything they do. Leaders who can do this help employees understand and align their work strategically and engage with their work more meaningfully.

3. Show empathy for their employees.

Empathy isn't just a nice-to-have when it comes to leadership—it's fundamental to building trust, confidence, and engagement among your team.

Empathy is the ability to perceive and relate to the thoughts and experiences of others. Leaders who operate from a place of empathy, understanding, and compassion establish stronger connections among their employees and improve performance across the board.

Empathetic leadership can take many forms, but there are a few ways you can demonstrate empathy in your day-to-day management:

Look for and recognize signs of employee burnout. Burnout is a real cost for businesses, leading to lower productivity and engagement among employees. Empathetic leaders have a skill for recognizing when people are over-stressed or overworked and intervening to prevent it.

Show sincere interest in your employees' personal lives. In other words, good leaders treat their employees as people and recognize their individuality and unique contributions. Get to know your employees on a personal level and show genuine interest in their hobbies, needs, and goals.

Support your employees outside of work. Attend events that are important to them, like birthdays, sporting events, or performances. Showing support for your team outside of work settings demonstrates you care and strengthens your personal connections with your employees.

4. Hold them accountable.

Good leaders hold themselves accountable and are always working to improve and progress. They are never satisfied with the status quo. Accountability and continual improvement require a commitment to seeking and acting on feedback, learning from mistakes, and course correcting.

When accountability is modeled from the top, everyone improves. Accountability strengthens culture, inspires excellence, sets expectations, and builds trust—not only in leadership but among the team.

Show gratitude.

A grateful leader is a powerful leader. Gratitude breeds positive interactions and connection, increases engagement, and builds resilience.

Good leaders make a point of showing gratitude and recognizing the work of their employees by:

Complimenting employees daily

Celebrating wins

Listening to employee feedback and addressing needs

Acknowledging employee contributions in private and in public

Leaders who practice gratitude in small and big ways can make a meaningful impact on employee engagement. Good leadership is about more than just managing tasks and tracking performance.

Leadership means going ahead and paving the way for your team

2.12 Features of Leadership:

1) Influence the behaviour of others:

Leadership is an ability of an individual to influence the behaviour of other employees in the organization to achieve a common purpose or goal so that they are willingly co-operating with each other for the fulfillment of the same.

2) Inter-personal process:

It is an interpersonal process between the leader and the followers. The relationship between the leader and the followers decides how efficiently and effectively the targets of the organization would be met.

3) Attainment of common organizational goals:

The purpose of leadership is to guide the people in an organization to work towards the attainment of common organizational goals. The leader brings the people and their efforts together to achieve common goals.

4) Continuous process:

Leadership is a continuous process. A leader has to guide his employees every time and also monitor them in order to make sure that their efforts are going in the same direction and that they are not deviating from their goals.

5) Group process:

It is a group process that involves two or more people together interacting with each other. A leader cannot lead without the followers.

6) Dependent on the situation:

It is situation bound as it all depends upon tackling the situations present. Thus, there is no single best style of leadership.

2.13 Qualities of a Leader

Personality:

A pleasing personality always attracts people. A leader should also be friendly and yet authoritative so that he inspires people to work hard like him.

Knowledge:

A subordinate looks up to his leader for any suggestion that he needs. A good leader should thus possess adequate knowledge and competence in order to influence the subordinates.

- **Integrity:**

A leader needs to possess a high level of integrity and honesty. He should have a fair outlook and should base his judgment on the facts and logic. He should be objective and not biased.

- **Initiative:**

A good leader takes initiative to grab the opportunities and not wait for them and use them to the advantage of the organization.

- **Communication skills:**

A leader needs to be a good communicator so that he can explain his ideas, policies, and procedures clearly to the people. He not only needs to be a good speaker but also a good listener, counsellor, and persuader.

- **Motivation skills:**

A leader needs to be an effective motivator who understands the needs of the people and motivates them by satisfying those needs.

- **Self-confidence and Will Power:**

A leader needs to have a high level of self-confidence and immense will-power and should not lose it even in the worst situations, else employees will not believe in him.

- **Intelligence:**

A leader needs to be intelligent enough to analyze the pros and cons of a situation and take a decision accordingly. He also needs to have a vision and fore-sightedness so that he can predict the future impact of the decisions taken by him.

- **Decisiveness:**

A leader has to be decisive in managing his work and should be firm on the decisions are taken by him.

- **Social skills:**

A leader should possess empathy towards others. He should also be a humanist who also helps the people with their personal problems. He also needs to possess a sense of responsibility and accountability because with great authority comes great responsibility.

BANK PROFILE

3.1 BANK PROFILE



CHAPTER – 3

BANK PROFILE

- 3.1 Bank Profile:
- 3.2 History of Bank:
- 3.3 Structure of the Co-Operative Banking
- 3.4 Features of Co-Operative
- 3.5 Nature of Society
- 3.6 Aims and Objectives of the Society
- 3.7 Indian Banking Structure
- 3.8 Establishment of Society
- 3.9 Board of Directors
- 3.10 VISION, MISSION of the society
- 3.11 Product and Service Profile
- 3.12 Strategy
- 3.13 SWOT Analysis
- 3.14 Requirement to Open an Account

Other Information

Company name	Om urban co-operative credit society Ltd. Nasalapur
Established year	20/12/1990
Registration no	AR11/AOG/17772/90-91
Location	A/p: Nasalapur Tq: Raibag Dist: Belagavi
Founder	Bharatesh Banvane
Constitution	Co-operative
Facilities	Safety locker
Contact Number	9538146227
E-mail	nasalapururbansociety1962gmail.com
Number of member	15 committee member and 4 staff member total 19 members.
Share capital	29,86,330
Working capital	11,46,59,356
Deposits	8,41,10,863
Loan and advance	5,99,17,901
Net profit	27,17,395.61
Dividend	16%
Rate of interest for the loans given	16% (in the deposit 2% extra)
Branch	Only one branch of Nasalapur

A Study on Leadership Styles in Banking Sector at Om Urban Co-operative Credit Society Ltd. Nasalapur

3.2 Establishment of Om urban co-operative bank:

Om urban co-operative credit society ltd. Nasalapur was established on 12 December 1990 at Nasalapur, Raibag Taluka, and Belagavi Dist. It is a one of the private bank.

It is the good of the bank Om urban co-operative credit society ltd. Nasalapur has made repaid growth between the start periods of time from 1990 to 2021. The organization was progressed in share capital, deposits, investment, advances, and profit and loss account. These bank main objectives it was provide facilities to agriculture sectors.

The organization is providing more personalized services. The bank was established by people of social responsibility. The staff in this co organization very good they are communicating to customer freely and giving suggestions or guidance to the customer.

3.3 Board of directors:

Sl. No	NAME	Designation
1	Mahaveer Laxman Parmaje	Chairman
2	Bharatesh Shantappa Banvane	Founder
3	Jaypal Annappa Banvane	Director
4	Ashok Shrimant samaje	Director
5	Chandrakant kumar kante	Director
6	Bahubali Bhupal Kagawade	Director
7	Raju Bheema Parmaje	Director
8	Surendra Narsappa Samaje	Director
9	Gulab Bagasata Taral	Director
10	Bahul Abdal Tambat	Director
11	Smt.jayashree B Patil	Director
12	Smt. Gangutai B Khambare	Director
13	Appasaheb balappa Ratamane	Director
14	Annasheb H Patil	Manager

3.4 Vision, Mission:

Vision:

“To be the most admired credit society in Karnataka state”

“Various branch open and give will service to customer”

Mission:

- To provide excellent professional service and improve its position as a leader in financial and related services.
- Use latest technology aimed at customer satisfaction and act as an effective catalyst for socio economic development.
- Advance loan and earn deposit

3.5 Product and service profile:

Products:

- Gold loan
- Surety loan
- Pigmy loan
- Cash credit loan
- Vehicle loan
- Medium term loan

Deposits:

- Fixed deposits
- Saving deposits
- Recurring deposits
- Pigmy deposits

Accounts:

- Saving account
- Current account
- Recurring account

Loan:

Name of loan	Rate of interest
Gold loan	12%
Surety loan	16%
Pigmy loan	12%
Vehicle loan	80%
Medium term loan(plaza loan)	18% on Deposit

3.6 Features of Om urban co-operative credit society:

- 1) Good co-operating with customer
- 2) Good environment
- 3) Very helpful staff
- 4) Loan facilities
- 5) Locker facilities
- 6) Increase the interest 2% extra of deposit
- 7) Pay order facilities
- 8) Good service to customer
- 9) Credit on jewelries
- 10) Demand draft facilities at the discount rate

3.7 Aims and objectives of the Om urban co-operative credit society:

- 1) To lend loan from this member on deposit of gold and silver ornaments.
- 2) To provide safe lockers facility and other concerned service to its member.
- 3) Providing loan to self help group.
- 4) Open from varies branch's
- 5) Providing online facilities.
- 6) To receive deposit from charitable institution/ trusts and other public institutions.

- 7) According to the rules and regulation framed by the board of directors and approved by the registrar, to provide all grants and incentives to employees of their children and family member.
- 8) To arrange programs to give financial assistance for social and educational development of member and welfare of them.
- 9) Conducting programs for improvement of economic conditions of SC/ST and women member.
- 10) Providing financial assistance to members for higher education of their children and family member.

Conduct of meeting:

- 1) Annual general meeting
- 2) Board of directors meeting
- 3) Staff based meeting

3.8 Requirement to open an account

- 1) Fill the form
- 2) Affix a passport size photo
- 3) Attached identify proof there is photo proof address proof etc

3.9 FEATURES OF CO-OPERATIVE:

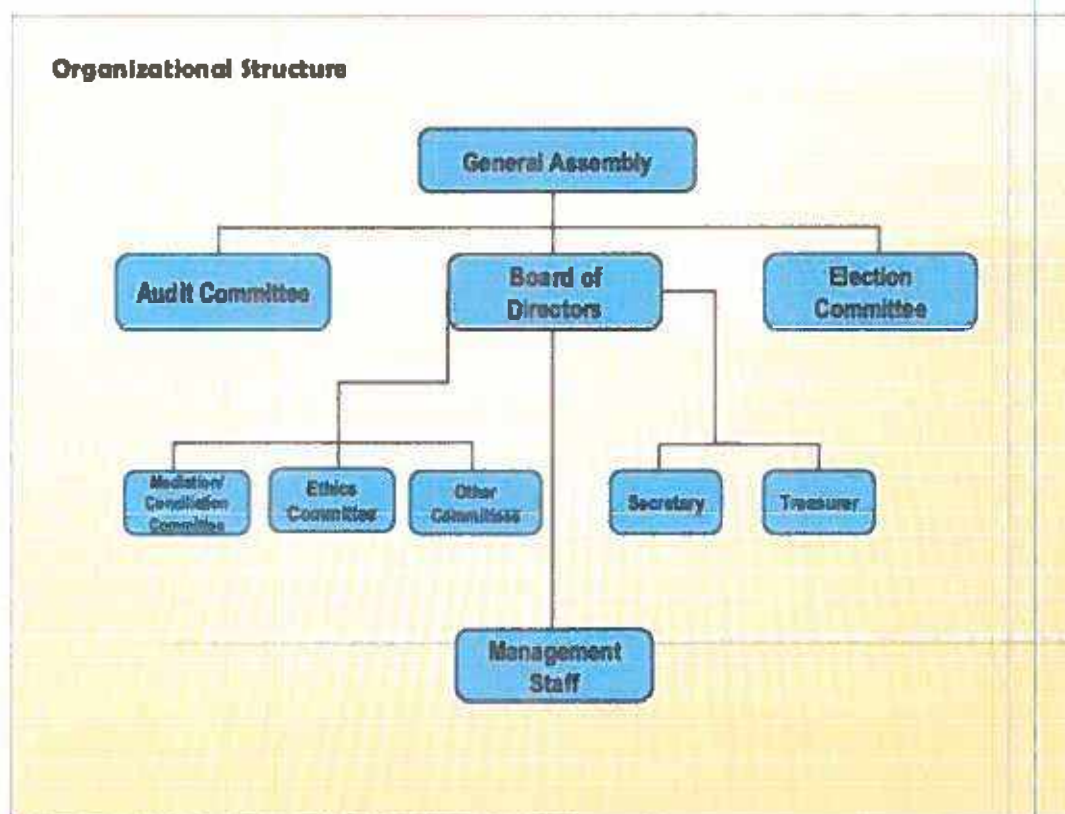
Co-operative are voluntary organization of the have notes in the same cadre, joined together to achieve the common goal "co" and "opus" the two Latin words make it 'jointly operate'. Mutual help for self help is the principle and service is the motto of co-operative movement. Important features of co-operative movement are:

1. Good co-operating with customer
2. Good environment
3. Very helpful staff
4. Demand draft facilities at the discount rate
5. Credit on jewelries
6. Good service to customer
7. Pay order facilities
8. Increase the interest 2% extra of deposit
9. Locker facilities
10. Loan facilities

3.10 NATURE OF SOCIETY:

- ❖ Locker facility in head office as well as branch offices.
- ❖ Demand draft facility at a discount rate for the main cities of the country.
- ❖ Pay order facility.
- ❖ Computerized transaction in head office and also in branch office.
- ❖ Good service to the costumers and special interest for senior citizens.
- ❖ Credit on Jewelries.
- ❖ Sanctioning of loans of a higher speed, charging lower interest rates.

3.11 ORGANIZATIONAL STRUCTURE:



3.12 REQUIREMENT TO OPEN AN ACCOUNT:

- 1) Fill the form.
- 2) Affix a passport size photo
- 3) Attached identity proof i.e. photo proof, address proof, etc....

3.13 SWOT ANALYSIS:

Strength

- The bank has a sound network i.e. it providing mobile SMS service to their customer.
- The bank is having well experienced, trained, most dedicated and committed staff.
- It has a strong customer base.

Weakness

- Lengthy procedure to grant loans.

Opportunities

- The bank can optimize the growth opportunities arising out of retail banking and small and medium enterprises (SMEs).
- Further expansion of business networks and possible arrangements of sharing networks of other banks by issuing mutual funds and insurance.

Threat

- Bank is facing competition from its other Private Sector Banks.
- Changing economic policies of Government will have serious impact on interest rate and reserve ratio maintained with RBI.

CONDUCT OF MEETING:

- 1) Annual general meeting
- 2) Board of directors meeting
- 3) Staff based meeting

CHAPTER – 4

DATA ANALYSIS AND INTERPRETATION

Table No: 4.1 Shows gender of the Respondents.

Table No: 4.2 Shows marital status of Respondents.

Table No. 4.3 shows Qulification of employees.

Table No: 4.4 Shows age group employees.

Table No: 4.5 Shows respondents feeling of proud to work for this bank.

Table No. 4.6 Shows respondents opinion of satisfied with rules and regulation of the Bank.

Table No. 4.7 Shows that much satisfied with your job.

Table No. 4.8 Shows Society placed respondents as per their expectaion.

Table No. 4.9 Shows respondents feeling about working environment.

Table No. 4.10 Shows respondents opinion about difficulties getting the facility.

Table No.4.11 Shows the respondents opinion about working in this bank surety policy.

Table No. 4.12 Shows the respondents opinion about superior response to them.

Table No. 4.13 Shows the respondents relationship with bank.

Table No. 4.14 Shows the respondents opinion about job position.

Table No. 4.15 Shows the respondents opinion about their regular payment.

Table No. 4.16 Shows employees openion on safety measures in the bank.

Table No. 4.17 Shows the respondents opinion about care taken by bank for their employees.

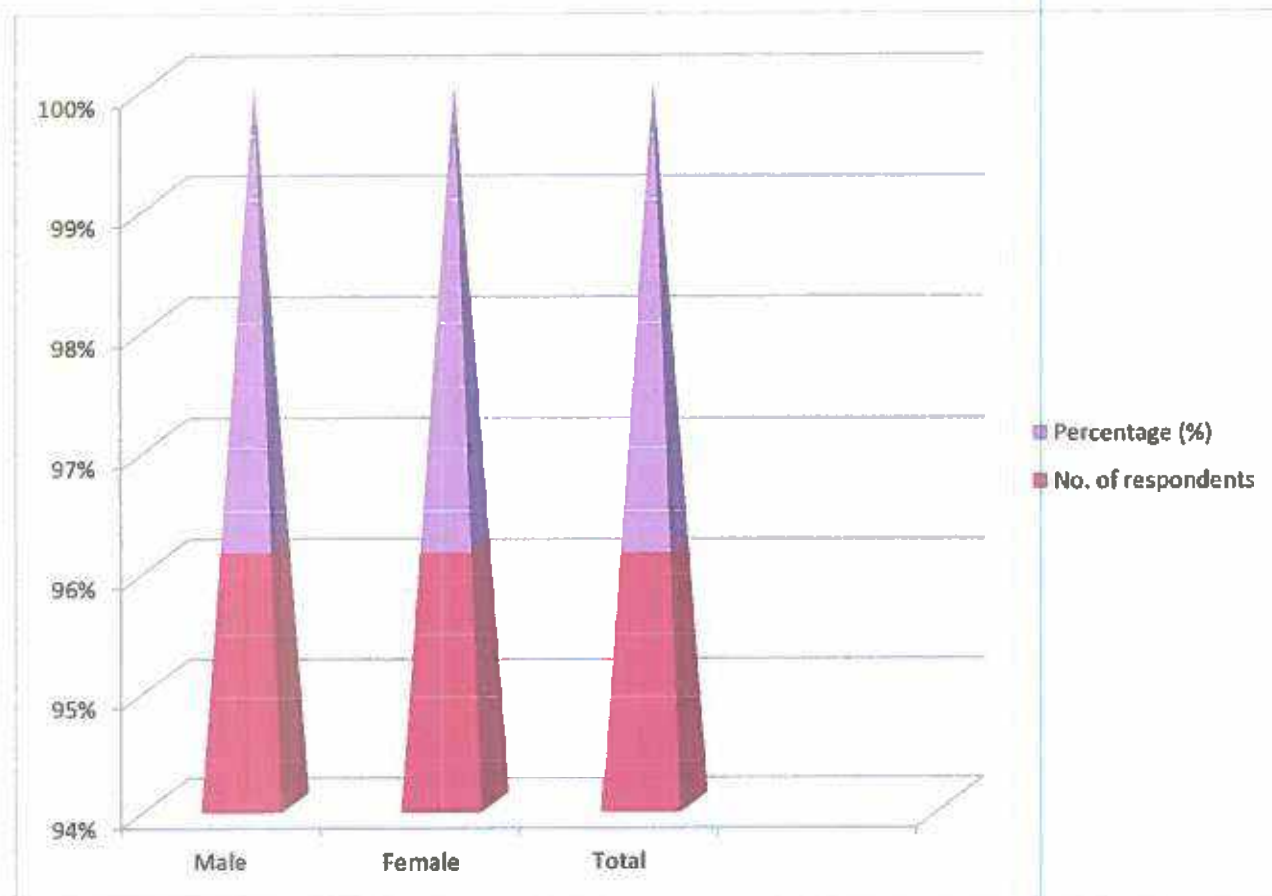
DATA ANALYSIS AND INTERPRETATION

Table No: 4.1 Shows gender of the Respondents.

Gender	No. of respondents	Percentage (%)
Male	15	60
Female	10	40
Total	25	100

Source: Survey

Graph No: 4.1 Shows gender of the Respondents.



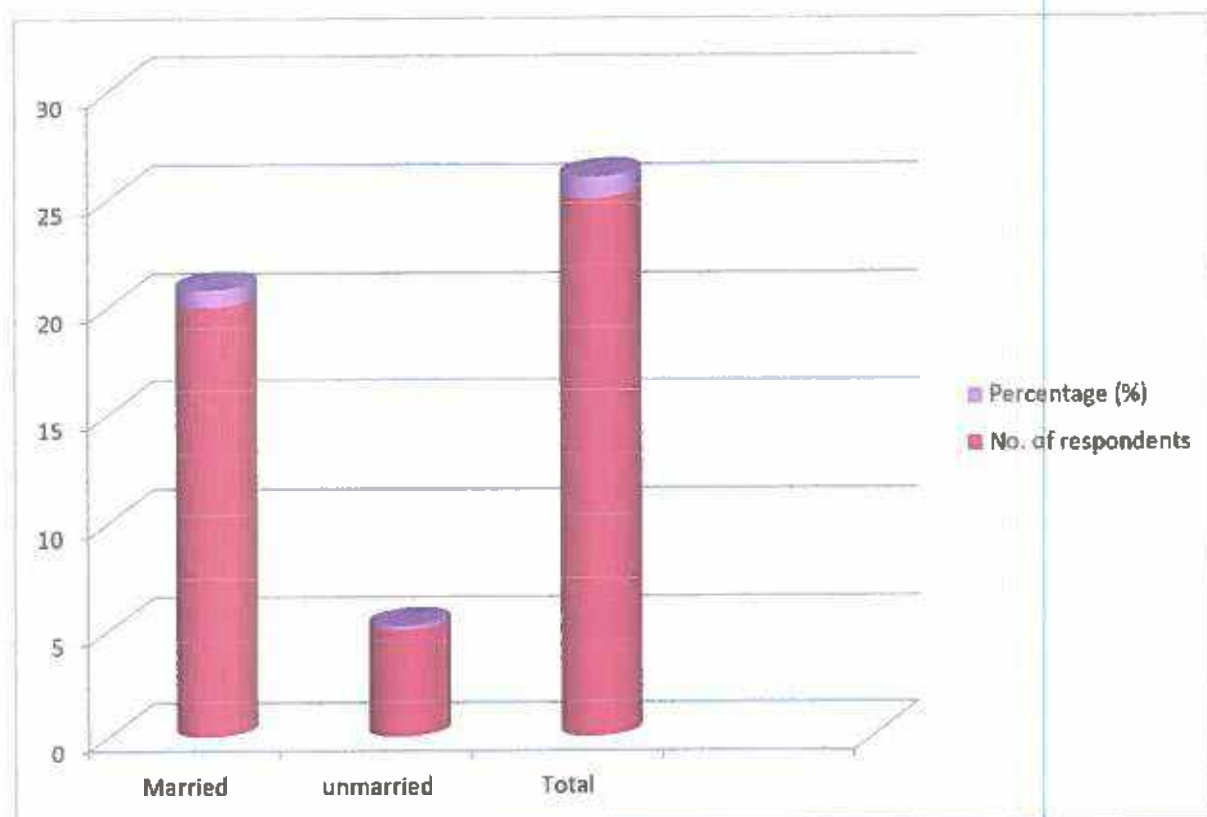
Interpretation:

It can be observed from that above table that out of 25 respondents 60% are male and 40% are female. Majority of Respondents i.e.60% are male.

Table No: 4.2 Shows marital status of Respondents.

Particulars	No. of respondents	Percentage (%)
Married	20	80
unmarried	5	20
Total	25	100

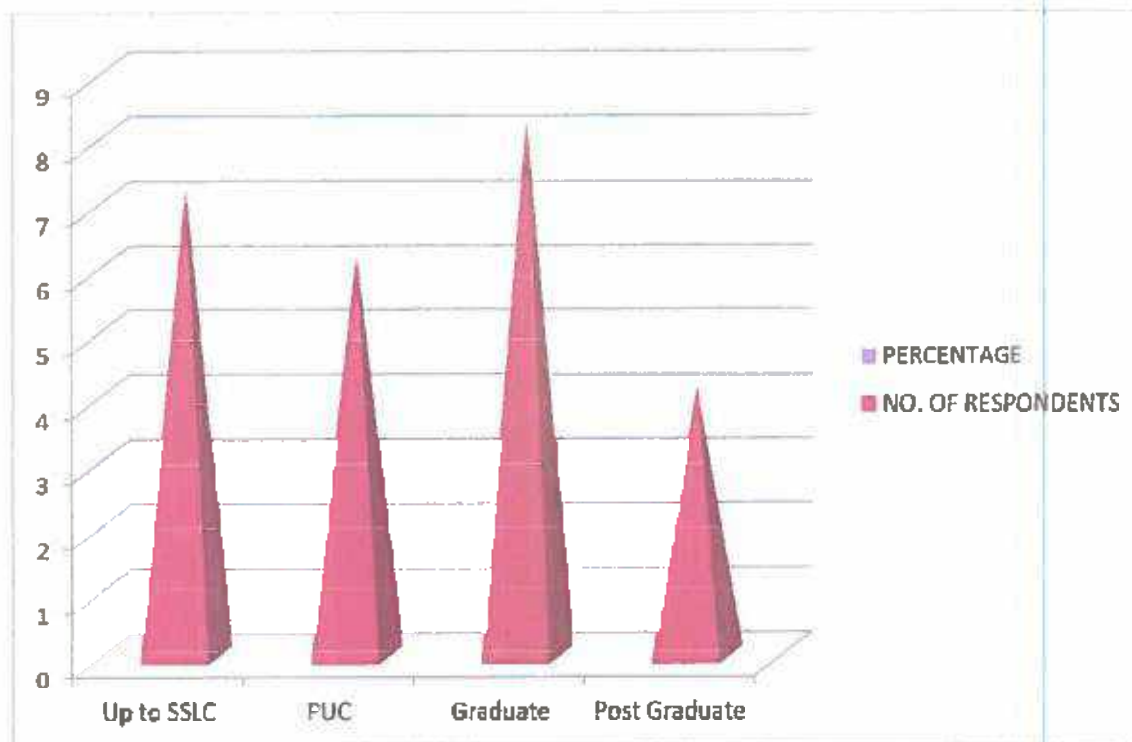
Source: Survey

Graph No: 4.2 Shows marital status of Respondents.**Interpretation:**

It can be observed from that above table that out of 25 Respondents 80% respondents are Married and 20% of Respondents are Unmarried. Majority of Respondents i.e. 80% are married.

Table No. 4.3 shows Qualification of employees.

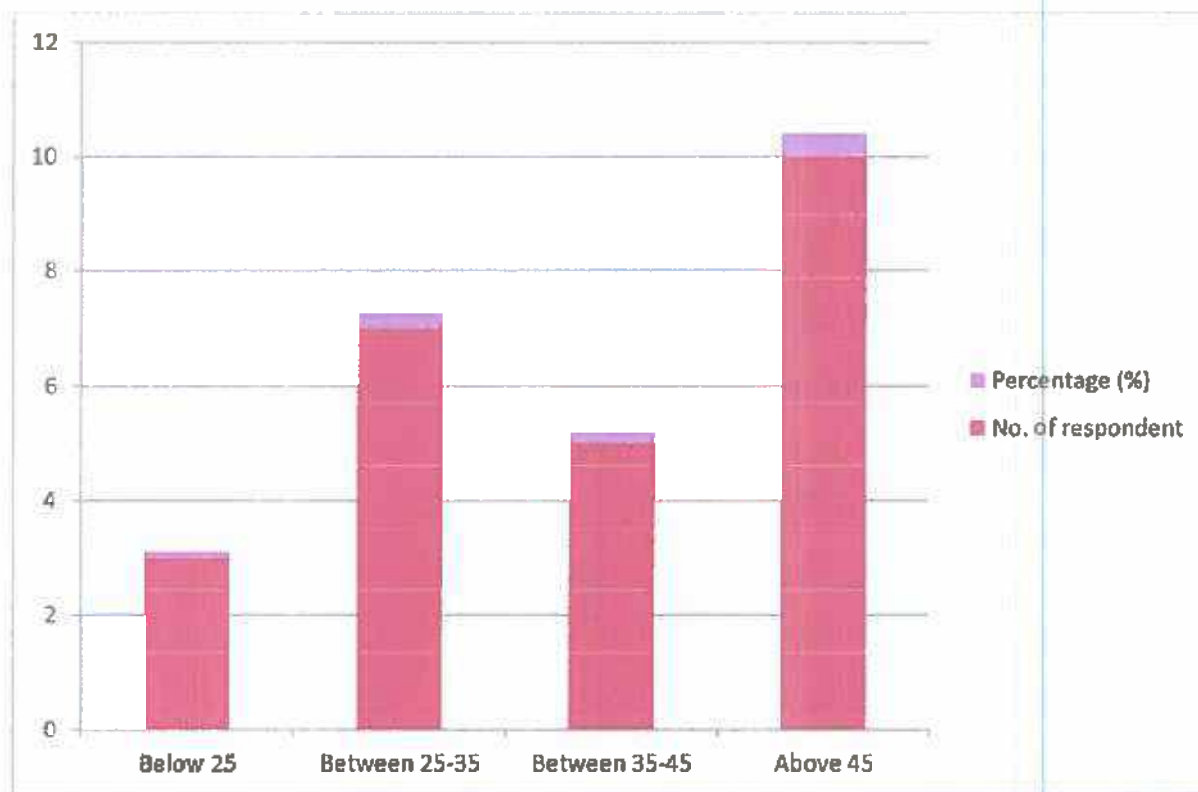
Particulars	NO. OF RESPONDENTS	PERCENTAGE
Up to SSLC	07	28%
PUC	06	24%
Graduate	08	32%
Post Graduate	04	16%

Source: Survey**Graph No. 4.3 shows Qualification of employees.****Interpretation :**

It can be observed from the above table that out of 25 Respondents 28% respondents' qualification is up to SSLC, 24% Respondents' qualification is PUC, 32% Respondents' qualification is Graduate and 16% Respondents' qualification is post graduate. Majority of Respondents i.e. 32% are graduate.

Table No: 4.4 Shows age group employees.

Age group	No. of respondent	Percentage (%)
Below 25	3	12
Between 25-35	7	28
Between 35-45	5	20
Above 45	10	40

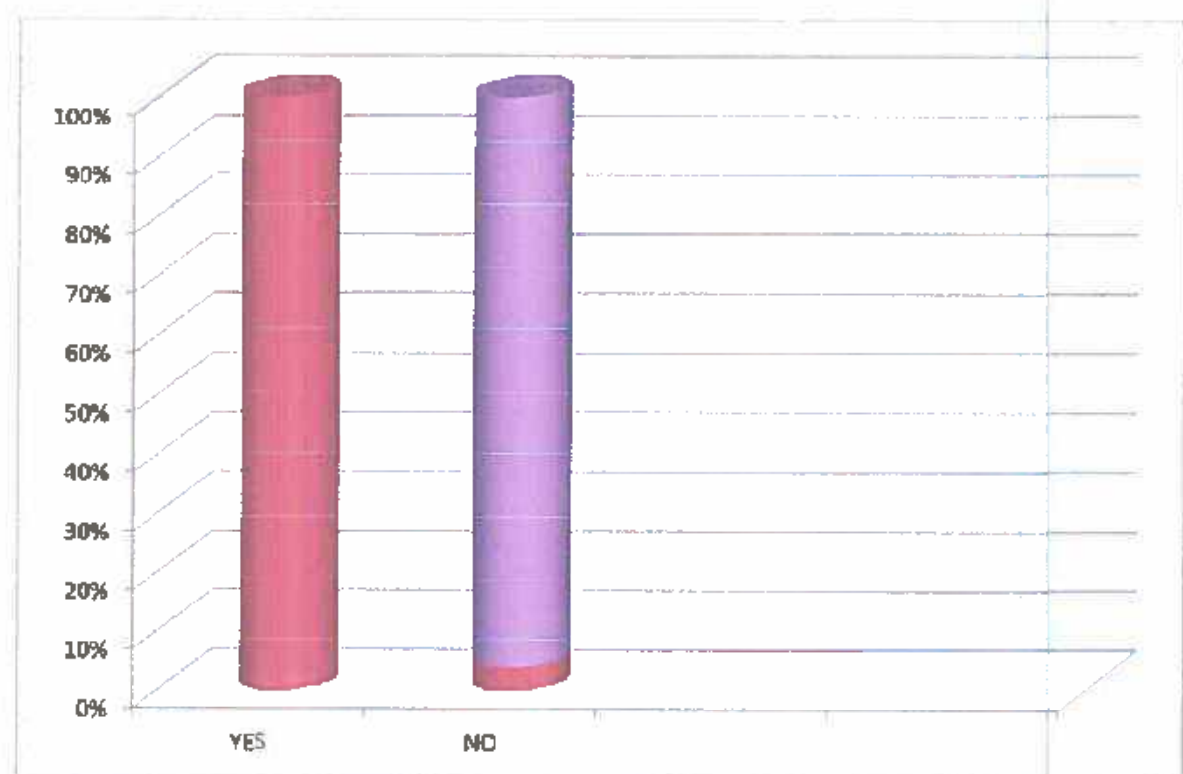
Source: Survey**Graph No: 4.4 Shows age group employees.****Interpretation:**

It can be observed from the above table that out of 25 Respondents 12% of the Respondents belong to age group below 25 years, 28% of Respondents belong to age group below 35, 20% of the respondents belong to age group below 45 and 40% of the Respondents belong to age group above 45 years. Majority of the Respondents belongs to age group above 45 year i.e. 40%.

Table No: 4.5 Shows respondents feeling of proud to work for this bank.

Particulars	No. Of respondents	Percentage
Yes	20	80
No	05	20

Source: Survey

Graph No: 4.5 Shows respondents feeling of proud to work for this bank.

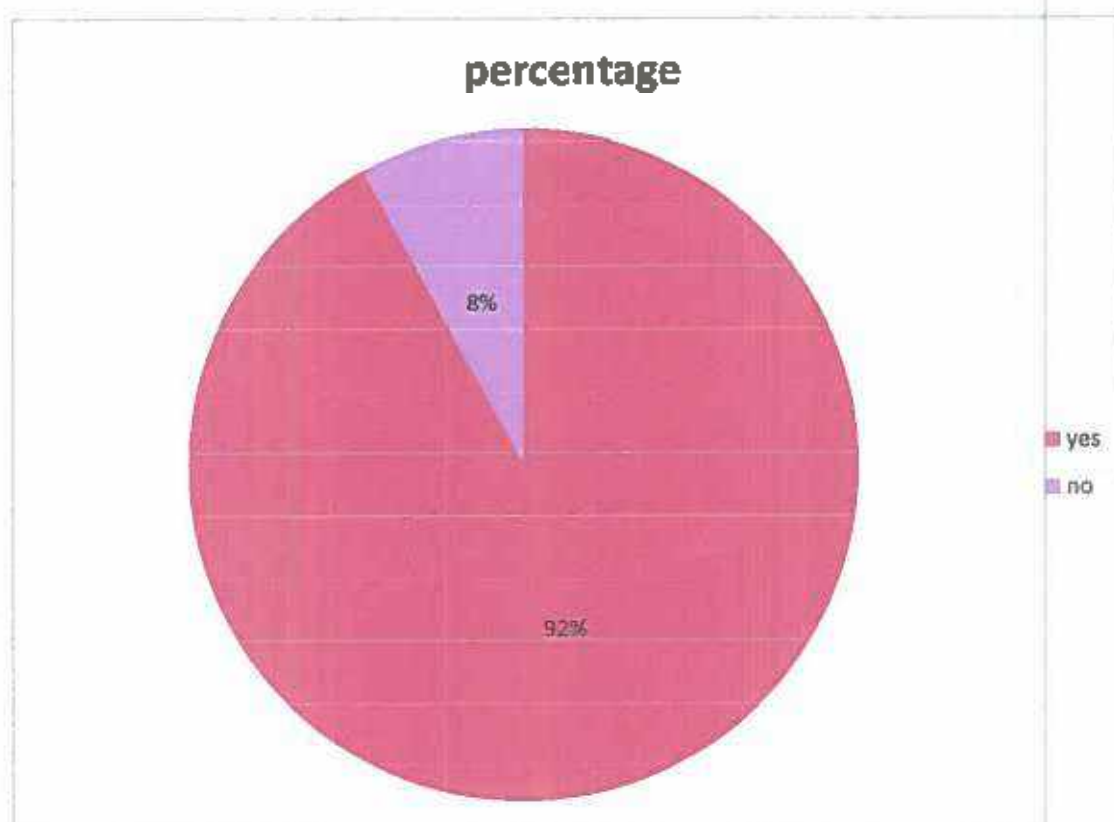
Interpretation :

It can be observed from the above table that out of 25 respondents, 80% of the respondents are happy to work for this bank and 20% of the respondents are not happy to work for this bank. Majority of respondents i.e. 80% respondents are happy to work for this bank.

Table No. 4.6 Shows respondents opinion of satisfied with rules and regulation of the Bank.

Particulars	No. Of Respondents	Percentage
Yes	18	72
No	07	28

Source: Survey

Graph No. 4.6 Shows respondents opinion of satisfied with rules and regulation of the Bank.

Interpretation :

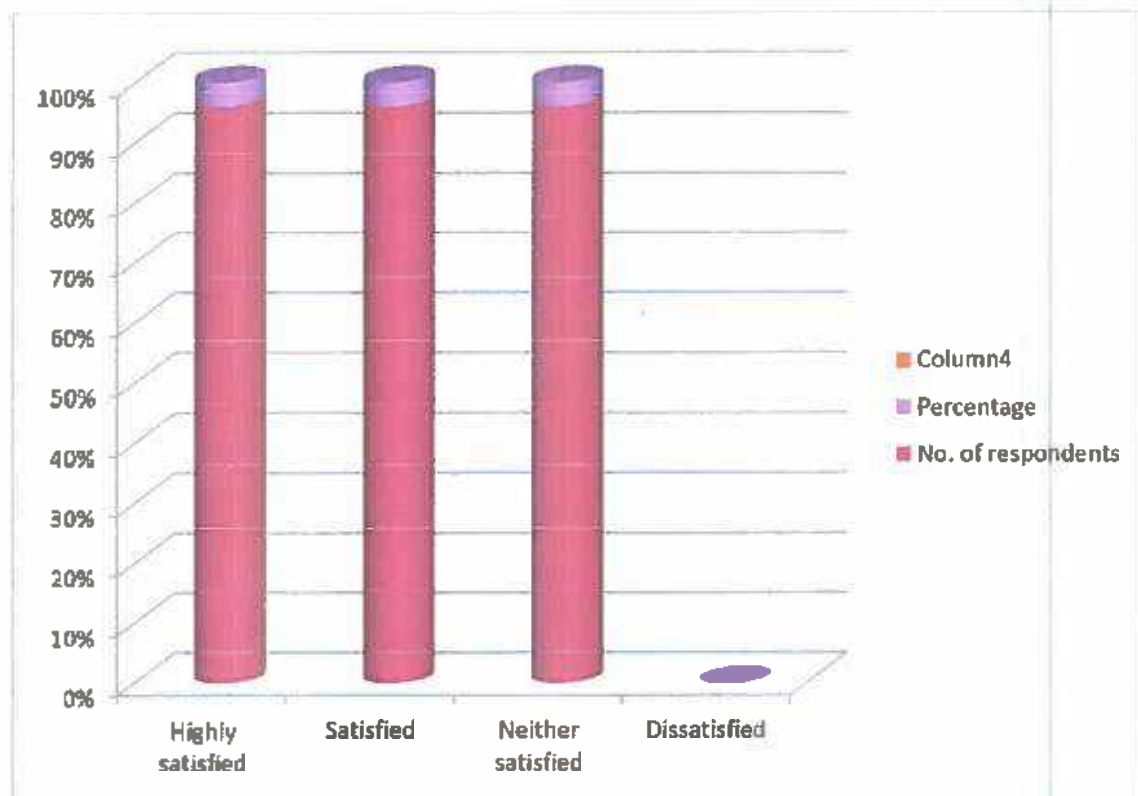
It can be observed from that above table that out of 25 Respondents 72% of the Respondentssatisfied with their rules and regulations and 28% of theRespondents are not satisfied with their rules and regulations. Majority of the Respondents i.e. 72% Respondents are satisfied with the rules and regulations of the bank.

Table No. 4.7 Shows that much satisfied with your job.

particular	No. of respondents	Percentage
Highly satisfied	12	48
Satisfied	11	44
Neither satisfied	02	08
Dissatisfied	-	-

Source: Survey

Graph No. 4.7 Shows that much satisfied with your job.

**Interpretation :**

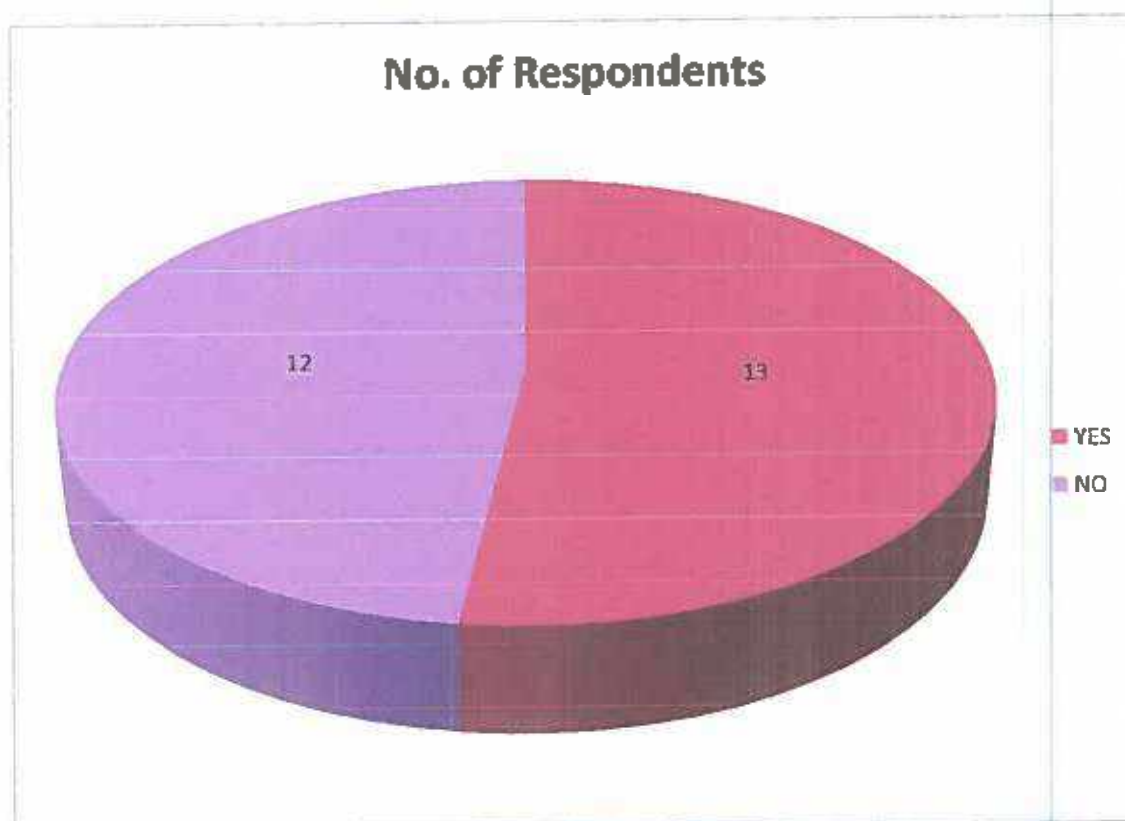
The above table and chart shows that out of 25 respondents, 48% of the employees have got satisfaction with the team spirit in their work, some employees are 44% and 08% got the satisfaction with the team spirit in their work. Majority of the respondents i.e 48% are satisfied with their job.

Table No. 4.8 Shows Society placed respondents as per their expectaion.

Particulars	No. of Respondents	percentage
Yes	13	52
No	12	48

Source: Survey

Graph No. 4.8 Shows Society placed respondents as per their expectaion.

**Interpretation :**

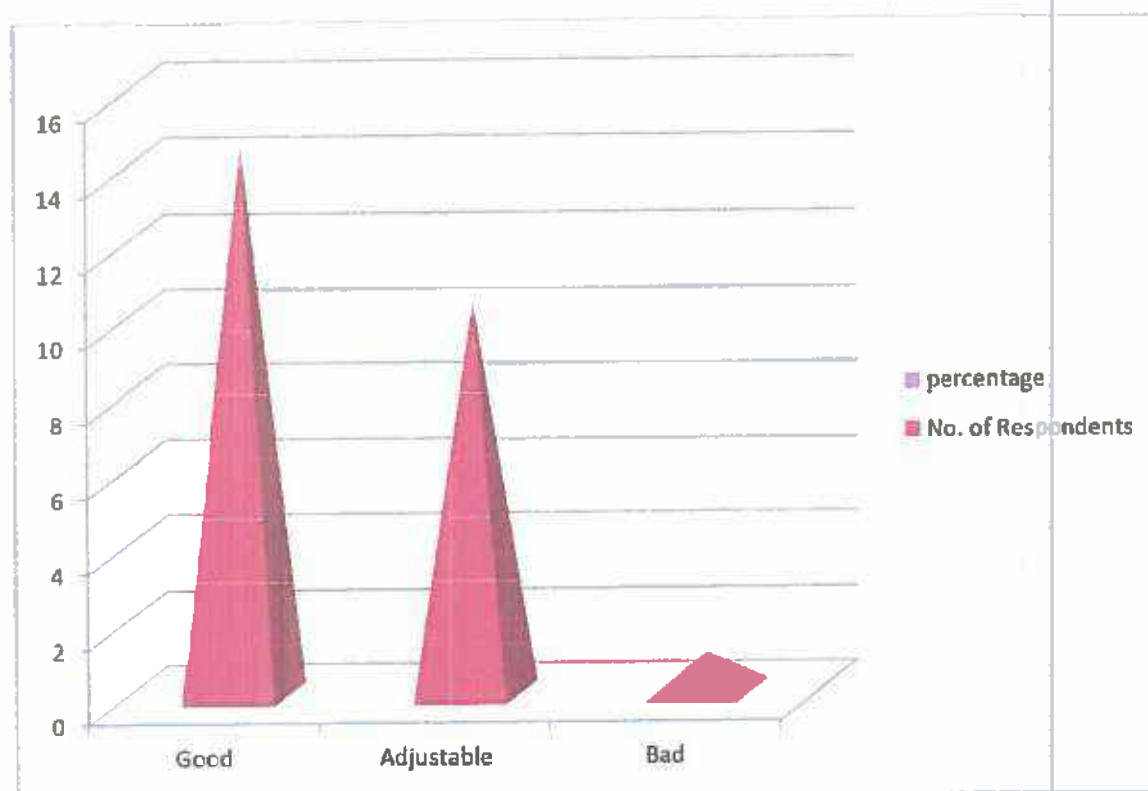
It can observed from that above table that out of 25 Respondents 52% are the respondents agreed that Society has placed them in a right position of work as per the acceptance 48% Respondents are not agree. Majority of the respondents i.e 52% told that they are placed as per their expectations .

Table No. 4.9 Shows respondents feeling about working environment.

Particulars	No. of Respondents	Percentage
Good	14	56
Adjustable	10	40
Bad	1	04

Source: Survey

Graph No. 4.9 Shows respondents feeling about working environment.

**Interpretation :**

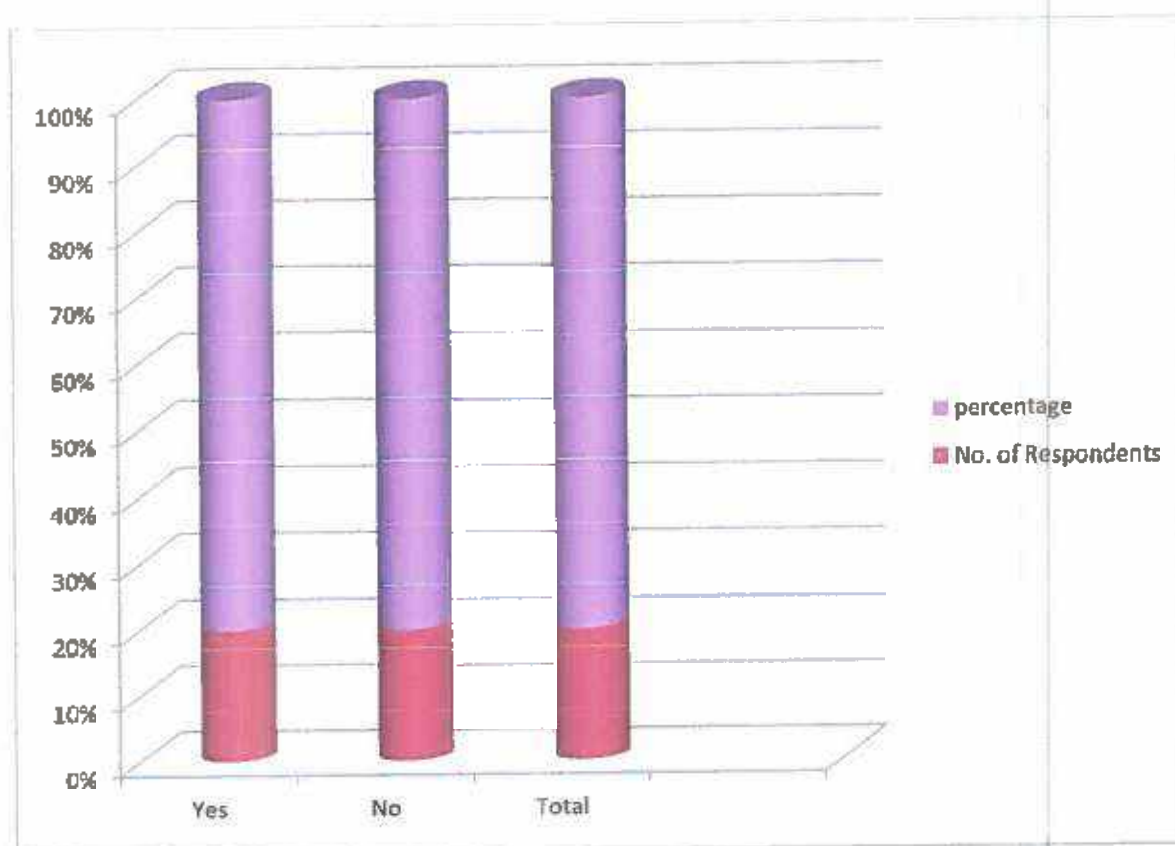
It can be observed from the above table that out of 25 respondents, 56% of the respondents feel good about the working environment, 40% are feeling adjustable about the working environment, and 4% are feeling bad about the working environment. The majority of the respondents, i.e., 56% are feeling good about the working environment.

Table No. 4.10 Shows respondents opinion about difficulties getting the facility.

Particulars	No. of Respondents	percentage
Yes	20	80
No	05	20
Total	25	100

Source: Survey

Graph No. 4.10 Shows respondents opinion about difficulties getting the facility.

**Interpretation:**

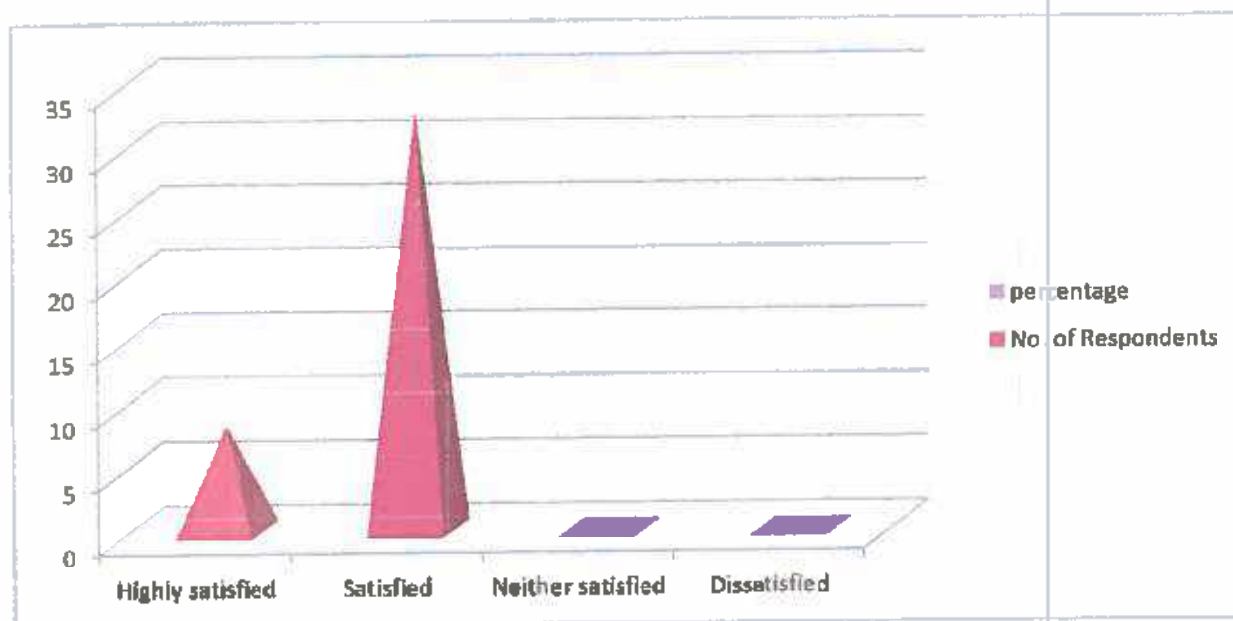
It can be observed from the above table that out of 25 Respondents 80% of the Respondents' opinion is that there are difficulties in getting the facility, and 20% of the Respondents' opinion is that there are no difficulties in getting the facility. The majority of the respondents, i.e., 80% of the Respondents' opinion is that there is difficulty in getting the facilities.

Table No.4.11 Shows the respondents opinion about working in this bank surety policy.

Particulars	No. of Respondents	percentage
Highly satisfied	20	80
Satisfied	05	20
Neither satisfied not dissatisfied	0	0
Dissatisfied	0	0

Source: Survey

Graph No.4.11 Shows the respondents opinion about working in this bank surety policy.



Interpretation:

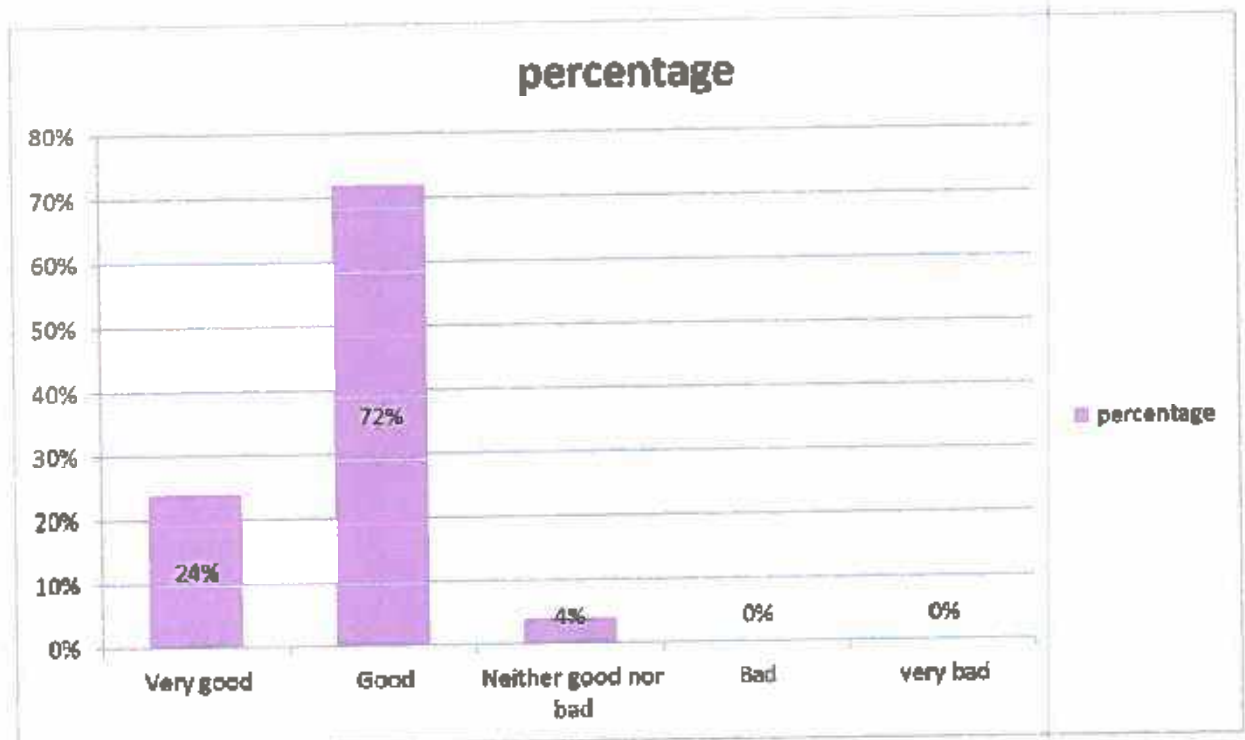
It can be observed from the above table that out of 25 Respondents 80% of the Respondents are highly satisfied for surety policy of the Bank and 20% of the Respondents are satisfied for surety policy of the Bank. Majority of the Respondents i.e. 80% of the Respondents are highly satisfied for surety policy of the Bank.

Table No. 4.12 Shows the respondents opinion about superior response to them.

Particulars	No. of Respondents	percentage
Very good	6	24
Good	18	72
Neither good nor bad	1	4
Bad	0	0
Very bad	0	0

Source: Survey

Graph No. 4.12 Shows the respondents opinion about superior response to them.



Interpretation :

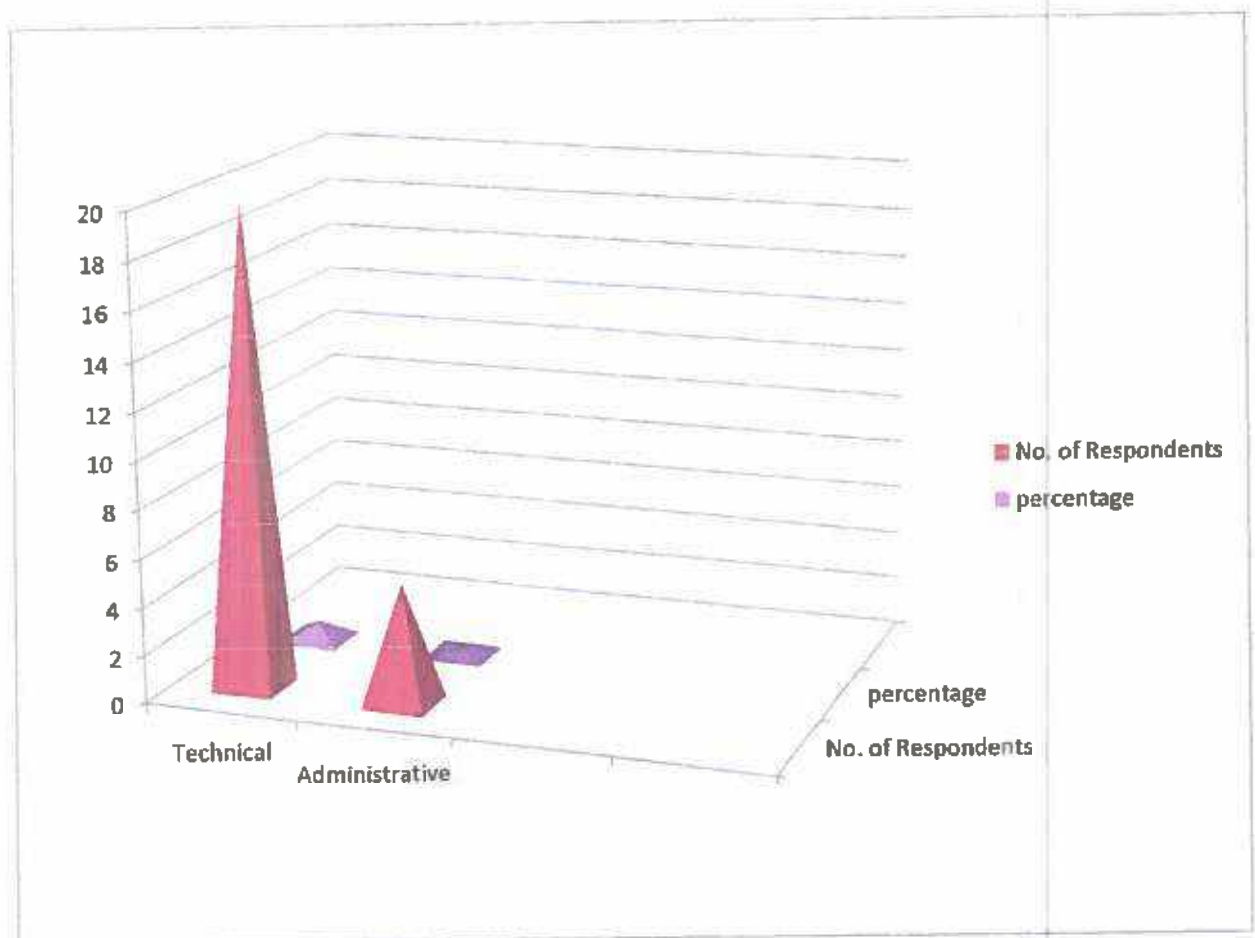
It can be observed from the above table that out of 25 respondents, 24% of the respondents' opinion about superior response to them is very good, 72% of the respondents' opinion is good, 4% of the respondents' opinion is neither good nor bad. Majority of the respondents, i.e., 72% are of the opinion that superior response to them is good.

Table No. 4.14 Shows the respondents opinion about job position.

Particulars	No. of Respondents	percentage
Technical	20	80
Administrative	5	20

Source: Survey

Graph No. 4.14 Shows the respondents opinion about job position.



Interpretation :

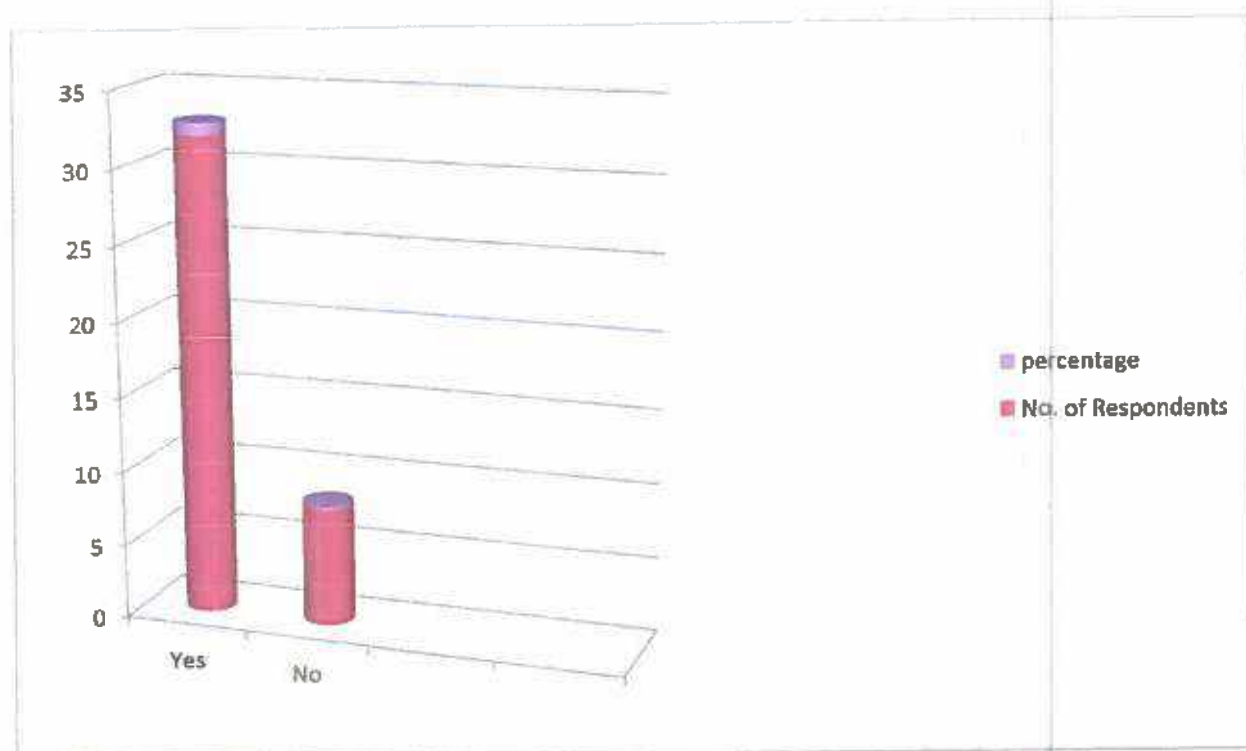
It can be observed from the above table that out of 25 respondents, 80% of respondents wanted a technical job position in a bank, and 20% of the respondents wanted an administrative job position in a bank. The majority of respondents, i.e., 80%, are in favor of a technical job position.

Table NO. 4.15 Shows the respondents opinion about their regular payment.

Particulars	No. of Respondents	percentage
Yes	20	80
No	5	20

Source: Survey

Graph NO. 4.15 Shows the respondents opinion about their regular payment.



Interpretation:

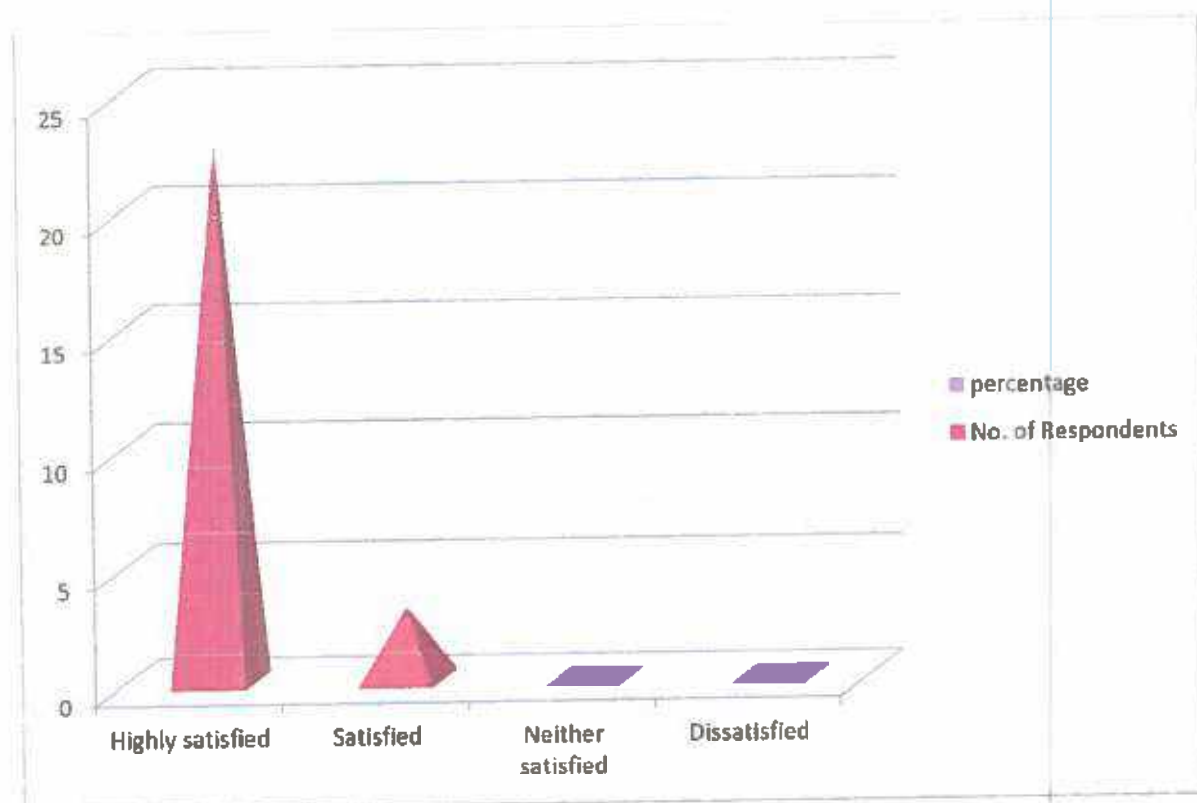
It can be observed from the above table that out of 25 Respondents, 80% Respondents are said yes, 20% respondents are said no. Overall out of 25 respondents 20 Respondents are getting regular payment, and 5 employees are not getting regular payment in their bank. Majority of the Respondents i.e. 80% are regular payment.

Table No. 4.16 Shows employees opinion on safety measures in the bank.

Particulars	No. of Respondents	percentage
Highly satisfied	22	88
Satisfied	03	12
Neither satisfied	0	0
Dissatisfied	0	0

Source: Survey

Graph No. 4.16 Shows employees opinion on safety measures in the bank.

**Interpretation :**

It can be observed from the above table that out of 25 Respondents 88% of the Respondents are highly satisfied with safety measures taken by Bank. 12% of the Respondents are satisfied with safety measures taken by bank. majority of the Respondents are i.e. 88% safety measures in the bank.

CHAPTER -5

FINDING, SUGGESTIONS AND CONCLUSION

5.1 Findings

5.2 Suggestions

5.3 Conclusion

FINDING, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS :

- From this study we can see that out of 25 respondents maximum 60% of respondents are male.
- The study we can see that out of 25 respondents maximum 80% respondents are married.
- The study shows that out of 25 respondents maximum 32% respondents are Graduates.
- It can be observed from the study out of 25 respondents maximum 40% respondents are belongs to age group of above 45 years.
- The study disclosed that out of 25 respondents maximum 80% respondents are happy with their bank work.
- The study shows that out of 25 respondents 72% respondents are satisfied with rules and regulation of the bank.
- It can be observed from the study out of 25 respondents maximum 48% respondents employees are satisfied with their job.
- From the study out of 25 respondents maximum 52% respondents have got the same job which they have expected.
- The study out of 25 respondents maximum 56% respondents opinion about their working environment is good.
- From the study we can see that out of 25 respondents maximum 80% respondents are getting difficulties in bank facilities.
- The study reveals that out of 25 respondents maximum 80% respondents are satisfied with the bank policy.
- From the study we can see that out of 25 respondents maximum 72% respondents opinion is good.
- From the study we can see that out of 25 respondents maximum 64% respondents very good relation with the bank.

- From the study reveals that out of 25 respondents maximum 80% respondents satisfied with technical one.
- From the study we can see that out of 25 respondents maximum 80% respondents are getting regular payment.
- From the study we can see that out of 25 respondents maximum 88% respondents are highly satisfied with the safety of the bank.
- The study shows that out of 25 respondents maximum 80% respondents opinion is bank can cares about employees.

5.2 SUGGESTIONS:

The study has conducted on leadership Style of Om Urban Co-operative Credit Society Ltd. Nasalapur. Based on the observation and personal discussion with leaders and employees of Om Urban Co-operative Credit Society Ltd. Nasalapur, as researcher I would like to give some suggestions for working of Om Urban Co-operative Credit Society Ltd. Nasalapur.

- 1 The bank should provide TA and DA to their employees.
- 2 The bank should focus on the employees' welfare and their conditions of working.
- 3 The bank should frequently communicate with its employees for better performance of bank as well as employees development.
- 4 The bank should try provide all infrastructural facilities needed by employees.

5.3 CONCLUSION :

The study was conducted on Leadership Styles in Banking Sector at Om Urban Co-operative Credit Society Ltd Nasalapur. It can be conclude that leadership is the ability to direct a group of people in realising a common goal. This is done by people applying their leadership attributes. Leaders create commitment and enthusiasm amongst followers to achieve goals.

Leadership can also be developed by strengthening the connection between, and alignment of, the efforts of individual leaders and the systems through which they influence organizational operations. Leadership development can build on the development of individuals to become leaders.

8 How Employees have got the same job which they have expected?

- A. Yes
- B. No

9 How do you feel about your working environment?

- A. Good
- B. Adjustable
- C. Bad

10 Do you have any difficulties getting the facility?

- A. Yes
- B. No

11 Are you satisfied with working in this bank with surety policy?

- A. Highly satisfied
- B. Satisfied
- C. Dissatisfied
- D. Neither satisfied

12 How the superior response to you?

- A. Very good
- B. Good
- C. Average
- D. Bad
- E. Very bad

13 How the relation between with bank and employee?

- A. Very good
- B. Bad
- C. Good
- D. Very bad

14 How the opinion about job position?

- A. Technical
- B. Administrative

**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON CREDIT MANAGEMENT"**

AT

ADARSH CREDIT SOUHARD SAHAKARI LTD. SOUNDATTI

Submitted to

RANI CHANNAMMA UNIVERSITY, BELAGAVI



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

Miss. ARUNA KAMAGOUDA

M.COM-IV SEMESTER

REGISTER NO: MC191603

UNDER THE GUIDANCE OF

SHRI. V. S. KHOT

K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201
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CERTIFICATE

This is to certify that Miss. Aruna Kamagouda has satisfactorily completed the Project Report Entitled "A Study on Credit Management" At Adarsh Credit Soudard Sahakari Ltd. Soundatti for the partial fulfilment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year 2020-2021.

SHRI V. S. KHOT

PROJECT GUIDE

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ಆದರ್ಶ ಕ್ರೆಡಿಟ್ ಸೌಹಾರ್ದ ಸಹಕಾರಿ ನಿಯಮಿತ ಸೌಂದತ್ತಿ

ತಾ|| ರಾಯಚೂರು

ಜ|| ಬೆಳಗಾವಿ.

ADARSH CREDIT SOUHARD SAHAKARI LTD.

Tal: Raibag.

SOUNDATTI.

Dist : Belagavi.

Date : 10-08-2021

CERTIFICATE

This is to certify that **ARUNA KAMAGOUDA** who is persuing her M.Com.4th Semester (Registration No.MC191603) from P. G. Dept. of Commerce & management, KLE Society's B K College Chikkodi from has successfully completed his " Project "work entitled " **A STUDY ON CREDIT MANAGEMENT** " of our Society in fulfillment of the requirement of master of commerce for the period of 25th June to 30th August 2021

During the project his performance was satisfactory and we wish him all success in his career.

(Signature)
SECRETARY

Adarsh Credit Souhard Sahakari
Nmt. Soundatti. Tq. Raibag.

DECLARATION

I declare that the project report entitled "A Study on Credit Management" At Adarsh Credit Sahakari Ltd. Soundatti is a record of independent research work carried out by me and submitted in partial fulfillment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of **Shri. V. S. Khol**, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 31-08-2021
Place: Chikodi

A.V. Kamagouda
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Miss. Aruna Kamagouda

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CHAPTER-1

INTRODUCTION AND RESEARCH DESIGN

- 1.1 Introduction**
- 1.2 Review of Literature**
- 1.3 Statement of the Problem**
- 1.4 Need of the Study**
- 1.5 Objectives of the Study**
- 1.6 Scope of the Study**
- 1.7 Research Methodology**
- 1.8 Limitations of the Study**
- 1.9 Chapter Scheme**

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION:

The purpose of credit in banks is to earn interest and make profit. It follows that principles of goods lending shall be concerned with ensuring, so far as possible that the borrowed will be able to make scheduled payments with interest in full and within the required time period otherwise, the profit from an interest earned is reduced or even wiped out by the bad debt when the customer eventually defaults.

Credit management is concerned primarily with managing debtors and financing debts. The objectives of credit management can be stated as safe guarding the companies' investments in debtors and optimizing operational cash flows. Politics and procedures must be applied for granting credit to customers, collecting payment and limiting the risk of non payments.

An important function of credit management is credit control. This is primarily a process of deciding how much credit should be given to customers or borrowers and ensuring compliances with the credit terms that is given for controlling credit repayments.

1.2 REVIEW OF LITERATURE:

- a) **SACHIN R. AGRAWAL AND S. S. SOLAMKE (2012)** In his research paper write that A co-operative movement plays a major role in development of social and economic environment in India. But Govt. Of India has not provided a good support to the co-operative due to which many problems has been faced by them. Thus, an attempt has been made to elaborate the problems and the relative perspective of co-operative banks in Indian economy.
- b) **RAJESH BARDWAJ ET. AL (2011)** In this paper researcher write that agriculture is the backbone of the Indian economy co-operative banks play significant role in agriculture credit in Indian baking sector. In this study analysed the role of co-operative banks in agriculture credit in India from 2001 to 2007 with the help of

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ACGR. It indicates remarkable achievement of co-operative credit movement in India.

- c) **PUJARI, ASHOK, SUHAG AND MALIK, (2009)** in their article published in Indian Cooperative Review on "An Evaluation of performance of Primary Agricultural Cooperative Societies in Karnataka State" reveals that the share of different size groups of land holdings to PACS membership was almost stagnant in relative term. A majority of the borrowers were small cultivators. They suggested that, government should increase share in working capital to advance more credit to rural people to meet their capital requirement. PACS should initiate steps to recover the amount of over-dues to increase the efficiency of societies.
- d) **J. P. BHOSALE, (2005)**, in his study on A study of Primary Agriculture Cooperative Credit Societies in Junnar, Ambegoan & Khed Talukas of Pune District unpublished Ph.D. thesis, the University of Pune, examined working of PACS to improve the efficiency of the societies for the benefit of the members. His study was focused on the role of PACS in rural development, loan advancement, various services provided, organization and management of PACS.
- e) **BALASAHEB VIKHE PATIL, (2005)** in his article published in Economic Political weekly on "Rural Banking; Problems of Localized Banking Institutions" stated that while at no stage the government has denied the need for revitalization of Credit Co-operatives, the appropriate decisions are getting delayed. It is quite important that we have road map for their reform and development. In absence of clear signals there is virtually no progress in this regard.

1.3 STATEMENT OF THE PROBLEM:

As the study is pertaining to issue of credit management has a profound implication both at the micro and macro level. When credit is allocated poorly it raises costs to successful borrowers, erodes the fund, and reduces banks flexibility in redirecting towards alternative activities. Moreover, the more the credit, the higher is the risk associated with it. The problem of loan default, which is resulted from poor credit management, reduces the lending capacity of a bank. It also denies new applicants' access to credit as the bank's cash flow management problems augment in direct

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proportion to the increasing default problem. In other words, it may disturb the normal inflow and outflow of fund a bank has to keep staying in sustainable credit market.

1.4 NEED FOR THE STUDY:

The study on credit management is the most important for bank/ Co-operative society to as they can understand the expectation and perception of loan applicants/ loan clients about loan application procedure and loan collection procedure. It is important assess the expectation loan applicants and loan clients.

1.5 OBJECTIVES OF THE STUDY:

- To estimate the agreement of the Bank to its policies and procedures in process of loan applications.
- To estimate the ability of the Bank in creating credit and collecting its loan on their due date.
- To assess the awareness of the customers towards the Bank's policy in relation to its loan condition.
- To estimate the Bank's credit quality as compared to National Bank's requirements and its credit policy.

1.6 SCOPE OF THE STUDY:

The study is concentrated on Adarsh Credit souhard sahakari Ltd. branches found in Raibag Region. The study covered credit policies, procedures, and credit operations of the Bank. It assessed whether the loan growth and performance is to the required level of the bank or not. In addition, the study is concerned with identifying the major reasons for best practices of credit management, loan growth, and causes of loan default if any in the region.

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1.7 RESEARCH METHODOLOGY:

Methodology is the systematic approach to the given problem. In other words, it is the way in which we go for the collection of data. Therefore, the better way of collecting data is more important than the data collected, because ultimately the data collected is depend upon how we approach the data. The data has been collected in the following ways.

Tools for data collection:

The tools for data collection are divided into two parts i.e

1. Primary data
2. Secondary data

1. PRIMARY DATA:

Primary data was collected from three sets of people i.e. Bank Officials and Borrowers. This data was collected through filling up of the questionnaires given to each set of these people/officials. The data was collected by personal interviews/discussions/observations/by filling up of the questionnaires by the researcher and his assistants and in some cases the data was filled up by the respondents.

The data required for the project was collected through the discussion with finance manager and various executive in the company.

Following are the methods of primary data.

- Observation method.
- Questionnaire method.
- Discussion method.

2. SECONDARY DATA:

Secondary data was collected from websites of various nationalised banks, website, from the journals of Indian Bank Associations, journals unpublished data from Lead Bank offices.

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Sources of Secondary data:

- Annual Report
- Internet
- Books / Journals
- Reference material

Sample design:

Sampling design is a design, or working plan, that specifies the population frame, sample size, sample selection and estimation method in detail. Objective of the sampling design is to know the characteristics of population.

Population:

Target population for the project is customers of Adarsh Credit Souhard Sahakari Ltd. Soundatti.

Sample Size:

The sample size is taken for the study at Adarsh Credit Souhard Sahakari Ltd. Is 25

Sampling Method:

Simple random sampling

1.8 LIMITATIONS OF THE STUDY:

- The non availability of the relevant information is one of the limitations.
- The study does not claim completeness and accuracy in the findings because it is made by referring the annual report
- This Project is only belongs to Adarsh Credit Souhard Sahakari Ltd.
- The constraint of time had significant impacts on the study.
- The present study and analysis is limited to only 25 respondents.

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1.9 CHAPTER SCHEME:

Chapter 1: Introduction and Research Design

Introduction of the study, Statement of the problem, Objectives of the study, Research Methodology and Limitations of study.

Chapter 2: Conceptual Framework

It deals with Introduction and Empirical Studies.

Chapter 3: Bank Profile

It deals with Bank Profile History of the Bank, Objectives of the Bank, Board of Directors, Organisation Structure, Vision and Mission of the Bank, The various Deposits of the Bank and Swot analysis.

Chapter 4: Data Analysis and Interpretation

It deals with Analysis and Interpretation of data Collected.

Chapter 5: Findings, Suggestions and Conclusion

It deals with Findings, Suggestions and Conclusion of the Study.

CHAPTER-2
CONCEPTUAL FRAMEWORK

2.1 Introduction

- 2.1.1 Definition of Credit Management**
- 2.1.2 Process of Credit Management**
- 2.1.3 Types of Credit**

- 2.1.4 Credit Policies and Procedures**
- 2.1.5 Credit Analysis**
- 2.1.6 Credit Information**
- 2.1.7 Credit Process**
 - 2.1.7.1 Business Development and Credit Analysis**
 - 2.1.7.2 Credit Execution and Administration**
 - 2.1.7.3 Credit Review**
- 2.1.8 Credit Approval and Implementation**
- 2.1.9 Credit Collection Techniques**
- 2.1.10 Financial Analysis**
- 2.1.11 Criteria for Choosing a Bank**
- 2.1.12 Default Problems**
- 2.1.13 Principles Formulated by the Basel Committee**
- 2.1.14 Common Sources of Major Credit Problems**

2.2 Empirical Studies

CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION:

Financial institutions, which are composed of banks, micro finances, and insurances, have comprehensive roles in serving the needs of the society within the economy. The service is rendered through providing three major financial functions: intermediation, or allocation, operational and payment systems. Operational and allocation functions are the provisions of financial resources to meet borrowing needs of individuals and other economic agents. The main microeconomic function of banks is the provision of facilities to collect deposits and invest these deposits as credits. Provision of a sound payment mechanism is also the other expected service from banks. Hence, the performance of banks is measured in terms of the above major roles of the banking business and relies on the provision of these functions.

As Hoff and Stieglitz in 1990 denoted, in the past decades there have been major advances in theoretical understanding of the workings of credit markets. These advances have evolved from a paradigm that emphasis the problems of imperfect information and imperfect enforcement. They pointed out that borrowers and lenders may have differential access to information concerning a business risk, they may form different appraisal of the risk. What is clearly observed in credit market is asymmetric information where the borrower knows the expected return and risk of his/her business, where as the lender such as bank knows only the expected return and risk of the average business in the economy.

2.1.1 DEFINITION OF CREDIT MANAGEMENT:

Credit management is a branch of accountancy, and is a function that falls under the label of credit and collection or accounts receivable as a department in many companies and institutions. They will usually deal with the credit vetting of customers, the resolution of any invoice queries or disputes, allocations of payments or cash applications, internal fund movements, Reconciliations and also maintaining positive working relationships with customer during the debt collection or credit review and approval process.

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2.1.2 PROCESS OF CREDIT MANAGEMENT:

The process of credit management begins with accurately assessing the credit-worthiness of the customer base and his/her business viability. This is particularly important if the company chooses to extend some type of credit line or revolving credit to certain customers. Hence, proper credit management is setting specific criteria that a customer must meet before receiving the proposed credit arrangement.

As part of the evaluation process, credit management also calls for determining the total credit line that will be extended to a given customer.

Several factors are used as part of the credit management process to evaluate and qualify a customer for the receipt of some form of commercial credit. This includes gathering data on the potential customer's current financial condition, including the current credit track record that discloses the character of a customer in meeting obligations as well as collateral value. The current ratio between income and outstanding financial obligations will also be taken into consideration.

Competent credit management seeks to not only protect the bank or any financial institution involved from possible losses, but also protect the customer from creating more debt obligations that cannot be settled in a timely manner.

When the process of credit management functions efficiently, everyone involved benefits from the effort. The financial institution such as banks has a reasonable amount of assurance that loans granted to a client will be paid back within terms, or that regular minimum payments will be received on credit account balances.

2.1.3 TYPES OF CREDIT:

There are four basic types of credit. By understanding how each works, financial institutions will be able to get the most solution for their loan recovery and avoid paying unnecessary charges.

- **Service credit** is monthly payments for utilities such as telephone, gas, electricity, and water. You often have to pay a deposit, and you may pay a late charge if your payment is not on time.
- **Loans:** Loans can be for small or large amounts and for short or long periods. Loans can be repaid in one lump sum or in several regular instalment payments until the

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amount borrowed and the finance charges are paid in full. Moreover, loans can be secured or unsecured.

- Instalment credit: is described as buying on time, financing through the store or the easy payment plan.

The borrower takes the goods home in exchange for a promise to pay later. Cars, major appliances, and furniture are often purchased this way. You usually sign a contract, make a down payment, and agree to pay the balance with a specified number of equal payments called instalments.

The finance charges are included in the payments. The item you purchase may be used as security for the loan.

- Credit cards are issued by individual retail stores, banks, or businesses. Using a credit card can be the equivalent of an interest-free loan--if you pay for the use of it in full at the end of each month

2.1.4 CREDIT POLICIES AND PROCEDURES:

A Credit Policy is not something that is only operated by the Credit and risk Department. All employees involved with customers, in any way, need to be aware of it. In order to be effective, credit policies must be communicated throughout the organization, implemented through appropriate procedures, monitored and periodically revised to take into account changing internal and external circumstances. They should be applied, where appropriate, on a consolidated bank basis and at the level of individual affiliates. In addition, the policies should address equally the important functions of reviewing the credit policy and ensure that it is operated consistently.

Economic conditions and the firm's credit policies are the chief influences on the level of a firm's account receivable. Economic conditions, of course, are largely beyond the control of the financial manager. As with other current assets, however, the manager can vary the level of receivables in keeping with the trade off between profitability and risk. Lowering quality standards may stimulate demand, which, in turn, should lead to higher profitable receivables, as well as a greater risk of bad debt.

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The credit and collection policy of one firm are not independent of those of other firms. If product and capital markets are reasonably competitive, the credit and collection practices of one company will be influenced by what other companies are doing.

Such practice related to the pricing of the product or service and must be viewed as part of the overall competitive process.

The examination of certain policy variables implies that the competitive process is accounted for in the specification of the demand function as well as in the opportunity cost associated with taking on additional receivables. The policy variables include the quality of the trade accounts accepted; the length of the credit period, the cash discount, any special terms such as seasonal dating and the collection program of the firm. Together, these elements largely determine the average collection period and the proportion of bad debt losses (Horne, 1995: 361).

2.1.5 CREDIT ANALYSIS:

Credit analysis is the primary method in reducing the credit risk on a loan request. This includes determining the financial strength of the borrowers, estimating the probability of default and reducing the risk of non repayment to an acceptable level. In general, credit evaluations are based on the loan officer's subjective assessment (or judgmental assessment technique).

Once a customer requests a loan, bank officers analyze all available information to determine whether the loan meets the bank's risk-return objectives. Credit analysis is essentially default risk analysis, in which a loan officer attempts to evaluate a borrower's ability and willingness to repay.

Similarly Compton (1985) identified three distinct areas of commercial risk analysis related to the following questions: 1) what risks are inherent in the operations of the business? 2) What have managers done or failed to do in mitigating those risks? 3) How can a lender structure and control its own risks in supplying funds?

The first question forces the credit analyst to generate a list of factors that indicate what could harm a borrower's ability to repay. The second recognizes that repayment is largely a function of decisions made by a borrower. Is management aware of the

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important risks, and has it responded? As Tomothy (1995:665) quoted, the last question forces the analyst to specify how risks can be controlled so the bank can structure to an acceptable loan agreement.

A bank's credit analysts often use the five C's of credit to focus their analysis on the key dimensions of an applicant's creditworthiness.

Lawrence (1997:776-777), identified five C's of credit. They include; Character, Capacity, Capital, Collateral, and Conditions.

- 1) **Character:** The applicant's record of meeting past obligations, financial, contractual, and moral. Past payment history as well as any pending or resolved legal judgments against the applicant would be used to evaluate its character.
- 2) **Capacity:** The applicant's ability to repay the requested credit. Financial statement analysis, with particular emphasis on liquidity and debt ratios, is typically used to assess the applicant's capacity.
- 3) **Capital:** The financial strength of the applicant as reflected by its ownership position. Analysis of the applicant's debt relative to equity and its profitability ratios are frequently used to assess its capital.
- 4) **Collateral:** The amount of assets the applicant has available for use in securing the credit. The larger the amount of available assets the greater the chance that a firm will recover its funds if the applicant defaults.

A review of the applicant's balance sheet, asset value appraisals, and any legal claims filed against the applicant's assets can be used to evaluate its collateral.

- 5) **Conditions:** The current economic and business climate as well as any unique circumstances affecting either party to the credit transaction. For example, if the firm has excess inventory of the items the applicant wishes to purchase on credit, the firm may be willing to sell on more favourable terms or to less creditworthy applicants. Analysis of the general economic and business conditions, as well as special circumstances that may affect the applicant or firm is performed to assess conditions. The credit analyst typically gives primary attention to the first two C's-character and Capacity-because they represent the most basic requirements for extending credit to an applicant. Consideration of the last three C's-Capital, Collateral, and Conditions- is

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important in structuring the credit management and making the final credit decision, which is affected by the credit analyst's experience and judgment.

According to Golden and Walker (1993), there are five Cs of bad debt; which represent things to guard against in order to help prevent problems. They include: Complacency, Carelessness, Communication breakdown, Contingency, and Competition

Complacency refers to the tendency to assume that because things were good in the past they will be good in the future. Common examples are an over reliance on guarantors, reported net worth, or past loan repayment success because it's always worked out in the past.

Carelessness involves poor underwriting, typically evidenced by inadequate loan documentation, a lack of current financial information or other pertinent information in the credit files, and a lack of protective covenants in the loan agreement. Each of these makes it difficult to monitor a borrower's progress and identify problems before they are unmanageable.

Loan problems often arise when a bank's credit objectives and policies are not clearly communicated. This is communication breakdown. Management should articulate and enforce loan policies, and loan officers should make management aware of specific problems with the existing loans as soon as they appear.

A contingency refers to lenders' tendency to play down or ignore circumstances in which a loan might in default.

Competition involves following competitors' behaviour rather than maintaining the bank's own credit standards.

2.1.6. CREDIT INFORMATION:

Adequate and timely information that enables a satisfactory assessment of the creditworthiness of borrowers applying for a bank loan is crucial for making prudent lending decisions. Prudent lending decisions made on the basis of adequate information on the creditworthiness of borrowers are one of the principal factors in ensuring the financial soundness of banks.

But, there has been serious difficulty in Ethiopia of getting accurate and timely

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information on prospective borrowers that facilitates the making of such prudent lending decisions. One of the means for alleviating this difficulty of getting accurate and timely information on prospective borrowers is the establishment of a Credit Information Center (CIC) where relevant information on borrowers is assumed to be pooled and made available to lending banks.

~~According to article 36 of the Licensing and Supervision of Banking Business~~

Proclamation No. 84/ 19 94, the National Bank Ethiopia (NBE) has issued these directives to establish such a Credit Information Center (CIC). Though there is still serious limitations in the accuracy of the credit information extracted the summary of the directive is as follows :

- Banks shall provide, alter and update credit information on each and every one of their borrowers using online system.
- Upon written request by banks, the Supervision Department of the NBE shall provide to the requesting bank, in writing, all credit information available in the Central Database on a prospective borrower within three working days from the date of receipt of the request.
- Access to the Central Database shall be restricted to the user group;
- The role of the NBE shall be restricted to administering the Credit Information Sharing system, providing in writing credit information on borrowers available at Credit Information Centre to banks, ensuring that access to online system to update or alter credit information is given only to authorized persons and ensuring that the system is operating smoothly and reliably;
- The NBE shall not be responsible for any damages, claims or liabilities that may arise as a result of inaccurate, misleading or incomplete credit information on borrowers supplied to the Credit Information Center by individual banks and shared, through the NBE, with other banks.
- Each bank shall provide, electronically, the initial credit and other related information to the Credit Information Center on each and every one of its borrower;
- Each bank shall be fully responsible for providing accurate, complete and timely credit information to the Credit Information Center. In cases where errors have been made, such errors shall be corrected promptly by the concerned bank;

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- Each bank shall be fully responsible for any damages, claims or liabilities that may arise as a result of providing inaccurate, misleading or incomplete credit information to the Credit Information Center or failure to provide, inadvertently or otherwise, information to the Center that should have been provided in line with these directives;
- Each bank shall use the credit information on borrowers obtained from the Central Database of the Credit Information Center only and only for making a lending decision. Such information shall be treated with utmost confidentiality and shall not be disclosed to any third party or used for any other purpose;

Each bank shall be fully responsible for any damages, claims or liabilities that may arise as a result of disclosure of credit information on borrowers obtained from the Credit Information Center to third parties or use of that information for purposes other than for making a lending decision.

2.1.7 CREDIT PROCESS:

The fundamental objective of commercial and consumer lending is to make profitable loans with minimal risk. Management should target specific industries or markets in which lending officers have expertise. The credit process relies on each bank's systems and controls to allow management and credit officers to evaluate risk and return trade-offs.

According to Timothy (1995), the credit process includes three functions: business development and credit analysis, credit execution and administration, and credit review.

2.1.7.1 BUSINESS DEVELOPMENT AND CREDIT ANALYSIS:

Business development is the process of marketing bank services to existing and potential customers. With lending it involves identifying new credit customers and soliciting their banking business, as well as maintaining relationships with current customers and cross-selling non-credit services. Every bank employee, from tellers handling drive-up facilities to members of the board of the directors, is responsible for business development. Each employee regularly comes in to contact with

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potential customers and can sell bank services. To encourage marketing efforts, many banks use cash bonuses or other incentive plans to reward employees who successfully cross.

2.1.7.2 CREDIT EXECUTION AND ADMINISTRATION:

The formal credit decision can be made individually or by committee, depending on a bank's organizational structure. This structure varies with a bank's size, number of employees, and type of loans handled. A bank's Board of Directors normally has the final say on which loans are approved. Typically, each lending officer has independent authority to approve loans up to some fixed dollar amount.

2.1.7.3 CREDIT REVIEW:

The loan review effort is directed at reducing credit risk as well as handling problem loans and liquidating assets of failed borrowers. Effective credit management separates loan review from credit analysis, execution, and administration. The review process can be divided into two functions: monitoring the performance of existing loans and handling problem loans. Many banks have a formal loan review committee, independent of loan officers, that reports directly to the chief executive officer and directors' loan committee.

Loan review personnel review current loan to verify that the borrower's financial condition is acceptable, loan documentation is in place, and pricing meets return objectives.

2.1.8 Credit Approval and Implementation:

The individual steps in the credit approval process and their implementation have a considerable impact on the risks associated with credit approval. The quality of credit approval processes depends on two factors, i.e. a transparent and comprehensive presentation of the risks when granting the loan on the one hand, and an adequate assessment of these risks on the other. Furthermore, the level of efficiency of the credit approval processes is an important rating element. Due to the considerable differences in the nature of various borrowers and the assets to be

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financed as well as the large number of products and their complexity, there cannot be a uniform process to assess credit risks.

The quality of the credit approval process from a risk perspective is determined by the best possible identification and evaluation of the credit risk resulting from a possible exposure.

According to Oesterreichische Nationalbank Credit Approval Process and Credit Risk Management (2000), the credit risk can be distributed among four risk components.

- a. Probability of Default (PD)
- b. Loss Given Default (LGD)
- c. Exposure at Default (EAD)
- d. Maturity (M)

The most important components in credit approval processes are PD, LGD, and EAD. While maturity (M) is required to calculate the required capital, it plays a minor role in exposure review. The significance of PD, LGD, and EAD is described below.

a) PROBABILITY OF DEFAULT (PD)

Reviewing a borrower's probability of default is basically done by evaluating the borrower's current and future ability to fulfill its interest and principal repayment obligations. This evaluation has to take into account various characteristics of the borrower (natural or legal person), which should lead to a differentiation of the credit approval processes in accordance with the borrowers served by the bank.

Furthermore, it has to be taken into account that for certain finance transactions, interest and principal repayments should be financed exclusively from the cash flow of the object to be financed without the possibility for recourse to further assets of the borrower. In this case, the credit review must address the viability of the underlying business model, which means that the source of the cash flows required to meet interest and principal repayment obligations has to be included in the review.

b) LOSS GIVEN DEFAULT (LGD)

The loss given default is affected by the collateralized portion as well as the cost of

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selling the collateral. Therefore, the calculated value and type of collateral also have to be taken into account in designing the credit approval processes.

c) **EXPOSURE AT DEFAULT (EAD)**

In the vast majority of the cases described here, the exposure at default corresponds to the amount owed to the institution. Thus, besides the type of claim; the amount of the claim is another important element in the credit approval process.

2.1.9 CREDIT COLLECTION TECHNIQUES:

Effective credit collection techniques are one of the necessities for financial institutions in any economic climate. Knowing how to encourage customers to pay their outstanding debts to financial institutions like banks on time can increase the cash flow of banks.

Therefore a number of collection techniques are employed. Under normal circumstances loan clients are expected to pay in cash or deposit or keep their installment repayment as per the agreement made. As the loan account becomes past due or overdue the collection effort becomes more personal and strict. The basic techniques are:

- **Telephone Calls:** If the loan client passes the due date, a telephone call may be made to the customer to request immediate repayment and up to date his or her account.
- **Personal visits:** - If the telephone call made is not resulted positive response vesting his business and discussing the issue with the customer can be a very effective collection procedure.
- **Letters:** - If the efforts made so far is unsuccessful and not resulted positive response a polite letter is to be served reminding the customer of its obligation followed by warning letters for the action to be taken in future and its consequence. Collection letters are the first step in the collection process for past due and overdue loan accounts.
- **Using Collection Agencies:** Firms can turn uncollectible accounts over to a collection agency or an attorney for collection. The fees for this service are typically quite high; the firm may receive less than fifty percent on accounts collected in this way.
- **Legal Action:** legal action is the most stringent step in the collection process. It is an

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alternative to the use of a collection agency not only is direct legal action expensive, but it may force the debtor into bankruptcy, thereby reducing the possibility of future business without guaranteeing the ultimate receipt of overdue amount.

2.1.10 FINANCIAL ANALYSIS:

Review, appraisal and follow-up are three basic elements in credit management and decision-making. At the time of considering fresh proposals or enhancement proposals, the banker reviews the past operations with a view to judge the health status of the client. Timothy (1995) identified three basic elements used in credit management to evaluate the creditworthiness of clients.

- a) Review is for the past. It should enable the banker to find out whether it is safe to lend to a particular client. In order to arrive at this decision, the banker has to satisfy himself about the risk and viability of the unit. Review of any unit involves assessment of solvency, liquidity and profitability of that unit as revealed by its financial statements, i.e. profit and loss accounts and balance sheets. Review, thus, involves classification of profit and loss account and the balance sheet according to bank's requirement and analysis of these statements.
- b) Credit appraisal implies consideration of fresh or enhancement proposals on the basis of futuristic data. While appraising proposals, banker tries to find out: financial need of the client, end-use of funds, viability of operations and risk involved. In case of proposals involving working capital finance, the banker can ascertain the aforesaid factors only when he / she is supplied with the business plan of the borrower for the ensuing period. Business plan is expressed through operating statement, balance sheet, funds flow, and cash flow statements, all on projected basis.
- c) Follow-up may be defined as a continuous activity aimed at ensuring observance of stipulations laid down by the bank, picking up signals on health status of client's position, remedial action and ensuring results of action on a continuous basis. Safety, need-based finance and end-use are the key assumptions of lending.

A banker needs various types of data and information from the borrowers for taking the credit decisions. Such information is generally available in various financial statements such as income statement, balance sheet, cash flow statement, funds flow statement, etc.

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But mere collect of these financial data from the borrowers is of little help unless the banker is able to use these statements; arrange or classify them according to his/her needs and analyze them with a view to draw meaningful conclusions.

2.1.11 CRITERIA FOR CHOOSING A BANK:

~~Individuals whose only contact with their bank is through the use of its checking~~ services generally choose a bank for the convenience of its location and the competitive cost of its services. However, a business that borrows from banks must look at other criteria, and a potential borrower seeking banking relations should recognize that important difference exist among banks. Some of these differences are considered here.

a) WILLINGNESS TO ASSUME RISKS

Banks have different basic policies toward risk. Some banks are inclined to follow relatively conservative lending practice, while others engage in what are properly termed creative banking practices. These policies reflect partly the personalities of officers of the bank and partly the characteristics of the banks deposit liabilities.

Thus, a bank with fluctuating deposit liabilities in a static community will tend to be a conservative lender, while a bank whose deposits are growing with little interruption might follow more liberal credit policies. Similarly, a large bank with broad diversification over geographic regions or across industries can obtain the benefit of combining and averaging risks.

b) ADVICE AND COUNSEL

Some bank loan officers are active in providing counsel and in stimulating development loans to firms in their early and formative years. Certain banks have specialized departments that make loans to firms expected to grow and thus to become more important customers. The personnel of these departments can provide valuable counseling to customers.

c) LOYALTY TO CUSTOMERS

Banks differ in the extent to which they will support the activities of borrowers in bad times. This characteristic is referred to as the degree of loyalty of the bank. Some banks might put great pressure on a business to liquidate its loans when the firms' outlook becomes clouded, whereas other will stand by the firm and work diligently

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to help it get back on its feet.

d) SPECIALIZATION

Banks differ greatly in their degrees of loan specialization. Large banks have separate departments that specialize in different kinds of loans for example, real estate loans, farm loans, and commercial loans. Within these broad categories, there might be a specialization by line of business, such as steel, machinery, cattle, or textiles. The strengths of banks also are likely to reflect the nature of the business and economic environment in which the banks operate. For example, some California banks have become specialists in lending to technology companies, while many Midwestern banks are agricultural specialists. A sound firm can obtain more creative cooperation and more active support by going to a bank that has experience and familiarity with its particular type of business. Therefore, a bank that is excellent for one firm might be unsatisfactory for another.

e) MAXIMUM LOAN SIZE

The size of a bank can be important factor. Because the maximum loan a bank can make to any one customer is limited to certain percent of the Banks capital account (capital stock plus retained earnings). It generally is not appropriate for large firms to develop borrowing relationships with small banks.

2.1.12 DEFAULT PROBLEMS:

Non-payment of loans has several undesirable consequences. It gradually destabilizes the credit system. Costs of loan administration of overdue loans are high. And defaults push up lending costs without any corresponding increase in loan turnover. Defaults reduce the resource base for further lending, weaken staff morale, and affect the borrower's confidence.

Sanderatne (1978), after a comprehensive survey of defaults in Sri Lanka, identified six factors which contributed to defaults:

- Variability in incomes caused by fortuitous, seasonal, or unforeseen factors;
- Defects and inadequacies in the organization disbursing credit;
- Attitudinal conditions not conducive to repayment;

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- Misallocation of borrowed funds;
- Miscellaneous reasons such as illness, death. Etc.

According to Pandmanabhan (1986: 26-31), causes of delinquencies and defaults are classified as relating to three levels: borrower level, financing institution level, and economy level.

a. CAUSES AT BORROWER LEVEL:

- Borrowers who deliberately divert loans to non -essential consumption find it difficult to meet repayment commitments ontime.
- Investments fail to generate sufficient incomes due to improper technical advice; absence of supporting services, inadequate marketing, etc. investments also fail due to unforeseen causes like floods, drought, etc. in both cases repayment would be affected.
- When borrowers have liabilities towards informal lenders, they get precedence over institutional lenders.
- Contingencies at borrower household like death, sickness, etc, affect repayment performance. Formal institutions which do not extend consumption and emergency loans are liable to have higher default rates.

b. CAUSES AT FINANCING INSTITUTIONLEVEL:

- Defective procedures for loan appraisal in the financing institutions could lead to the financing of bad projects and consequent defaults.
- Quality of loan officers, their ability and knowledge in the field, and their capacity to judge borrowers as also the incentive packages available to them affect repayment performance.
- Fixing of inappropriate repayment schedules and lack of flexibility often result in defaults. Similarly, when the procedure for repayment is cumbersome borrowers tend to delay repayments.
- Defaults have a 'spread effect' particularly in the marginal cases. When lenders show reluctance to enforce sanctions against conspicuous defaulters, defaults tend to increase through a process of imitation.

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c. CAUSES AT ECONOMY LEVEL:

- When overall government policies, particularly those relating to pricing of inputs and outputs, marketing, etc., discriminate against the specific sector.
- Faulty monetary and fiscal policies of governments could result in high inflationary conditions. Borrowers tend to delay repayments in such a situation to take advantage of the fall in value of currency.
- Interest rate policies of government have a vital role in the promotion of repayments. When the real rate is excessively low, borrowing and consumption will be much more profitable than saving and repayment.
- Excessive government intervention in the day -to-day administration of financial institutions could result in bad loans.
- Calamities like droughts, floods, market glut, etc could result non performing loans.

2.1.13 PRINCIPLES FORMULATED BY THE BASEL COMMITTEE:

As a direction for the achievement of the required level of loan status and healthy financial institutions the Basel Committee on Banking Supervision in September 2000 also formulated the following Principles

a) ESTABLISHING AN APPROPRIATE CREDIT RISK ENVIRONMENT

Principle 1: The board of directors should have responsibility for approving and periodically (at least annually) reviewing the credit risk strategy and significant credit risk policies of the bank. The strategy should reflect the bank's tolerance for risk and the level of profitability the bank expects to achieve for incurring various credit risks.

Principle 2: Senior management should have responsibility for implementing the credit risk strategy approved by the board of directors and for developing policies and procedures for identifying, measuring, monitoring and controlling credit risk. Such policies and procedures should address credit risk in all of the bank's activities and at both the individual credit and portfolio levels.

Principle 3: Banks should identify and manage credit risk inherent in all products and activities. Banks should ensure that the risks of products and activities new to them are subject to adequate risk management procedures and controls before being

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introduce or undertaken, and approved in advance by the board of directors or its appropriate committee.

b) OPERATING UNDER A SOUND CREDIT GRANTING PROCESS

Principle 4: Banks must operate within sound, well defined credit granting criteria. These criteria should include a clear indication of the bank's target market and a thorough understanding of the borrower or counterparty, as well as the purpose and structure of the credit, and its source of repayment.

Principle 5: Banks should establish overall credit limits at the level of individual borrowers and counterparties, and groups of connected counterparties that aggregate in comparable and meaningful manner different types of exposures, both in the banking and trading book and on and off the balance sheet.

Principle 6: Banks should have a clearly established process in place for approving new credits as well as the amendment, renewal and re-financing of existing credits.

Principle 7: All extensions of credit must be made on an arm's length basis. In Particular, credits to related companies and individuals must be authorized on an exception basis, monitored with particular care and other appropriate steps taken to control or mitigate the risks of non-arm's length lending.

c) MAINTAINING AN APPROPRIATE CREDIT ADMINISTRATION, MEASUREMENT AND MONITORING PROCESS.

Principle 8: Banks should have in place a system for the ongoing administration of their various credit risk bearing portfolios.

Principle 9: Banks must have in place a system for monitoring the condition of individual credits, including determining the adequacy of provisions and reserves.

Principle 10: Banks are encouraged to develop and utilize an internal risk rating system in managing credit risk. The rating system should be consistent with the nature, size and Complexity of a Bank's activities.

Principle 11: Banks must have information systems and analytical techniques that enable management to measure the credit risk inherent in all on and offbalance sheet activities. The management information system should provide adequate information on the composition of the credit portfolio, including identification of any concentrations of risk.

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Principle 12: Banks must have in place a system for monitoring the overall composition and quality of the credit portfolio.

Principle 13: Banks should take into consideration potential future changes in economic conditions when assessing individual credits and their credit portfolios, and should assess their credit risk exposures under stressful conditions.

d) ENSURING ADEQUATE CONTROLS OVER CREDIT RISK

Principle 14: Banks must establish a system of independent, ongoing assessment of the bank's credit risk management processes and the results of such reviews should be communicated directly to the board of directors and senior management.

Principle 15: Banks must ensure that the credit-granting function is being properly managed and that credit exposures are within levels consistent with prudential standards and internal limits. Banks should establish and enforce internal controls and other practices to ensure that exceptions to policies, procedures and limits are reported in a timely manner to the appropriate level of management for action.

Principle 16: Banks must have a system in place for early remedial action on deteriorating credits, managing problem credits and similar workout situations.

2.1.14. COMMON SOURCES OF MAJOR CREDIT PROBLEMS:

Most major banking problems have been either explicitly or indirectly caused by weaknesses in credit management. In supervisors' experience, certain key problems tend to persist. Severe credit losses in a banking system usually reflect simultaneous problems in several areas, such as concentrations, failures of due diligence and inadequate monitoring.

1. Concentrations are probably the single most important cause of major credit problems. Credit concentrations are viewed as any exposure where the potential losses are large relative to the bank's capital, its total assets or, where adequate measures exist, the bank's overall risk level.
2. Banking supervisors should have specific regulations limiting concentrations to one borrower or set of related borrowers, and, in fact, should also expect banks to set much lower limits on single obligor exposure. Most credit managers in banks also monitor industry concentrations. Many banks are exploring techniques to identify concentrations based on common risk factors or correlations among factors. While

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small banks may find it difficult not to be at or near limits on concentrations, very large banking organizations must recognize that, because of their large capital base, their exposures to single obligors can reach imprudent levels while remaining within regulatory limits.

3. Many credit problems reveal basic weaknesses in the credit granting and monitoring processes. While shortcomings in underwriting and management of market related credit exposures represent important sources of losses at banks, many credit problems would have been avoided or mitigated by a strong internal credit process.
4. Many banks find carrying out a thorough credit assessment (or basic due diligence) a substantial challenge. For traditional bank lending, competitive pressures and the growth of loan syndication techniques create time constraints that interfere with basic due diligence.

Some credit problems arise from subjective decision -making by senior management of the bank. This includes extending credits to companies they own or with which they are affiliated, to personal friends, to persons with a reputation for financial acumen or to meet a personal agenda, such as cultivating special relationships with celebrity.

5. Many banks that experienced asset quality problems in the 1990s lacked an effective credit review process (and indeed, many banks had no credit review function). Credit review at larger banks usually is a department made up of analysts, independent of the lending officers, who make an independent assessment of the quality of a credit or a credit relationship based on documentation such as financial statements, credit analysis provided by the account officer and collateral appraisals. At smaller banks, this function may be more limited and performed by internal or external auditors. The purpose of credit review is to provide appropriate checks and balances to ensure that credits are made in accordance with bank policy and to provide an independent judgment of asset quality, uninfluenced by relationships with the borrower. Effective credit review not only helps to detect poorly underwritten credits, it also helps prevent weak credits from being granted, since credit officers are likely to be more diligent if they know their work will be subject to review.

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6. A common and very important problem among troubled banks in the early 1990s was their failure to monitor borrowers or collateral values. Many banks neglected to obtain periodic financial information from borrowers or real estate appraisals in order to evaluate the quality of loans on their books and the adequacy of collateral. As a result, many banks failed to recognize early signs that asset quality was deteriorating and missed opportunities to work with borrowers to stem their financial deterioration and to protect the bank's position. This lack of monitoring led to a costly process by senior management to determine the dimension and severity of the problem loans and resulted in large losses.
7. In some cases, the failure to perform adequate due diligence and financial analysis and to monitor the borrower can result in a breakdown of controls to detect credit -related fraud. For example, banks experiencing fraud -related losses have neglected to inspect collateral, such as goods in a warehouse or on a showroom floor, have not authenticated or valued financial assets presented as collateral, or have not required audited financial statements and carefully analyzed them. An effective credit review department and independent collateral appraisals are important protective measures, especially to ensure that credit officers and other insiders are not colluding with borrowers.
8. In addition to shortcomings in due diligence and credit analysis, bank credit problems reflect other recurring problems in credit -granting decisions. Some banks analyze credits and decide on appropriate non -price credit terms, but do not use risk sensitive pricing. Banks that lack a sound pricing methodology and the discipline to follow consistently such a methodology will tend to attract a disproportionate share of under -priced risks. These banks will be increasingly disadvantaged relative to banks that have superior pricing skills.
9. Many banks have experienced credit losses because of the failure to use sufficient caution with certain leveraged credit arrangements. As noted above, credit extended to highly leveraged borrowers is likely to have large losses in default. Similarly, leveraged structures such as some buyout or debt restructuring strategies, or structures involving Customer written options generally introduce concentrated credit risks into the bank's credit portfolio and should only be used with financially

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strong customers. Often, however, such structures are most appealing to weaker borrowers because the financing enables a substantial upside gain if all goes well, while the borrower's losses are limited to its net worth.

Many banks' credit activities involve lending against non financial assets. In such lending, many banks have failed to make an adequate assessment of the correlation between the financial condition of the borrower and the price changes and liquidity of the market for the collateral assets. Much asset -based business lending (i.e. commercial finance, equipment leasing, and factoring) and commercial real estate lending appear to involve a relatively high correlation between borrower creditworthiness and asset values. Since the borrower's income, the principal source of repayment is generally tied to the assets in question, deterioration in the borrower's income stream, if due to industry or regional economic problems may be accompanied by declines in asset values for the collateral. Some asset based consumer lending (i.e. home equity loans, auto financing) exhibits a similar, if weaker, relationship between the financial health of consumers and the markets for consumer assets.

10. A related problem is that many banks do not take sufficient account of business cycle effects in lending. As income prospects and asset values rise in the ascending portion of the business cycle, credit analysis may incorporate overly optimistic assumptions. Effective stress testing which takes account of business or product cycle effects is one approach to incorporating into credit decisions a fuller understanding of a borrower's credit risk.
11. More generally, many underwriting problems reflect the absence of a thoughtful consideration of downside scenarios. In addition to the business cycle, borrowers may be vulnerable to changes in risk factors such as specific commodity prices, shifts in the competitive landscape and the uncertainty of success in business strategy or management direction. Many lenders fail to "stress test" or analyze the credit using sufficiently adverse assumptions and thus fail to detect vulnerabilities.

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2. 2 Empirical Studies

Hong and Sung (1995) have tried to analyze Korean banks' performance which was reflected on their financial statements and to provide some comments to improve their banking business. The study was carried out by comparing the eight Korean banks' past five years performance results with other banks in the State of California, other banks include Asian banks other than Korean banks owned by such Asians (e.g., Chinese and Japanese) and American banks owned by other ethnic groups of Americans (e.g., "white" American). The comparative financial analysis indicated that Korean banks were relatively conservative in managing operations and lending and were more actively involved in their services for international business and sales activities. The analyses also indicated that the Korean banks' loan quality was relatively low and their loan market appears to have been saturated. They recommend on the basis of the analysis that the Korean banks should adopt a more active marketing strategy to expand and create their own market, consider tighter control for their operations with understanding banking regulations (e.g., Financial Institutions Reform, Recovery, and Enforcement Act) and adopt the loan policy in a way that they can make a loan decision with more reliable cash flow analysis.

Abdus (2004) has examined empirically the performance of Bahrain's commercial banks with respect to credit (loan), liquidity and profitability during the period 1994-2001. Nine financial ratios (Return on Asset, Return on Equity, Cost to Revenue, Net Loans to Total Asset, Net Loans to Deposit, Liquid Asset to Deposit, Equity to Asset, Equity to Loan and Non-performing loans to Gross Loan) were selected for measuring credit, liquidity and profitability performances. By applying these financial measures, this paper found that commercial banks' liquidity performance was not at par with the Bahrain banking industry. Commercial banks are relatively less profitable and less liquid and, are exposed to risk as compared to banking industry. With regard to asset quality or credit performance, this paper found no conclusive result.

Non Performing loans to gross loans(NPLGL) indicates that there was no difference in performance between the commercial banks and the banking industry in Bahrain.

Chowdhury and Ahmed (2007) have tried to analyze the development and growth of

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selected private Commercial Banks of Bangladesh. It was observed that all the selected private commercial banks were able to achieve a stable growth of branches, employees, deposits, loans and advances, net income and earnings per share during the period of 2002-2006. Seven trend equations have been tested for different activities (growth in branch, employees, deposits, loans and advances, net income and earnings per share) of the private commercial banks. Among them the trend value of branches, employees deposits and net income were positive incase of all the selected banks.

The above empirical review of literature emphasizes that all the studies so far conducted are mainly discussing the loan recover y problems, determinant factors for default of borrowers in financial institutions in general at Macro level. The researcher also observed in the review of literature that there are no studies conducted mainly to identify the problems related to lack of effective credit management with reference to Wegagen Bank Share Company, Tigray region. Thus , the researcher felt it appropriate to take up the present study entitled "CREDIT MANAGEMENT - A CASE STUDY OF WEGAGEN BANK SHARE COMPANY IN TIGRAY REGION" to assess the credit management problems and thereby to recommend courses of action that are assumed to promote quality loan growth and curtail non -performing.

CHAPTER-3

BANK PROFILE

- 3.1 Bank Profile**
- 3.2 History of the Bank**
- 3.3 Objectives of the Bank**

- 3.4 Board of the Directors**
- 3.5 Organisation Structure**
- 3.6 Vision and Mission of the Bank**
- 3.7 The Various Deposits of the Bank**
- 3.8 Swot Analysis**

BANK PROFILE

3.1 Bank Profile:



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Founder of ADARSH CREDIT SOUHARD SAHAKARI LTD.

SOUNDATTI

Shri. I.D.Patil



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Other Information:

Name of the Bank	Adarsh Credit Souhard Sahakari Ltd. Soundatti
Founder	I.D.PATIL
Head Office	Soundatti
Branches	4
Working Hours	10:30am to 5:30pm 10:30am to 2:30pm (Saturday)
Telephone Number	(08338)254251, 254245
Address	Adarsh Credit Souhard Sahakari Ltd. Soundatti A/p:- (B) Soundatti, Tq:- Raibag, Dist:- Belgaum 591213
Slogan	Strong and Pure Banking
Registration Number	DRL/RSR/1216/KAS/UOG/0601

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3.2 HISTORY OF THE BANK:

Adarsh Credit Souhard Sahakari Ltd. Soundatti, was established in the year of 29th September 2006 formerly as Soundatti Adarsh Credit Society Ltd; , Soundatti Rajiv Ghandi Road, A/P-Sondatti, Tal-Raibag, Dist-Belgaum. Under the prestigious & dynamic, personality-I.D.PATIL (Adarsh Credit Souhard Sahakari Ltd. Soundatti,) with 13 Board of members are Chairman Shri Anvasaheb T Kuge, Vice-Chairman Shri Shankar B Chougala, Shri Iragouda D Patil, Shri Jineshwar M Magadum, Shri Tavanappa N Kamagouda, Shri Kakasab B Tadake, Shri Dhulagoda I Patil, Shri Mallappa B Salagare, Shri Maruti B Pujeri, Shri Salim A Tambat, Smt Krishnabai B Magadum, Shri Kesarmala S Kone, Shri Haridas G Kamble.

For overcome the economic level and also to provide the banking facilities for the farmers and poor people for which the founder made bold venture to inaugurate this institution by the divine blessings of Shri. Siddeshwar Mahaswamiji of Bijapur Dynanyogashram.

The Organisation has branches for the service at Soundatti Diggewadi Nasalapur and Yadrav under the local Body committee's of branches respectively.

3.3 Objectives of the Bank:

- To extend banking facility in rural areas and semi-rural areas there by encourage rural savings and mobilise those savings for the economic development of the country
- To cater the credit needs of the rural areas
- To extend financial help for the establishment of ware housing and marketing securities in different parts of the areas
- To grand the financial facilities to the small scale industries in the country
- To provide remittance facilities to the customers

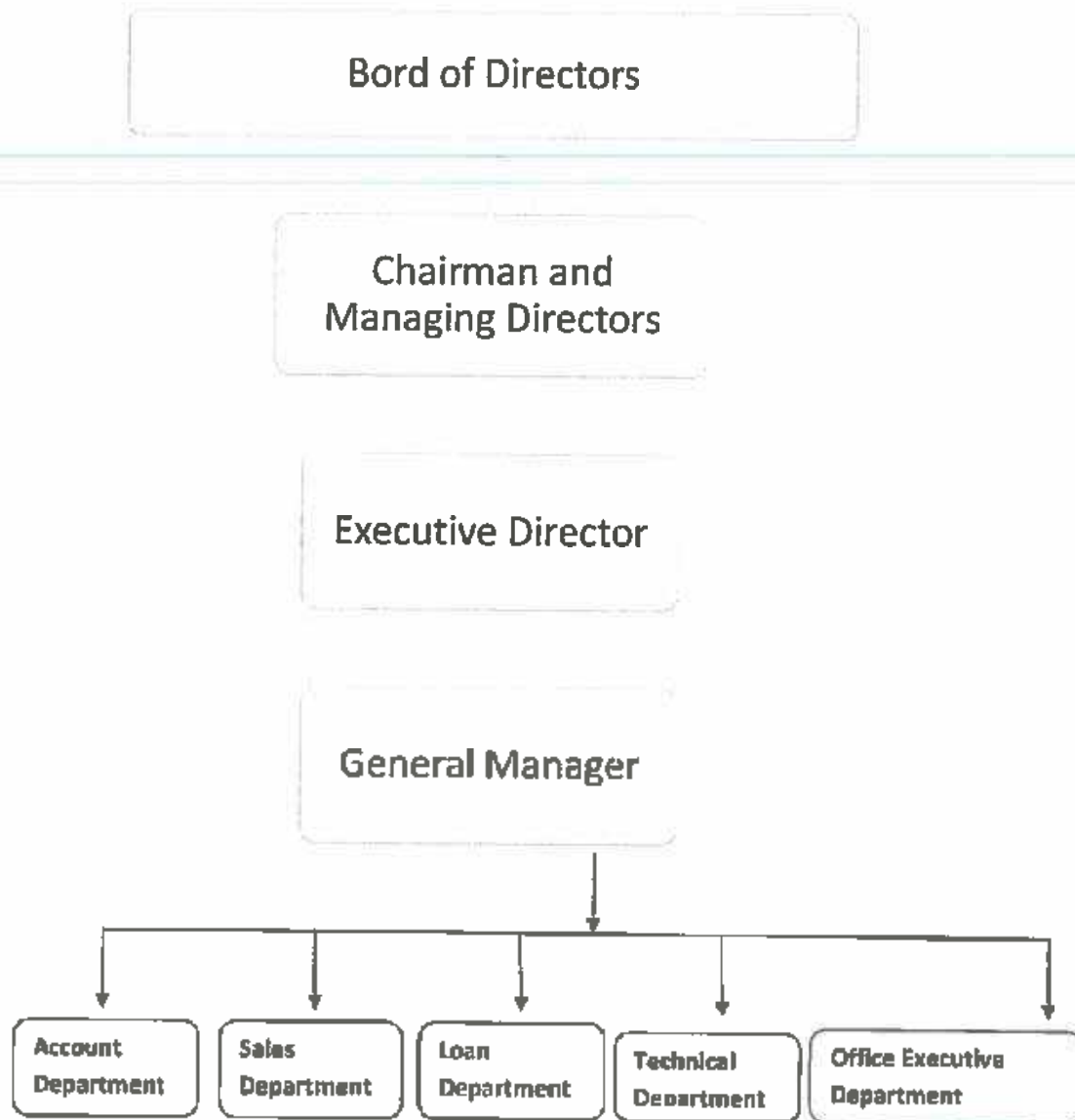
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TABLE NO: 3.4 BOARD OF DIRECTORS

Sl.No	Name	Position
1	Shri Annasaheb T Kuge	Chairman
2	Shri. Shankar B Chougala	Vice- Chairman
3	Shri. Iragouda D Patil	Director
4	Shri. Jineshvar M Magadam	Director
5	Shri. Tavanappa N Kamagouda	Director
6	Shri. Kakasab B Tadake	Director
7	Shri. Dhulagouda I Patil	Director
8	Shri. Mallappa B Salagare	Director
9	Shri. Maruti B Pujeri	Director
10	Shri. Munira Salim Tambat	Director
12	Shri. Kesarnalla S Kone	Director
13	Shri. Haridas G Kamble	Director

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CHART NO: 3.5 ORGANISATION STRUCTURE



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3.6 VISION AND MISSION OF THE BANK



- Emerging as a strong vibrant responsive competitive bank
- Serving its constituents and stakeholders as a faithfully and friendly financial partner
- To develop the rural area makes them strong in finance
- To extend the banking facility throughout the country especially in rural areas.

Competitors:

- Ratnakar Bank
- DCC Bank
- Laxmi credit souhard sahakari niyomit
- Erriswami credit souhard sahakari niyomit
- DR.Prabhakar Kore credit souhard sahakari niyomit

3.7 THE VARIOUS DEPOSITS OF THE BANK:

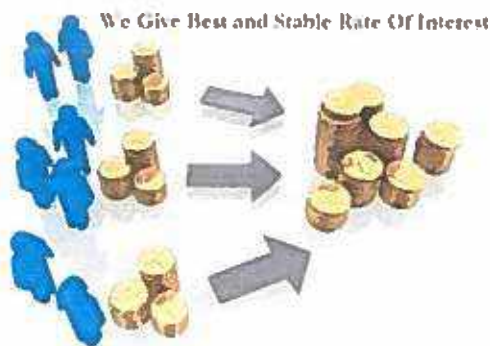
FIXED DEPOSIT:



BHAGYAJYOTI DEPOSIT:



CALL DEPOSIT:



RECURRING DEPOSIT:



SAVING BANK DEPOSIT:



BALSANJEEVANI CHILD LIFE DEPOSIT:



CURRENT DEPOSIT:



The various deposits of the Bank Periods and Rates:

PERIODS	RATES
• 46 Days To 90 Days	8.00%
• 91 Days To 179 Days	8.50%
• 180 Days to 1 Year	10.00%
• 1 Year to 2 Year	11.00%
• 2 Year and above	11.50%
• Saving deposits	4.00%
• Recurring deposits	10.50%
• Pigmy deposits	4.00%

SPECIAL REFERENCES

- Senior citizens get 0.50% extra benefits of the above mentioned all type of interest rates
- At 7 year, the Bhagyajyoti scheme deposits are doubled

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

SECURE LOAN:



- Our Quarterly Interest and Instalment: 1.5%
- Our Yearly Interest and Instalment: 16%

VEHICLE LOAN:



- Our Quarterly Interest and Instalment: 1.5%
- Our Yearly Interest and Instalment: 16%

GOLD LOAN:



- Our Quarterly Interest and Instalment: 1.5%
- Our Yearly Interest and Instalment: 16%

CASH CREDIT LOAN:



- Our Quarterly Interest and Instalment: 1.5%
- Our Yearly Interest and Instalment: 16%

MEDIUM TERM LOAN:



- Our Quarterly Interest and Instalment: 1.5%
- Our Yearly Interest and Instalment: 16%

CHAPTER-4
DATA ANALYSIS AND INTERPRETATION

- 4.1: Shows gender of the Respondents
- 4.2: Shows age group of the Respondents
- 4.3: Shows marital status of Respondents
- 4.4: Shows occupation of Respondents

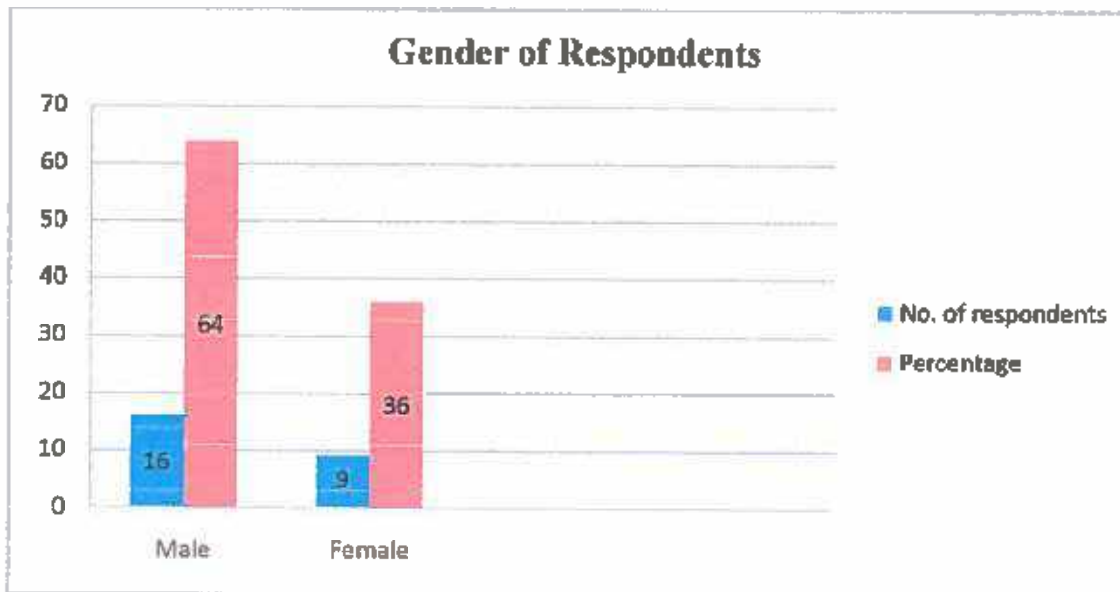
- 4.5: Shows Respondents approach to first loan request
- 4.6: Shows service can reach Respondents expectation
- 4.7: Shows staff visits to Respondents business / property
- 4.8: Shows application requirements and procedures convenient and simple
- 4.9: Shows loan processing time is short and convenient
- 4.10: Shows branch information approach based on request/need
- 4.11: Shows loan relationship with Bank
- 4.12: Shows relationship with the Bank
- 4.13: Shows needs improvement of the Bank
- 4.14: Shows extend with same relation with the Bank
- 4.15: Shows loan amount sufficient to Respondents business
- 4.16: Shows Bank visit Respondents business sites after loan granting
- 4.17: Shows satisfaction with request loan and approved loan
- 4.18: Shows convenient of loan repayment time
- 4.19: Shows motivating to loan repay on time
- 4.20: Shows credit analysis and procedure of loan of the Bank
- 4.21: Shows Bank's credit providing procedure
- 4.22: Shows loan collection techniques of the Bank
- 4.23: Shows effectiveness of credit collection technique

DATA ANALYSIS AND INTERPRETATION

Table no. 4.1: Shows gender of the Respondents

Particulars	No. Of Respondents	Percentage (%)
Male	16	64
Female	9	36
Total	25	100

Graph no. 4.1: Shows gender of the Respondents



Interpretation:

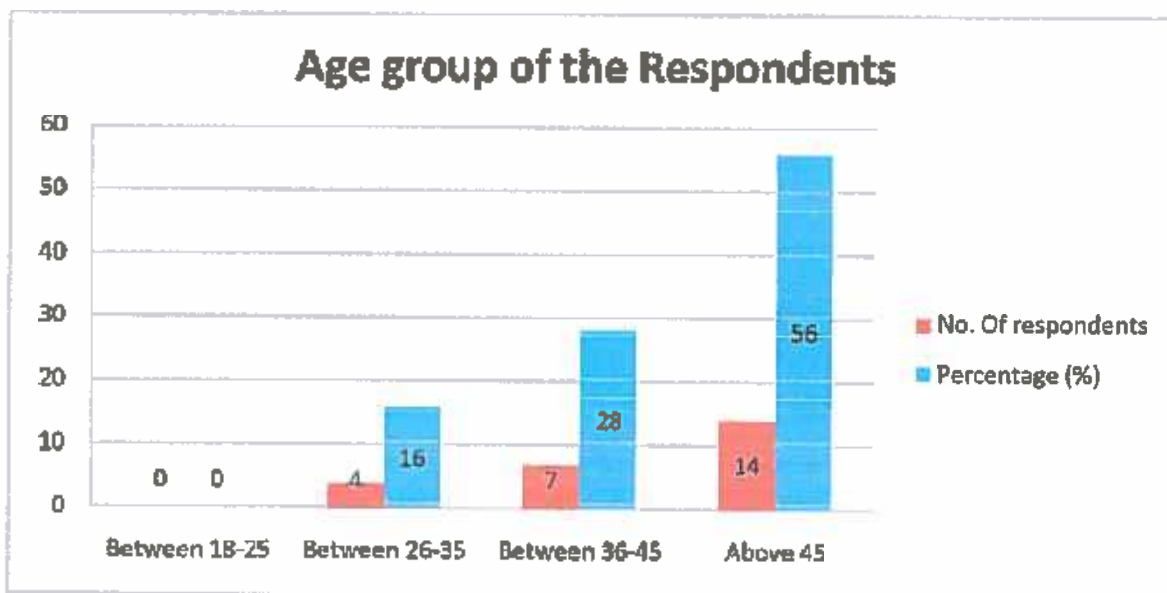
It can be observed from the above table that out of 25 Respondents 64% are Male and 36% are Female. Majority of Respondents i.e 64% are Male.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.2: Shows age group of the Respondents

Particulars	No. Of respondents	Percentage (%)
Between 18-25	0	0
Between 26-35	4	16
Between 36-45	7	28
Above 45	14	56
Total	25	100

Graph no. 4.2: Shows age group of the Respondents



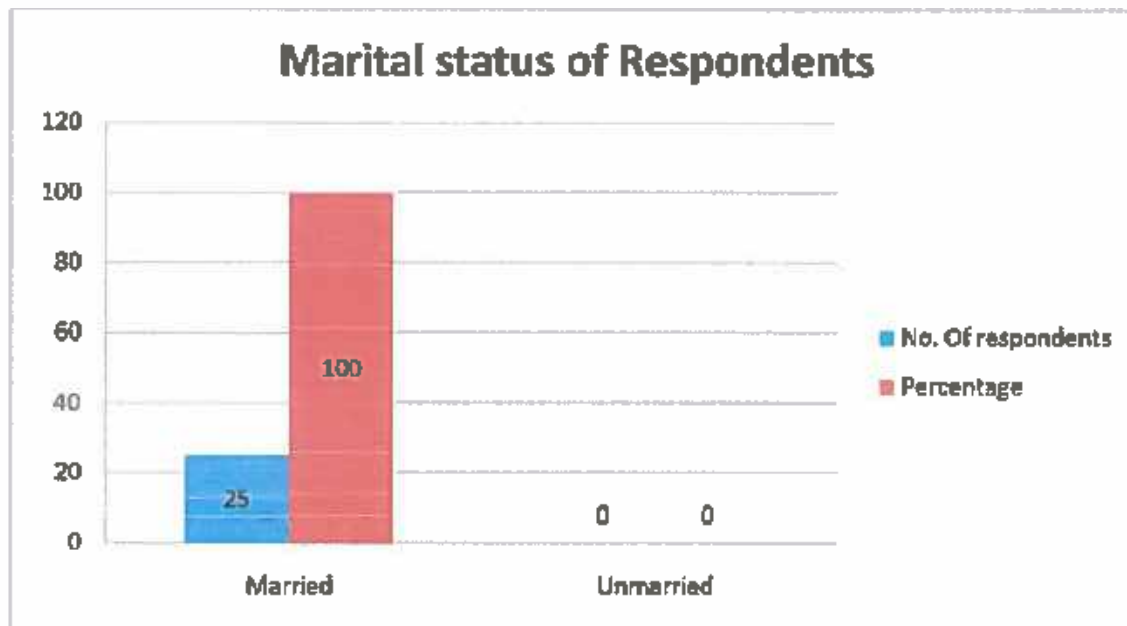
Interpretation:

It can be observed from the above table that out of 25 respondents, 0% of the respondents belong to the age group below 25 years. 16% of respondents belong to the age group below 35, 28% of the respondents belong to the age group below 45, and 56% of the respondents belong to the age group above 45 years. Majority of the respondents, i.e., 56%, belong to the age group above 45 years.

Table no. 4.3: Shows marital status of Respondents

Particulars	No. Of Respondents	Percentage (%)
Married	25	100%
Unmarried	0	0%
Total	25	100%

Graph no. 4.3: Shows marital status of Respondents



Interpretation:

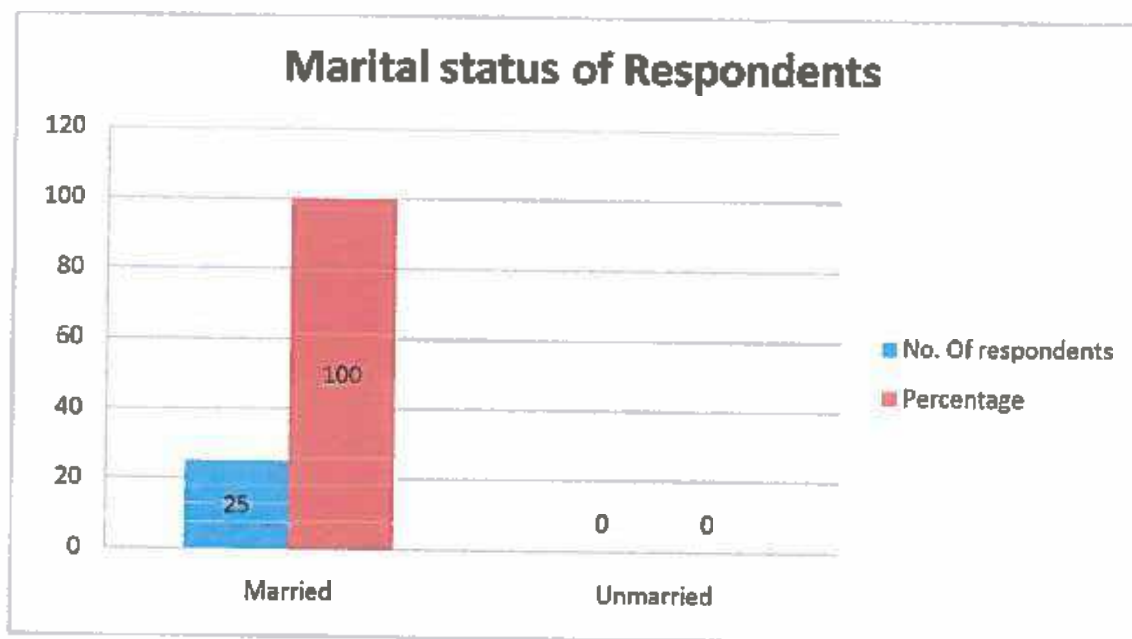
It can be observed from the above table that out of 25 respondents, 100% of respondents are married and 0% of respondents are unmarried. The majority of respondents, i.e., 100% are married.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.3: Shows marital status of Respondents

Particulars	No. Of Respondents	Percentage (%)
Married	25	100%
Unmarried	0	0%
Total	25	100%

Graph no. 4.3: Shows marital status of Respondents



Interpretation:

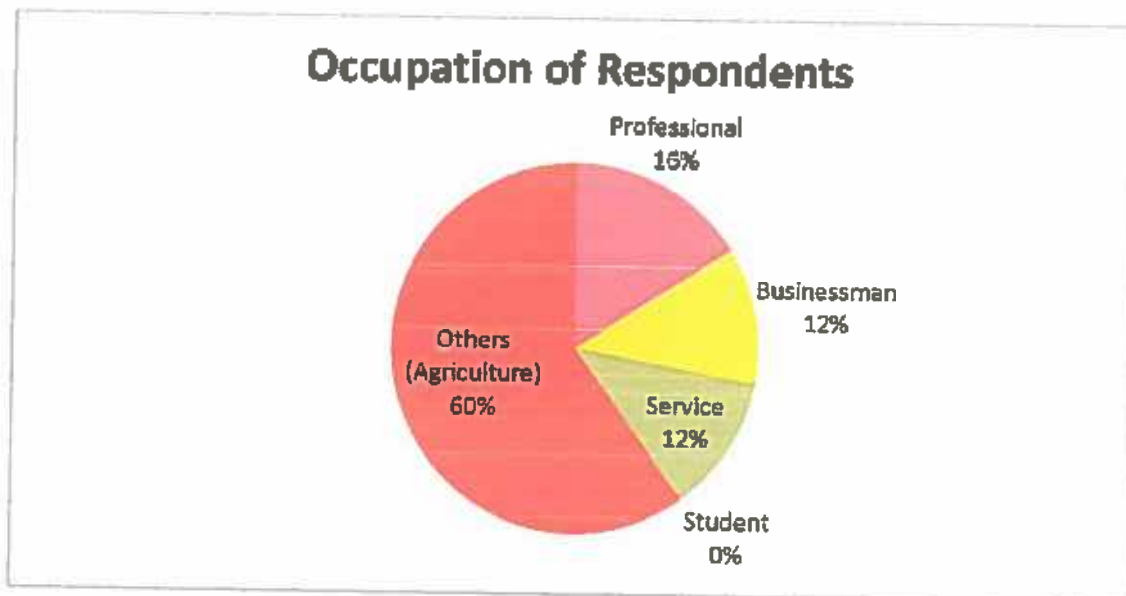
It can be observed from the above table that out of 25 respondents, 100% respondents are married and 00% of respondents are unmarried. Majority of respondents, i.e., 100% are married.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.4: Shows occupation of Respondents

Particulars	No. Of respondents	Percentage (%)
Professional	4	16%
Businessman	3	12%
Service	3	12%
Student	0	0%
Others (Agriculture)	15	60%
Total	25	100%

Chart no. 4.4: Shows occupation of Respondents



Interpretation:

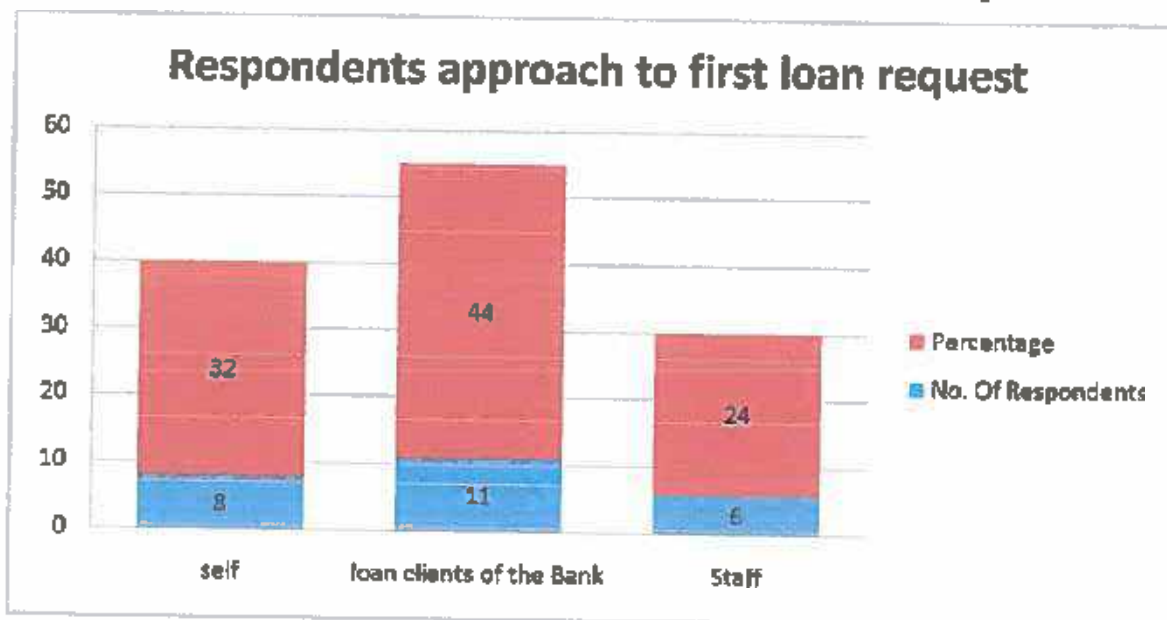
It can be observed from the above table that out of 25 respondents, 16% are Professional, 12% are Businessman, 12% are having Service, and 60% of the respondents are having Agriculture. The majority of respondents, i.e., 60%, belong to Agriculture.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.5: Shows Respondents approach to first loan request

Particular	No. Of respondents	Percentage (%)
Self	8	32%
Loan Clients of the Bank	11	44%
Staff	06	24%
Total	25	100%

Graph no. 4.5: Shows Respondents approach to first loan request



Interpretation:

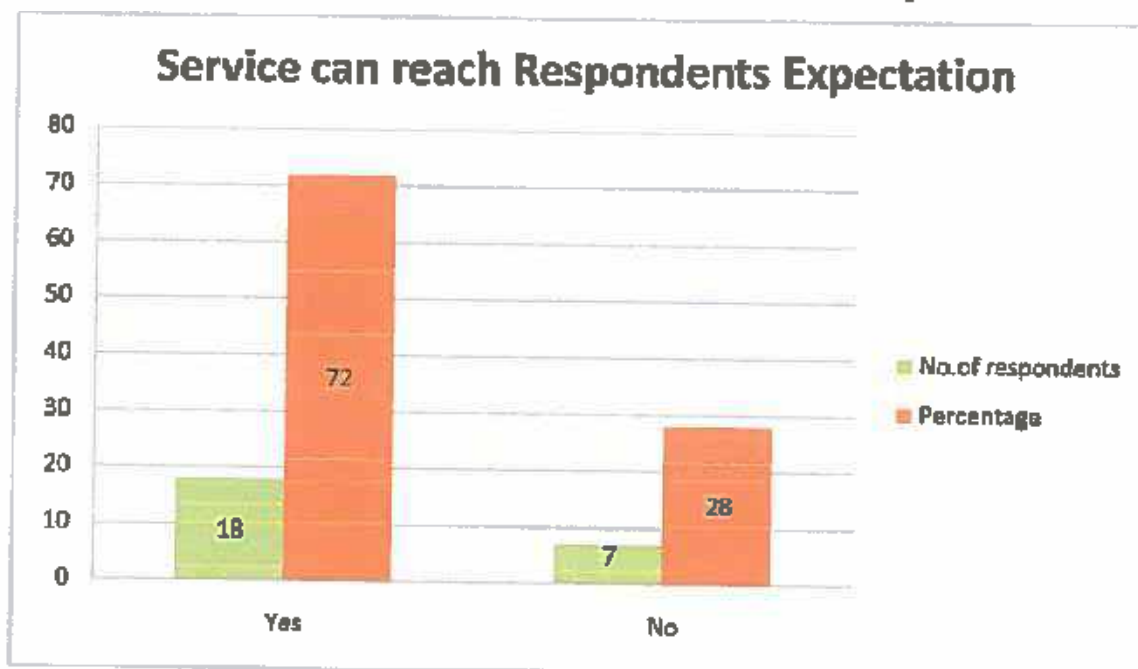
It can be observed from the above table that out of 25 respondents, 44% of the respondents are loan clients of the bank, 32% of respondents were approached by self, and 24% of respondents were approached by bank staff. The majority of respondents, i.e., 44% of respondents were approached by loan clients of the bank.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.6: Shows service can reach Respondents expectation

Particulars	No. Of Respondents	Percentage (%)
Yes	18	72%
No	7	28%
Total	25	100%

Graph no. 4.6: Shows service can reach Respondents expectation



Interpretation:

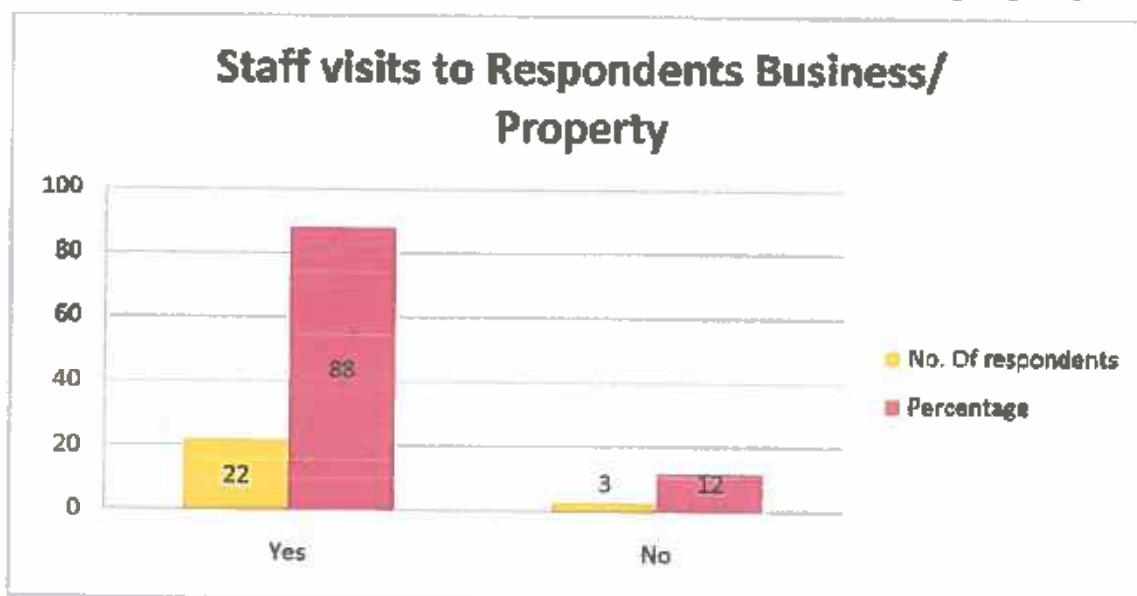
It can be observed from the above table that out of 25 respondents, 72% of the respondents are expected to receive the loan provision service, and 28% of the respondents are not expected to receive the loan provision service. The majority of respondents, i.e., 72% of respondents, are expected to receive the loan provision service.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.7: Shows staff visits to Respondents business / property

Particular	No. Of respondents	Percentage (%)
Yes	22	88
No	3	12
Total	25	100

Graph no. 4.7: Shows staff visits to Respondents business / property



Interpretation:

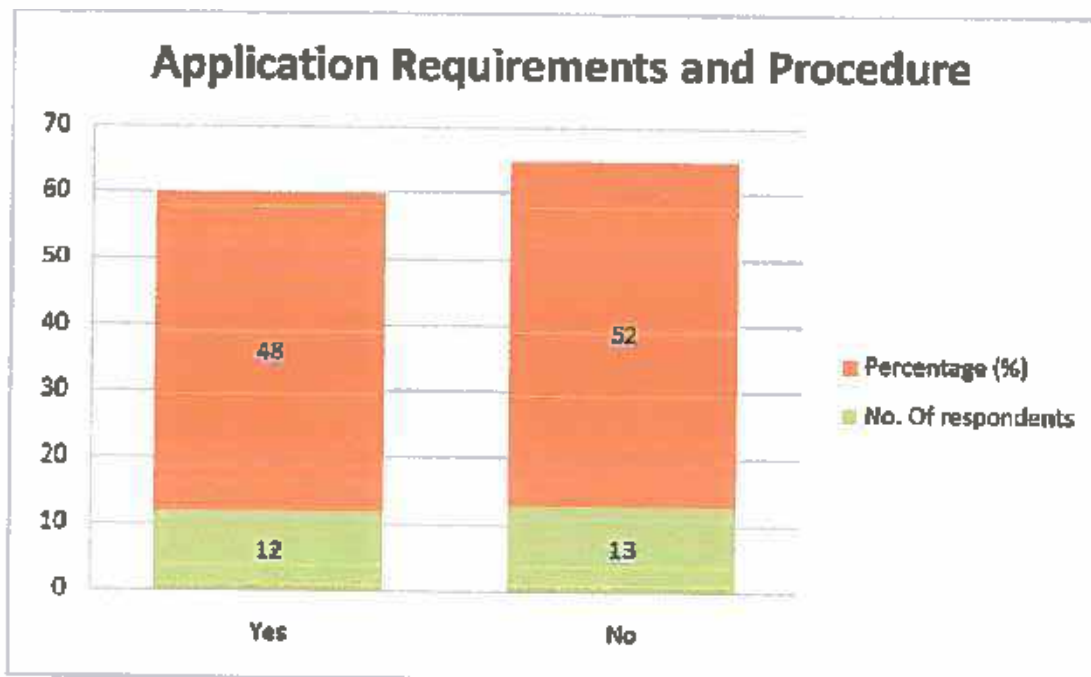
It can be observed from the above table that out of 25 respondents, 88% of respondents responded that bank staff visits to their business site during their loan request, and 12% of respondents responded that bank staff are not visiting to their business site during their loan request. Majority of respondents, i.e., 88% responded that bank staff visits to their business site during their loan request.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.8: Shows application requirements and procedures convenient and simple

Particular	No. Of respondents	Percentage (%)
Yes	12	48
No	13	52
Total	25	100

Graph no. 4.8: Shows application requirements and procedures convenient and simple

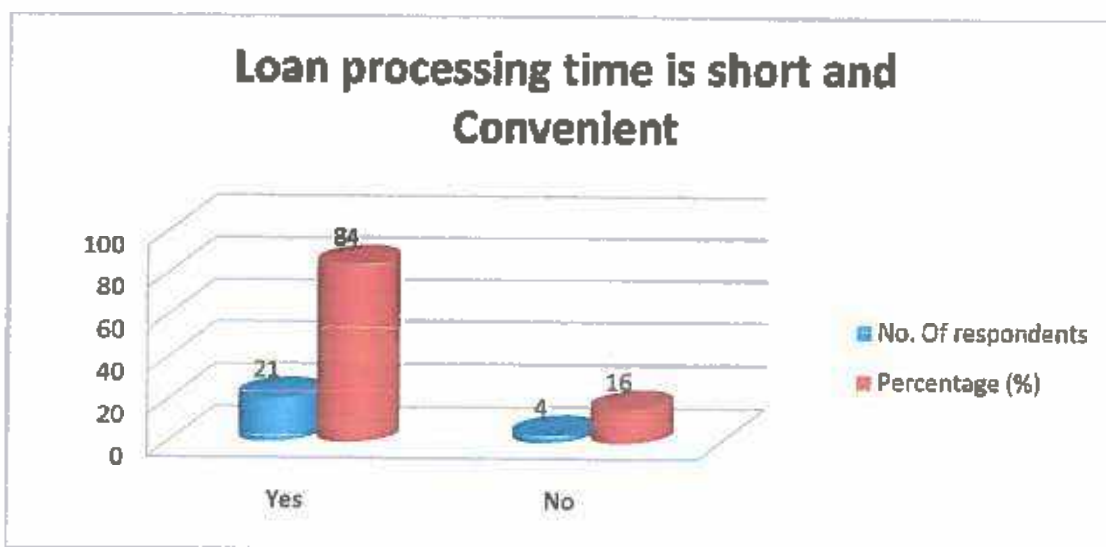


Interpretation:

It can be observed from the above table that out of 25 respondents, 48% of the respondents' opinion is that application requirements and procedures are convenient/simple, and 52% of the respondents' opinion is that application requirements and procedures are not convenient/simple. The majority of respondents, i.e., 52% of respondents, have the opinion that application requirements and procedures are not convenient/simple.

Table no. 4.9: Shows loan processing time is short and convenient

Particulars	No. Of respondents	Percentage (%)
Yes	21	84
No	4	16
Total	25	100

Graph no. 4.9: Shows loan processing time is short and convenient**Interpretation:**

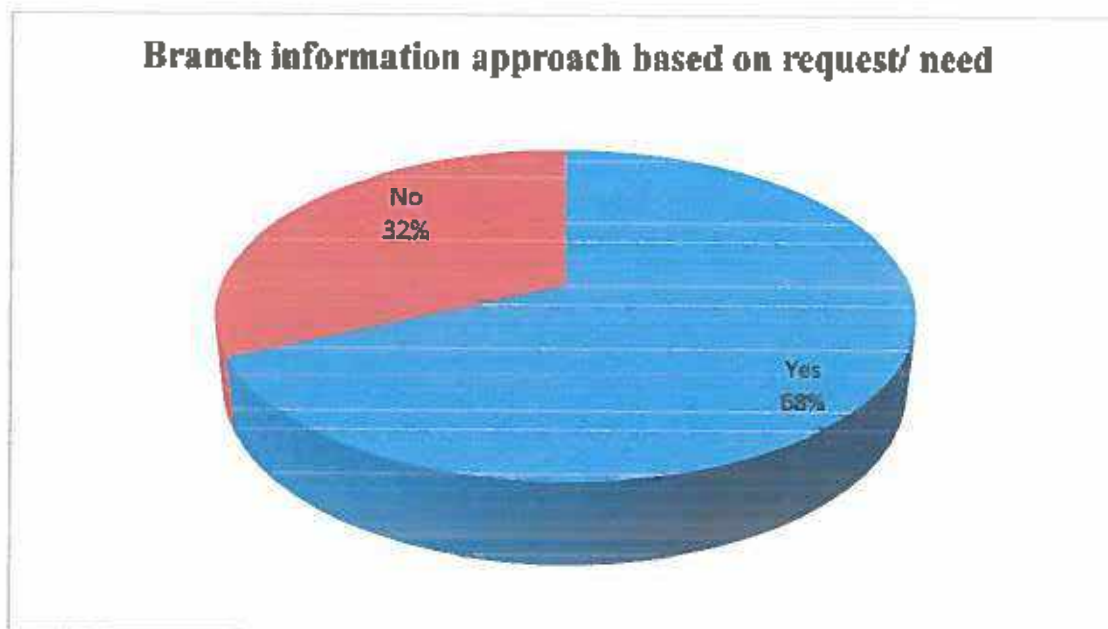
It can be observed from the above table that out of 25 respondents, 84% of the respondents' opinion on loan processing time is simple/convenient and short time, and 16% of the respondents' opinion on loan processing time is wider and not convenient. Majority of respondents, i.e. 84% of the respondents' opinion on loan processing time is simple/convenient.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.10: Shows branch information approach based on request/need

Particulars	No. Of respondents	Percentage (%)
Yes	17	68
No	8	32
Total	25	100

Chart no. 4.10: Shows branch information approach based on request/need



Interpretation:

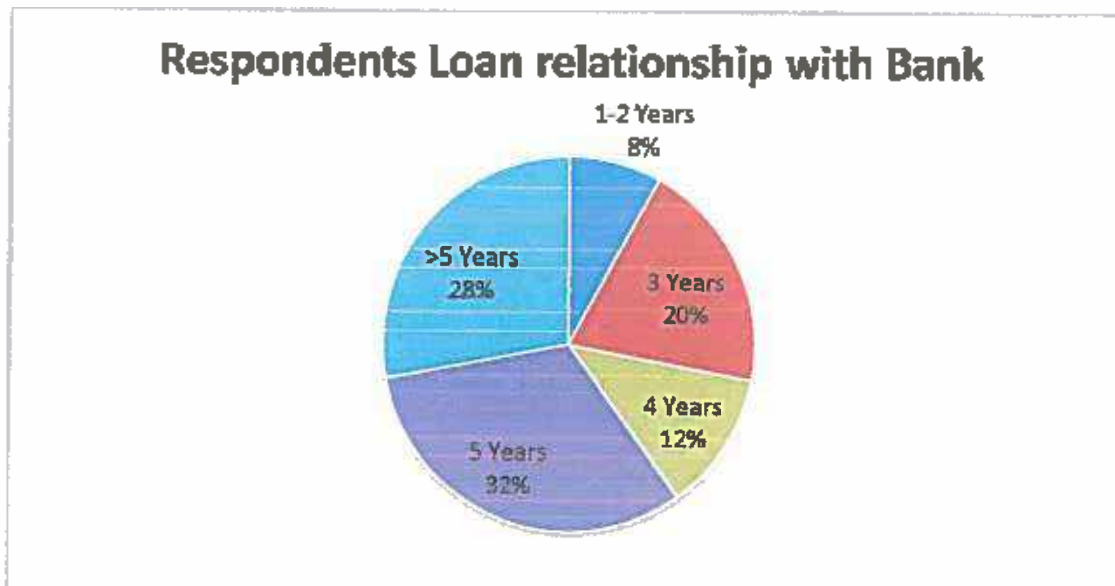
It can be observed from the above table that out of 25 respondents, 68% of the respondents are getting relevant information on their request, and 32% of the respondents are not getting relevant information on their request. The majority of respondents, i.e., 68% of the respondents, are getting relevant information on their request.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.11: Shows loan relationship with Bank

Years	No. of respondents	Percentage (%)
1-2 Years	2	8
3 Years	5	20
4 Years	3	12
5 Years	8	32
>5 Years	7	28
Total	25	100

Chart no. 4.11: Shows loan relationship with Bank



Interpretation:

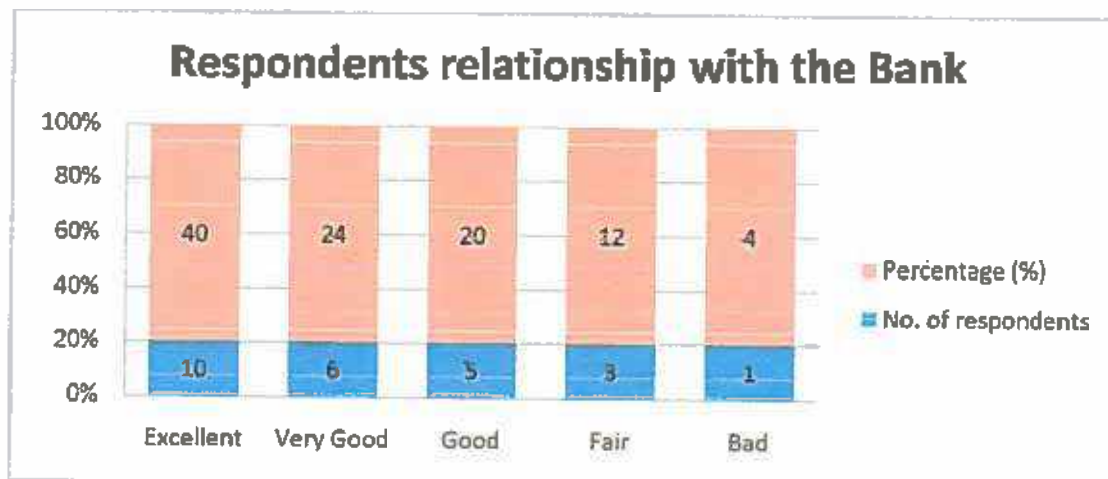
It can be observed from the above table that out of 25 respondents, 8% of the respondents' relationship with the bank is 1 to 2 years, 20% of the respondents' relationship with the bank is 3 years, 12% of the respondents' relationship with the bank is 4 years, 32% of the respondents' relationship with the bank is 5 years, and 28% of the respondents' relationship with the bank is >5 years. The majority of respondents, i.e., 32% of respondents, have a relationship with the bank of 5 years.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.12: Shows relationship with the Bank

Particulars	No. of respondents	Percentage (%)
Excellent	10	40
Very Good	06	24
Good	05	20
Fair	03	12
Bad	01	4
Total	25	100

Graph no. 4.12: Shows relationship with the Bank



Interpretation:

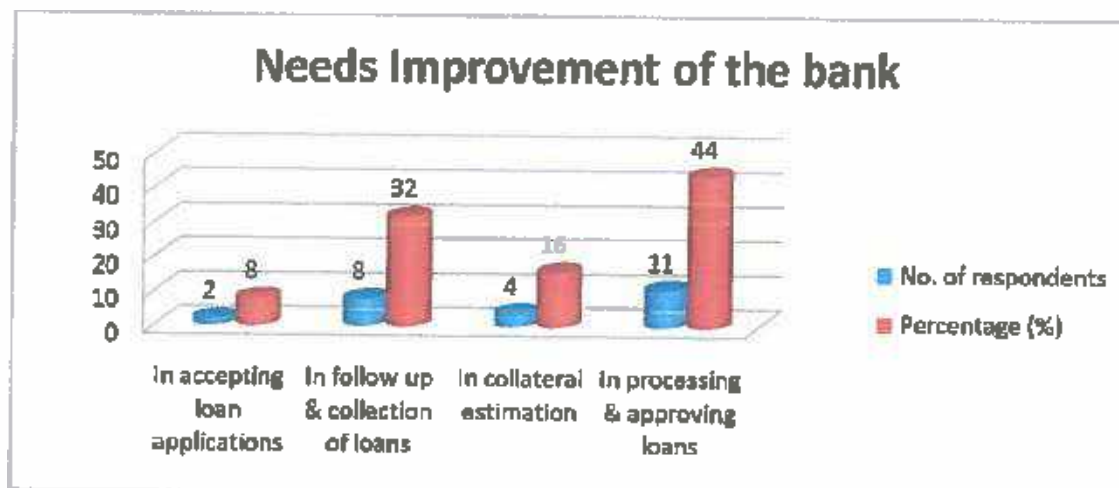
It can be observed from the above table that out of 25 respondents, 40% of the respondents evaluate their relationship with the Bank as a loan client as Excellent, 24% of the respondents evaluate their relationship with the Bank as a loan client as Very good, 20% of the respondents evaluate their relationship with the Bank as a loan client as Good, 12% of the respondents evaluate their relationship with the Bank as a loan client as Fair and 4% of the respondents evaluate their relationship with the Bank as a loan client as Bad. Majority of respondents i.e. 40% of respondents evaluate their relationship with the Bank as a loan client as Excellent.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.13: Shows needs improvement of the Bank

Particulars	No. of respondents	Percentage (%)
In accepting loan applications	2	8
In follow up & collection of loans	8	32
In collateral estimation	4	16
In processing & approving loans	11	44
Total	25	100

Graph no. 4.13: Shows needs improvement of the Bank



Interpretation:

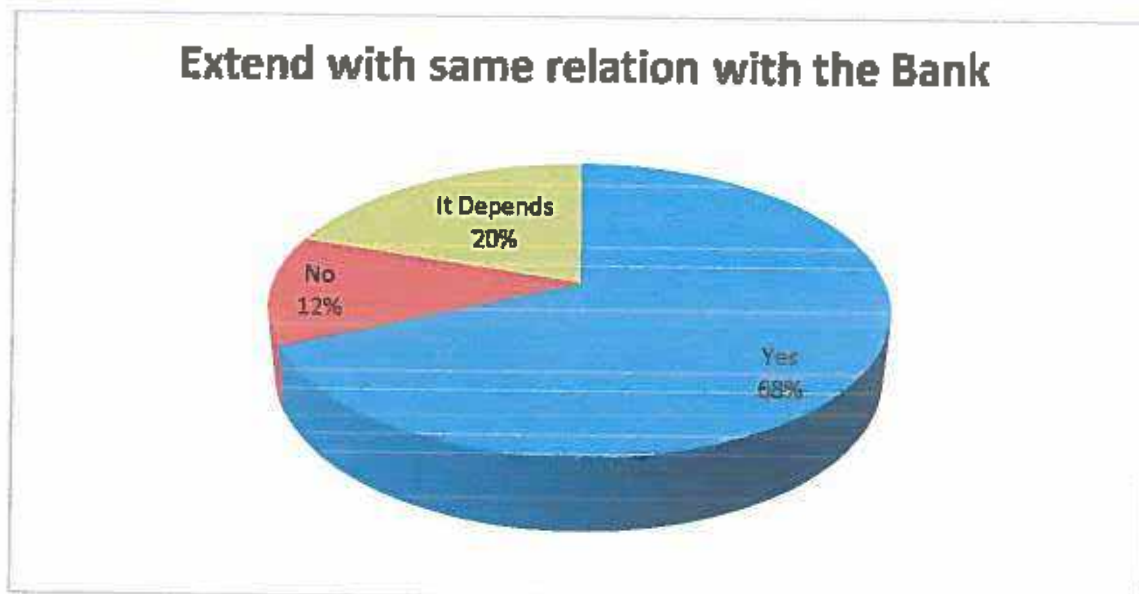
It can be observed from the above table that out of 25 respondents, 8% of the respondents' opinion is to improve accepting loan applications, 32% of the respondents' opinion is to improve follow-up & collection of the loans, 16% of the respondents' opinion is to improve collateral estimation, and 44% of the respondents' opinion is to improve processing & approving loans. The majority of respondents, i.e., 44% of the respondents' opinion is to improve processing & approving loans.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.14: Shows extend with same relation with the Bank

Particulars	No. of respondents	Percentage (%)
Yes	17	68
No	3	12
It Depends	5	20
Total	25	100

Chart no. 4.14: Shows extend with same relation with the Bank



Interpretation:

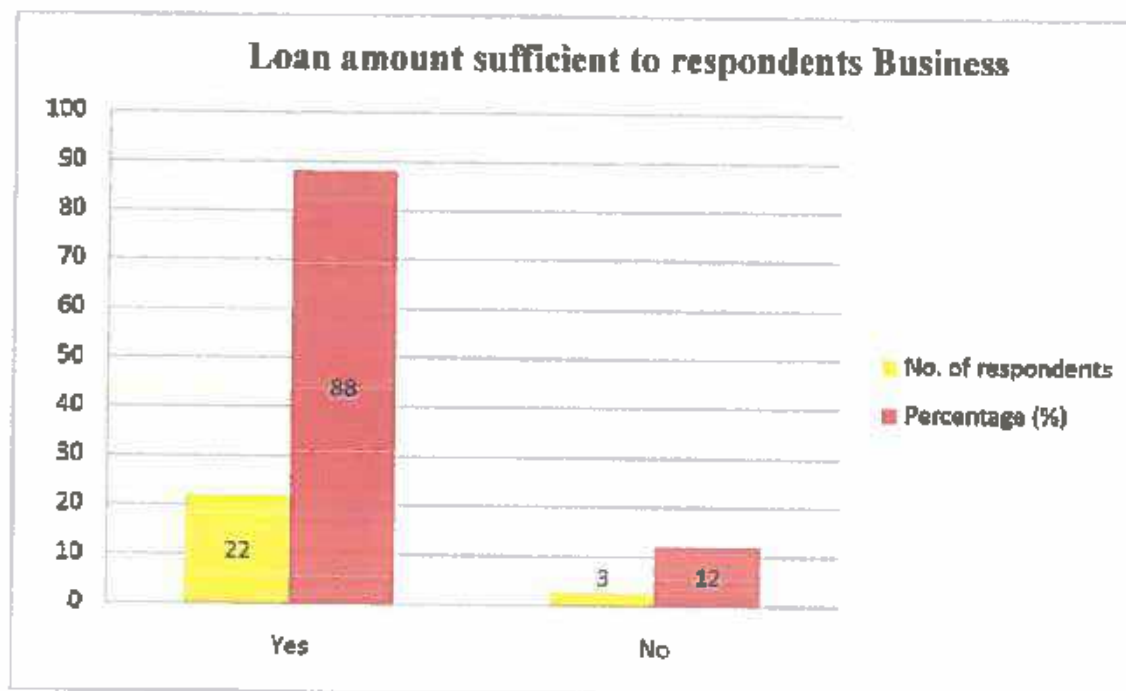
It can be observed from the above table that out of 25 respondents, 68% of the respondents want to maintain the same relationship with the bank, 12% of the respondents are not interested in maintaining the same relationship with the bank, and 20% of the respondents want to maintain their relationship based on the bank's performance with the clients. The majority of respondents, i.e., 68% of the respondents, want to maintain the same relationship with the bank.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.15: Shows loan amount sufficient to Respondents business

Particulars	No. of respondents	Percentage (%)
Yes	22	88
No	3	12
Total	25	100

Graph no. 4.15: Shows loan amount sufficient to Respondents business



Interpretation:

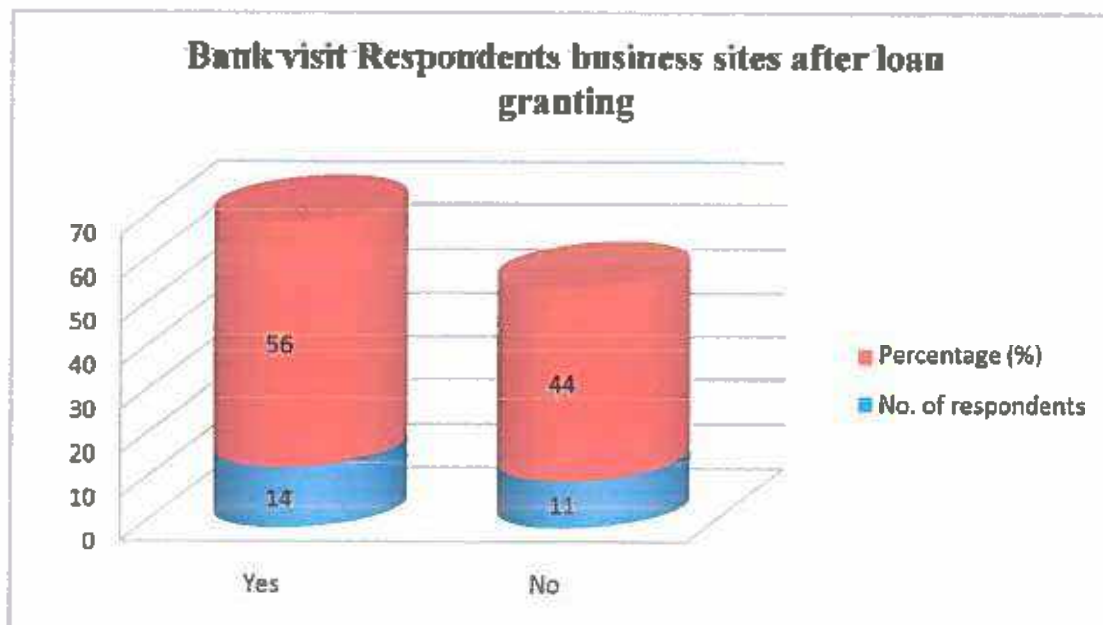
It can be observed from the above table that out of 25 respondents, 88% of the respondents' opinion is that the given loan amount was sufficient for their business, and 12% of the respondents are not satisfied with the given loan because it is insufficient for their business. The majority of respondents, i.e., 88% of the respondents' opinion is that the given loan amount was sufficient for their business.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.16: Shows Bank visit Respondents business sites after loan granting

Particulars	No. of respondents	Percentage (%)
Yes	14	56
No	11	44
Total	25	100

Graph no. 4.16: Shows Bank visit Respondents business sites after loan granting



Interpretation:

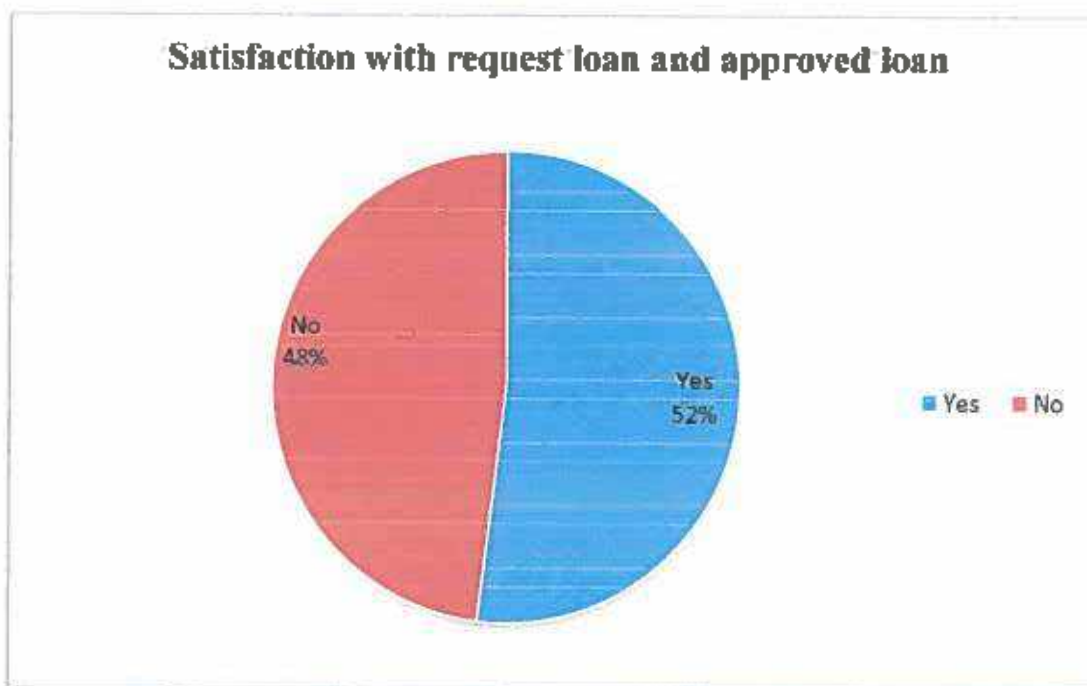
It can be observed from the above table that out of 25 respondents, 56% of the respondents visited their business sites after loan granting, and 44% of the respondents did not visit their business sites after loan granting. The majority of respondents, i.e., 56% of the respondents, visited their business sites after loan granting.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.17: Shows satisfaction with request loan and approved loan

Particulars	No. of respondents	Percentage (%)
Yes	13	52
No	12	48
Total	25	100

Chart no. 4.17: Shows satisfaction with request loan and approved loan



Interpretation:

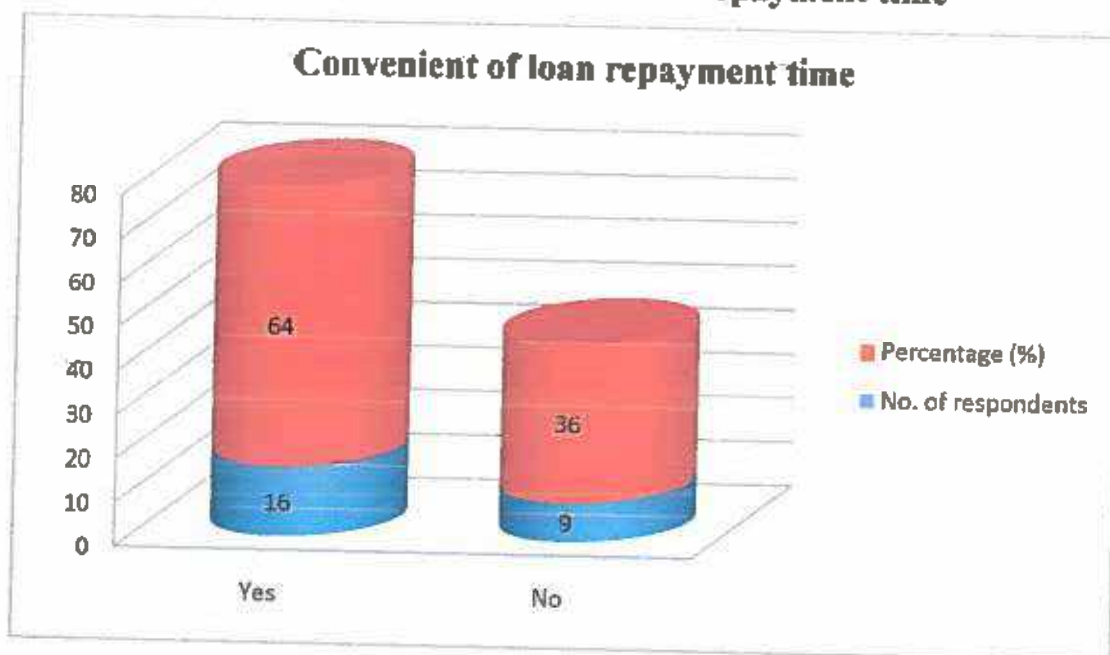
It can be observed from the above table that out of 25 respondents, 48% of respondents are satisfied with the given loan and 52% of the respondents are not satisfied with the given loan. Majority of respondents, i.e. 52% of the respondents are not satisfied with the given loan.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.18: Shows convenient of loan repayment time

Particulars	No. of respondents	Percentage (%)
Yes	16	64
No	09	36
Total	25	100

Graph no. 4.18: Shows convenient of loan repayment time



Interpretation:

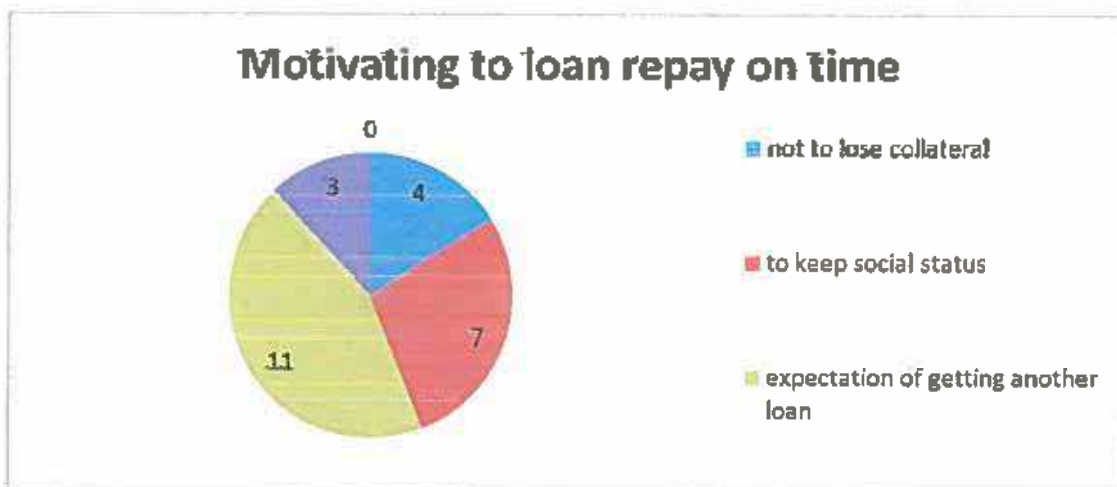
It can be observed from the above table that out of 25 respondents, 64% of the respondents are convenient for the loan repayment time and 36% of the respondents are not convenient for the loan repayment time. Majority of respondents, i.e. 64% of the respondents are convenient for the loan repayment time.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.19: Shows motivating to loan repay on time

Particulars	No. of respondents	Percentage (%)
not to lose collateral	4	16
to keep social status	7	28
expectation of getting another loan	11	44
knowing that paying bank loan per the agreement is ethical and an obligation	3	12
Others	0	0
Total	25	100

Chart no. 4.19: Shows motivating to loan repay on time



Interpretation:

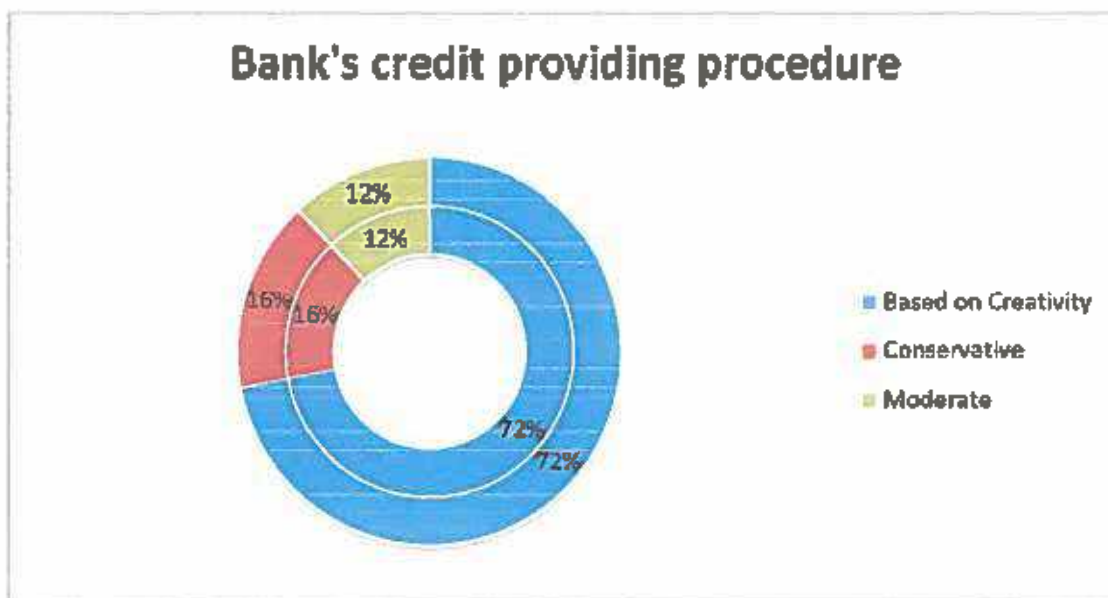
It can be observed from the above table that out of 25 respondents, 16% of the respondents do not want to lose collateral, 28% of the respondents want to keep their social status, 44% of the respondents are expecting to get another loan, and 12% of the respondents think that loan repayment agreement is ethical and an obligation. The majority of respondents, i.e., 44% of the respondents, are expecting to get another loan.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.21: Shows Bank's credit providing procedure

Particulars	No. of respondents	Percentage (%)
Based on Creativity	18	72
Conservative	4	16
Moderate	3	12
Total	25	100

Chart no. 4.21: Shows bank's credit providing procedure



Interpretation:

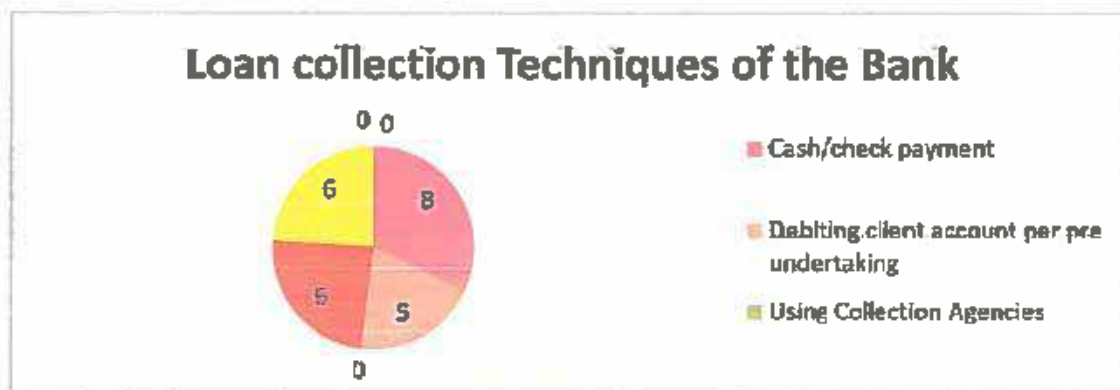
It can be observed from the above table that out of 25 respondents, 72% of the respondents' opinion is based on Creativity, 16% of the respondents' opinion is Conservative, and 12% of the respondents' opinion is Moderate. The majority of respondents, i.e., 72% of the respondents' opinion is based on Creativity.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.22: Shows loan collection techniques of the Bank

Particulars	No. of respondents	Percentage (%)
Cash/cheque payment	8	32
Debiting client account per pre undertaking	5	20
Using Collection Agencies	0	0
Personal visit	6	24
Telephone	6	24
All	0	0
Other	0	0
Total	25	100

Chart no. 4.22: Shows loan collection techniques of the Bank



Interpretation:

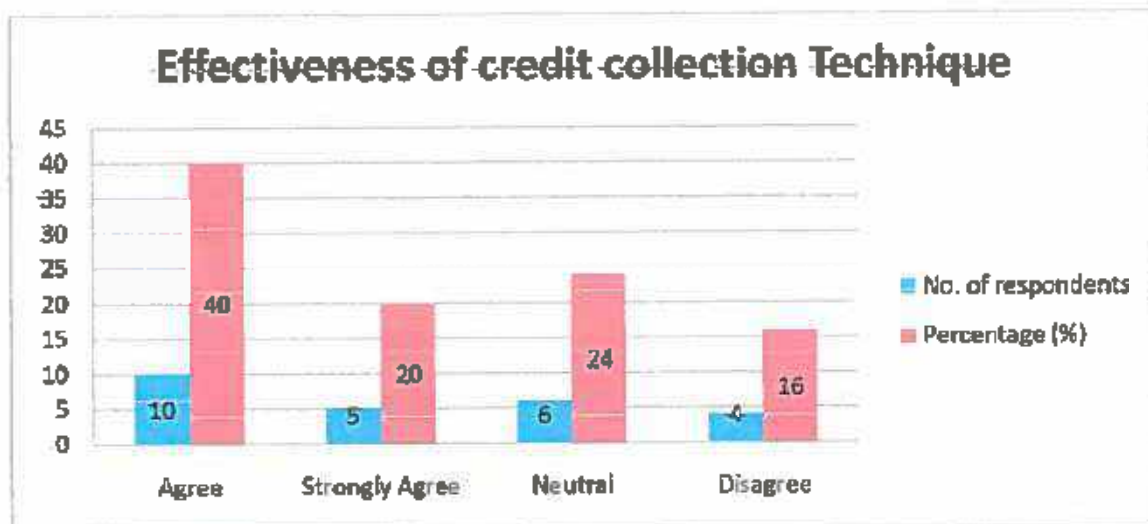
It can be observed from the above table that out of 25 respondents, 32% of the respondents told that the bank was accepting repayment by cheque/cash. 20% of the respondents told that the bank was accepting repayment by debiting with the clients account, 24% of the respondents told that the bank was accepting repayment by personal visit, 24% of the respondents told that the bank was accepting repayment by using telephone calling and the bank does not have any collection agencies. Majority of respondents i.e. 32% of the respondents told that the bank was accepting repayment by cheque/cash.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

Table no. 4.23: Shows effectiveness of credit collection technique

Particulars	No. of respondents	Percentage (%)
Agree	10	40
Strongly Agree	05	20
Neutral	06	24
Disagree	04	16
Total	25	100

Graph no. 4.23: Shows effectiveness of credit collection technique



Interpretation:

It can be observed from the above table that out of 25 respondents, 40% of the respondents are agree with loan collection technique, 20% of the respondents are strongly agree with loan collection technique, 24% of the respondents are neutral for loan collection technique and 16% of the respondents are disagree with loan collection technique. Majority of respondents i.e. 40% of the respondents are agree with loan collection technique.

CHAPTER-5
FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 Findings

5.2 Suggestions

5.3 Conclusion

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1: FINDINGS:-

- ❖ From the study we can see that out of 25 Respondents maximum 64% of Respondents are Male
- ❖ The study shows that out of 25 Respondents maximum 56% Respondents belongs to the age group of above 45 years age.
- ❖ The study reveals that out of 25 Respondents maximum 100% Respondents are married.
- ❖ The study shows that out of 25 Respondents 60% of Respondents are Belongs to Agriculture.
- ❖ From the study out of 25 Respondents maximum 44% of Respondents are getting first loans by through Bank Respondents.
- ❖ The study shows that out of 25 Respondents maximum 72% of Respondents are happy with the Bank services.
- ❖ The study shows that out of 25 Respondents maximum 88% Respondents Business visited from Bank.
- ❖ In this study shows that out of 25 Respondents maximum 52% of Respondents are agree with application requirements and procedures.
- ❖ In this study shows that out of 25 Respondents maximum 84% respondents are happy with Loan processing time.
- ❖ In this study shows that out of 25 Respondents maximum 68% of Respondents are happy with providing of Bank information.
- ❖ The study shows that out of 25 Respondents maximum 32% of Respondents are having 5 years old relationship with the Bank.
- ❖ From the study that out of 25 Respondents maximum 40% of Customers opinion is Bank was having excellent relationship with Respondents.
- ❖ In this study out of 25 Respondents maximum 44% Respondents opinion was Bank is need to improve in processing and approving loans.
- ❖ The study shows that out of 25 Respondents maximum 68% of Respondents are wants to keep same relationship with the Bank.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

- ❖ The study shows that out of 25 Respondents maximum 88% of Respondents are fulfilled with loan amount to their business.
- ❖ From the study shows that out of 25 Respondents maximum 56% of Respondents are told about Bank staff is visited their business after loan granting.
- ❖ The study shows that out of 25 Respondents maximum 52% of Respondents are satisfied with their approved loan.
- ❖ The study shows that out of 25 Respondents maximum 64% of Respondents are satisfied with loan repayment time.
- ❖ From the study out of 25 Respondents maximum 44% Respondents are repay their loans on time because of they are expecting to get a another loan from the Bank.
- ❖ In this study shows that out of 25 Respondents maximum 64% of Respondents opinion is excellent for credit analysis and loan procedure.
- ❖ In this study shows that out of 25 Respondents maximum 64% loans given on the basis of Respondents creativity.
- ❖ The study shows that out of 25 Respondents maximum 32% of loan collection accepting by the cash or cheque.
- ❖ The study shows that out of 25 Respondents maximum 40% of Respondents are agree with credit collection technique.

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soundatti

5.2: SUGGESTIONS:

The study has conducted on Credit Management of Adarsh Credit Souhard Sahakari Ltd., Soundatti. Based on the observation and personal discussion with customers and management of Adarsh Credit Souhard Sahakari Ltd., as researcher I would like to give some suggestions for working of Adarsh Credit Souhard Sahakari Ltd.

- Bank should adopt modern banking technology for better customer service and developments of the bank.
- Bank may adopt customer credit rating mechanism for better performance.
- The Bank should adopt simple procedure on credit process.
- The bank may adopt Better follow up method and collection of the loan.
- Bank may reduce documentation on credit processing time.
- Bank should visit every Customers site and business before and after loan granting..

A Study on Credit Management At Adarsh Credit Souhard Sahakari Ltd. Soudatti

5.3: CONCLUSION

The study examined credit management in Adarsh Credit Souhard Sahakari Ltd. Soudatti. From the findings it is concluded that banks profitability is inversely influenced by the levels of loans and advances, non-performing loans and deposits thereby exposing them to great risk of illiquidity and distress. Therefore, management need to be cautious in setting up a credit policy that will not negatively affects profitability and also they need to know how credit policy affects the operation of their banks to ensure judicious utilization of deposits and maximization of profit. Improper credit management reduce the bank profitability, affects the quality of its assets and increase loan losses and non-performing loan which may eventually lead to financial distress. One direct way is to assess the degree of credit crunch by isolating the impact of supply side of loan from the demand side taking into account the opinion of the firms about bank lending attitude. Finally, strengthening the securities market will have a positive impact on the overall development of the banking sector by increasing competitiveness in the banking sector. When the range of portfolio selection is wide people can compare the return and security of their investment among the banks and the securities market operators. As a result banks remain under some pressure to improve their financial soundness.

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- Credits, Collections and their Management.

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- www.google.com

ANNEXURES

Performing Loan Clients

Questionnaire on Credit management case study of Adarsh Credit

Souhard Sahakari Ltd. Soundatti

1. Gender:
 - a) Male
 - b) Female

2. Age:
 - a) 18-25
 - b) 26-35
 - c) 36-45
 - d) Above 45

3. Marital Status:
 - a) Married
 - b) Unmarried

4. Occupation:
 - a) Professional
 - b) Businessman
 - c) Service
 - d) Student
 - e) Others (Agriculture)

5. Who initiates you to approach the bank for your first loan request?
 - a) Self
 - b) Loan clients of the bank
 - c) Staff

6. Have you met the loan provision service as your expectation?
a) Yes b) No
7. Does the bank staff visit your business site during your loan request or before loan approval?
a) Yes b) No
8. Do the application requirements and procedures convenient and simple?
a) Yes b) No
9. Is the loan processing time short and convenient for you?
a) Yes b) No
10. When you approach the branch do you get relevant information to your request/need?
a) Yes b) No
11. For how long are you loan client of the bank?
a) 1-2 years
b) 3 years
c) 4 years
d) 5 years
e) >5 years
12. How do you evaluate your so far relationship with the bank as a loan client?
a) Excellent
b) Very good
c) Good
d) Fair
e) Bad

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b) Very good
c) Good
d) Fair
e) Bad

13. In which part do you think the bank needs improvement?

- a) In accepting loan applications
- b) In follow up & collection of loans
- c) In collateral estimation.
- d) In processing & approving loans

14. Do you think to extend your relation further with the bank?

- a) Yes
- b) No
- c) It depends

15. Do you think the existence of the bank add value to your business growth?

- a) Yes
- b) No

16. Does the bank visit your business sites after loan granting?

- a) Yes
- b) No

17. Do you think the amount of loan approved was enough for the intended Purpose per your request?

- a) Yes
- b) No

18. Do you think the loan repayment duration convenient to your business?

- a) Yes
- b) No

19. Which of the following is/are the most important one/s motivating you to repay your loan on time?

a) not to lose collateral

b) to keep social status

c) expectation of getting another loan

d) knowing that paying bank loan per the agreement is ethical and an obligation

e) Others _____

**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON WORKING CAPITAL MANAGEMENT"
AT
CANARA BANK, ANKALI**

**Submitted to
RANI CHANNAMMA UNIVERSITY, BELAGAVI**



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

Miss. Bhagyashree Umarane

M.COM-IV SEMESTER

REGISTER NO: MC191604

UNDER THE GUIDANCE OF

SHRI. S. M. BHOSAGE

(भारत सरकार का उपक्रम- A Govt. of India Undertaking)

प्रधान कार्यालय- बेंगलूर-Head Office-02

Ref. No.-Sep/2021/Certificate

Date-13/09/2021

CERTIFICATE**To whom so ever it may concern**

This is to certify that Miss. Bhagyashree Umarane (Reg. No-MC191604) M. Com IV Semester student of K.L.E. Socirty's Basavaprabhu Kore Art's, Science & Commercecottage Chikodi-591201, Dist-Belgaum has sucessfully comleted the project on " Working Capital of Management" in our branch from 01 June 2021 to 31 August 2021.

During the project period of project he found sincerer hardworking.

We wish her all sucess for her bright future.

कृते केनरा बँक
Thanking You
For CANARA BANK

[Signature]
मिनाक्षी
बाली-591213 (बेलगांव जिला)
ANKALI(Belgaum Dist.)
Manager

Canara Bank, Ankali



Bhagyashree Umarane
[Signature]

DECLARATION

I declare that the project report entitled "A Study on Working Capital Management" At Canara Bank, Ankali is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. S. M. Bhosage, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 21/09/2021

Place: Chikodi


Miss. Bhagyashree Umarane

Register No: MC191604

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

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Miss. Bhagyashree Umarane

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CHAPTER – 1
INRODUCTION & RESEARCH DESIGN

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- 1.1 Introduction
 - 1.2 Review of Literature
 - 1.3 Statement of the problem
 - 1.4 Need of the study
 - 1.5 Objective of the study
 - 1.6 Scope of the study
 - 1.7 Research Methodology
 - 1.8 Limitations of the study
 - 1.9 Chapter Scheme

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

Working capital management is very important element to measure the short term solvency position of a firm and for profitability. Without its proper management, no corporate can run their business smoothly. Management of working is essential for long term survival for every type of business. Management of working capital lies in maintaining its liquidity in day-to-day operation to ensure smooth running of the business and meets its obligations. The elements of the working capital are short term in nature such as cash, marketable securities, debtors, inventories, creditors etc. Current assets are short-lived investments that are continually being converted into other asset types. As far as current liabilities are concerned, the firms are accountable for paying these obligations on a timely basis but within a year. It should be neither excess nor inadequate in a firm. The requirement of the working capital depends on the operating cycle of the firm. The operating cycle starts with the purchase of raw material and other sources and end with the realization of cash from the sale of finished goods. Requirement of working capital depends upon the length of operation cycle. If period of cycle is long more working capital will be required and vice versa .Liquidity is the function of current assets and current liability. Liquidity can be achieved through to manage the tradeoff between the liquidity and profitability which helps in reduces the risk. Risk refers to the inability of the firm to meet its obligations. Large investment in current assets will increase liquidity with less dependence on short term borrowings. It will reduce the risk of the firm and also decrease the opportunity for gain or loss. On the other hand less investment in current assets increase dependence on short term borrowing, increase risk, reduce liquidity and increase profitability. So, there is an inverse relationship between degree of risk and profitability.

1.2 REVIEW OF LITERATURE

1. Rehman (2007)

The effect of different variables of working capital management including the Average Collection Period, Inventory Turnover in Days, Average Payable Period, Cash Conversion Cycle and Current Ratio on the Net Operating Profitability of Pakistani Firms. By using Pearson's correlation and regression analysis he found that there was a strong negative relationship between variables of Working Capital Management and Profitability. He also finds that as the cash conversion cycle increases, it leads to decrease in profitability of the firm and managers can create a positive value for the shareholders by reducing the cash conversion cycle to a possible minimum level.

2. Bhattacharya K.K (2006)

In the study of "Working Capital Management and Inflation" defined the concept of gross and net working capital. Negative concept is also used when current liabilities are in excess of current assets. Internal sources like retained earnings and depreciation and external sources like bank credit, creditors and public deposit are used for financing working capital. Certain cost control measures suggested are: substitution of raw material without affecting quality, monitoring cost under inflation, sales, collection and discount policy, proper care for slow moving and, obsolete stocks by senior management, forming guidelines to convert such blocked fund into current working capital, scheduling of payments to creditors etc

3. Eljelly (2004)

The relation between profitability and liquidity by using correlation and regression analyses and found that the cash conversion cycle was of more importance as a measure of liquidity than the current ratio that affects profitability.

4. Shin and Soenen (1998)

Studied the relationship between working capital management and profitability of firms. Shin and Soenen used Net Trade Cycle (NTC) instead of Cash Conversion Cycle to measure working capital management. The difference is components of CCC are expressed as a percentage of sales in NTC. They founded a strong negative relationship between NTC and corporate profitability for a large sample of listed American firms for the periods between 1975 and 1994.

5. Islam & Rahman (1994)

A study on working capital trends of enterprises in Bangladesh. They find that optimum working capital enables a business to have its credit standing and permits the debts payments on maturity date and helps to keep itself fairly in liquid position which enables the business to attract borrowing from the banks.

1.3 STATEMENT OF THE PROBLEM

The sufficiency of working capital assists in raising credit standing of a business because of better terms on goods bought, lesser cost of manufacturing due to the acceptance of cash discounts, favorable rates of interest etc. Working capital needs of every organization varies depending upon various parameters. For assessing the working capital limits, the Banks should analyze the business operations in detail and credit worthiness of the organizations. Based on business operations, type of industry, creditworthiness and other parameters working capital needs are assessed. For all organizations a single method cannot be applied for assessing the limits. Different methods should be used based on suitability to the organization and acceptability by the Banks.

1.4 NEED FOR THE STUDY

Working capital management is essentially an accounting strategy with a focus on the maintenance of a sufficient balance between a company's current assets and liabilities. An effective working capital management system helps businesses not only cover their financial obligations but also boost their earnings.

1.5 OBJECTIVES OF THE STUDY

1. To study the importance of adequate working capital.
2. To understand the methods of working capital management.
3. To learn the different forms of working capital extended by the Banks.
4. To identify the different modes of security acceptable by the Banks for providing working capital finance.

1.6 SCOPE OF THE STUDY

The scope of the study was related to the various methods used by Canara bank. The various types of working capital management. the present study covers the period of 5 years starting from 2015-2020.

1.7 RESEARCH METHODOLOGY

Research Design:

It is a descriptive study consisting of quantitative and qualitative factor. Descriptive research, also known as statistical research, describes data and characteristics about the population or phenomenon being studied. Descriptive research answers the questions who, what, where, when, why and how. Although the data description is factual, accurate and systematic, the research cannot describe what caused a situation.

Nature of Data

Primary and Secondary.

Sources of Data collection

Primary Data was collected by interviewing with the Bank employees.

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Secondary Data was personally collected from the Bank's internal sources, official records, annual report, the Bank website, data released by RBI in its website and management books.

1.8 LIMITATIONS OF THE STUDY

1. Though there was interaction with the Bank employees, more data was taken from secondary sources made available by the Bank.
2. The identity of the real borrower in the case study has been concealed as per the Banks requirement for maintaining the confidentiality
3. The conclusion and interpretations drawn are based on few cases. Anyhow, different cases would have different situation.

1.9 CHAPTER SCHEME:

CHAPTER – 1 INTRODUCTION & RESEARCH DESIGN

The first chapter gives detail on Introduction, Review of Literature, Statement of the problem, Need of the study, Objective of the study, Scope of the study, Research Methodology and Limitations of the study.

CHAPTER -2 CONCEPTUAL FRAMEWORK

This chapter deals with Concept of Working Capital Management, Determinants of Working Capital, Issues of Working Capital Management, Estimating Working Capital Needs, Types of Working Capital, Operating Cycle, Adequacy of Working Capital, Significance of Working Capital, Factors affecting Working Capital necessities and Ratio Analysis.

CHAPTER -3 BANK PROFILE

It gives the profile of bank, Vission, Mission, Board of Directors, Organization Structure, Product and Services, Area of Operation, Competitors Information, Infrastructure Facilities, Awards and Achievements, Swot Analysis and Financial Statements.

CHAPTER -4 DATA ANALYSIS AND INTERPRETATION

This chapter gives details regarding analysis and interpretation of data. It also consists of the table, graphs and its interpretation.

CHAPTER – 5 FINDING, SUGGESTION AND CONCLUSION

It deals with findings, suggestions and conclusion

CHAPTER – 2

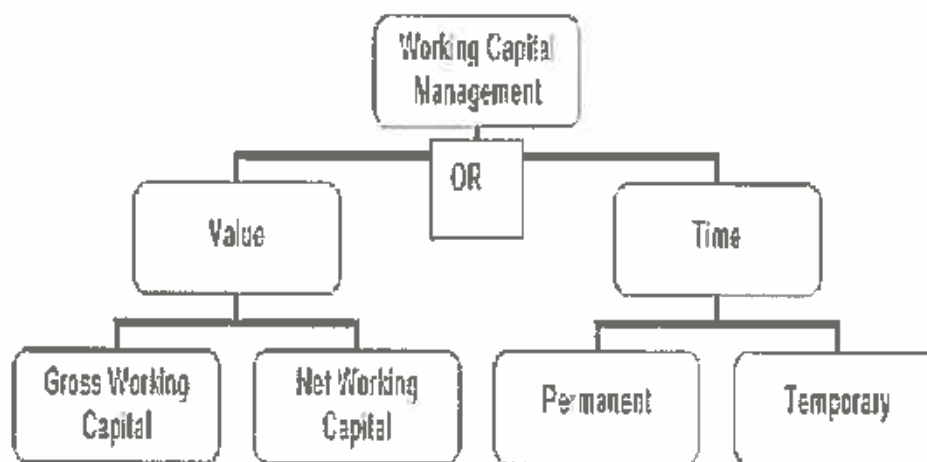
CONCEPTUAL FRAMEWORK

- 2.1 Concept of Working Capital Management**
- 2.2 Determinants of Working Capital**
- 2.3 Issues in the Working Capital Management**
- 2.4 Estimating Working Capital Needs**
- 2.5 Types of Working Capital**
- 2.6 Operating Cycle**
- 2.7 Adequacy of Working Capital**
- 2.8 Significance of Working Capital**
- 2.9 Factors affecting Working Capital Necessities**
- 2.10 Ratio Analysis**

CONCEPTUAL FRAMEWORK

2.1 CONCEPT OF WORKING CAPITAL MANAGEMENT

The concept of working capital can also be explained through two angles.



- a) **Value:** From the value point of view, Working Capital can be defined as Gross Working capital or net working capital.
- **Gross working capital** refers to the firm's investment in current assets. Current assets are those assets which can be converted into cash within an accounting year. Current Assets include: Stocks of raw materials, Work-in-progress, finished goods, Trade debtors, Prepayments, Cash balances etc.
 - **Net working capital** refers to the difference between current assets and current liabilities. Current liabilities are those claims of outsiders which are expected to mature for payment within an

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accounting year. Current Liabilities include: Trade creditors, Accruals, Taxation payable, Bills Payables, Outstanding expenses, Dividends payable, short-term loans.

- b) **Time:** From the point of view of time, the term working capital can be divided into two categories viz., Permanent and temporary.
- **Permanent working capital** refers to the hard-core working capital. It is that minimum level of investment in the current assets that is carried by the business at all times to carry out minimum level of its activities.
 - **Temporary working capital** refers to that part of total working capital, which is required by a business over and above permanent working capital. It is also called variable working capital. Since the volume of temporary working capital keeps on fluctuating from time to time according to the business activities it may be financed from short-term sources.

2.2 Determinants of Working capital:

Working capital management is concerned with:-

- a) Maintaining adequate working capital (management of the level of individual current assets and the current liabilities) AND
- b) Financing of the working capital.

For the point a) above, a Finance Manager needs to plan and compute the working capital requirement for its business. And once the requirement has been computed he needs to ensure that it is financed properly. This whole exercise is nothing but Working Capital Management.

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Sound financial and statistical techniques, supported by judgment should be used to predict the quantum of working capital required at different times. Some of the factors which need to be considered while planning for working capital requirement are:-

1. **Cash** – Identify the cash balance which allows for the business to meet day-to-day expenses, but reduces cash holding costs.
2. **Inventory** – Identify the level of inventory which allows for uninterrupted production but reduces the investment in raw materials and hence increases cash flow; the techniques like Just in Time (JIT) and Economic order quantity (EOQ) are used for this.
3. **Debtors** – Identify the appropriate credit policy, i.e., credit terms which will attract customers, such that any impact on cash flows and the cash conversion cycle will be offset by increased revenue and hence Return on Capital (or vice versa). The tools like Discounts and allowances are used for this.
4. **Short-term Financing Options** – Inventory is ideally financed by credit granted by the supplier; dependent on the cash conversion cycle, it may however, be necessary to utilize a bank loan (or overdraft), or to “convert debtors to cash” through “factoring” in order to finance working capital requirements.
5. **Nature of Business** - For e.g. in a business of restaurant, most of the sales are in Cash. Therefore need for working capital is very less.
6. **Market and Demand Conditions** - For e.g. if an item’s demand far exceeds its production, the working capital requirement would be less as investment in finished good inventory would be very less.
7. **Price Level Changes** – For e.g. rising prices necessitate the use of more funds for maintaining an existing level of activity. For the same

level of current assets, higher cash outlays are required. Therefore the effect of rising prices is that a higher amount of working capital is required.

2.3 Issues in the Working Capital Management:

Working capital management entails the control and monitoring of all components of working capital i.e. cash, marketable securities, debtors (receivables) and stocks (inventories) and creditors (payables).

Finance manager has to pay particular attention to the levels of current assets and their financing. To decide the levels and financing of current assets, the risk return trade off must be taken into account.

1. **Current Assets to Fixed Assets Ratio:** The finance manager is required to determine the optimum level of current assets so that the shareholders value is maximized.
 - The level of the current assets can be measured by creating a relationship between current assets and fixed assets. Dividing current assets by fixed assets gives current assets/fixed assets ratio.
 - Assuming a constant level of fixed assets, a higher current assets/fixed assets ratio indicates a conservative current assets policy and a lower current assets/fixed assets ratio means an aggressive current assets policy assuming all factors to be constant.
2. **Liquidity versus Profitability:** Risk return trade off – A firm may follow a conservative, aggressive or moderate policy as discussed earlier. However, these policies involve risk-return trade off.
 - A conservative policy means lower return and risk. While an aggressive policy produces higher return and risk.
 - The two important aims of the working capital management are profitability and solvency.

2.4 Estimating Working Capital Needs:

Operating cycle is one of the most reliable methods of Computation of Working Capital.

However, other methods like ratio of sales and ratio of fixed investment may also be used to determine the Working Capital requirements. These methods are briefly explained as follows:

- i. **Current Assets Holding Period:** To estimate working capital needs based on the average holding period of current assets and relating them to costs based on the company's experience in the previous year. This method is essentially based on the Operating Cycle Concept.
- ii. **Ratio of Sales:** To estimate working capital needs as a ratio of sales on the assumption that current assets change with changes in sales.
- iii. **Ratio of Fixed Investments:** To estimate Working Capital requirements as a percentage of fixed investments.

2.5 Types of working capital:

Sometimes, working capital is divided into two varieties as:

1. Permanent working capital
 2. Variable working capital
- **Permanent Working Capital:** refers to the minimum amount of working capital i.e. the amount of current assets over current liabilities which is needed to conduct a business even during the dullest period.
 - **Variable Working Capital:** This can be defined as the working capital invested for a temporary period of time in the business. For this reason, it is also called as fluctuating working capital. Such a

2.7 Adequacy of Working capital

The investment in current assets should be just adequate to the needs of the firm. Both excess working capital and inadequate working capital are dangerous to the firm.

• Problems of Excessive working capital

1. Low returns on investment as excess funds in current assets remains idle and earn nothing.
2. There is possibility of over capitalization. A firm having excess working capital may be tempted to invest heavily on fixed assets that may not be justified by its actual sales. This results in lower rate of return.
3. It results in unnecessary accumulation of inventories. Thus chances of inventory mishandling increases.
4. Excessive working capital makes management complacent. This may lead to management inefficiency.
5. It is an indication of defective working capital policy. It indicates firm's inability to utilize the available resources productively.

• Problems of inadequacy

1. A firm is not in a position to utilize the available production facilities effectively.
2. Inadequacy stagnate growth. It becomes difficult for the firm to undertake profitable project because of non-availability of working capital.
3. It also becomes difficult to implement operational plans of the firm.
4. Operational inefficiencies come up when it is difficult to meet even day to day commitments.
5. Fixed assets are not efficiently utilized because of lack of working capital; the firm's profitability may come down.
6. It makes the firm

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unable to enjoy attractive credit facilities from creditors and others. 7. In due course of time the firm may lose its reputation.

• **Importance of adequate working capital**

1. It protects the solvency of the firm. Suppliers of goods, customers, creditors and others keep their faith in such a firm that is in a position to meet its financial obligations promptly.
 2. It enables the firm to get the benefits of cash discounts as a firm having sound working capital position can meet its financial obligations promptly.
 3. It enables to extend better credit terms to the customers.
 3. It helps in achieving stability of the firm.
- It enables the firm to get easy loans and advances from banks and other financial institutions because of its good credit standard.
 - A firm having adequate working capital can execute rush orders as it can easily purchase additional raw materials and employ additional labor.
 - It provides capacity to hold up inventories. A firm with adequate working capital can wait for better market opportunities by holding up inventories till the prices increase favorably. But, has to sell its products as early as possible.
 - It improves general morale of the employees and creates goodwill for the firm.

2.8 Significance of Working Capital

Working capital is the life blood and nerve centre of a company. Just as movement of blood is necessary in the human body for maintaining existence, working capital is very necessary to uphold the horizontal running of a company. No business can run productively without an sufficient amount of working capital. The main compensation of maintaining ample amount of working capital is as under:

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1. **Solvency of the company:** Sufficient working capital helps in maintaining solvency of the company by providing continuous flow of manufacture.
2. **For Goodwill of business:** Sufficient working capital enables a business concern to make punctual payments and hence helps in creating and maintaining goodwill.
3. **Easy availability of loans:** A business having sufficient working capital, high solvency and good credit standing can assemble loans from banks and other on easy and positive terms.
4. **To avail cash discounts:** Enough working capital also enables a concern to avail cash discounts on the purchases and hence it reduces costs.
5. **Normal supply of raw materials:** Enough working capital ensures usual supply of raw materials and regular production.
6. **Usual payment for day-to-day commitments:** A company which has plenty working capital can make usual payment of salaries, wages and other day-to-day commitments which raises the confidence of its employees, increases their competence, reduces wastages and costs and enhances manufacture and profits.
7. **Utilization of favorable market situation:** Only concern with the sufficient working capital can exploit positive market conditions such as purchasing its necessities in bulk when the prices are lesser and by holding its inventories for upper prices.
8. **Capability to face crisis:** Sufficient working capital enables a concern to face company crisis in emergency periods such as gloominess because during such periods, usually, there is much pressure on working capital.
9. **Rapid and regular return on investments:** Every sponsor wants a quick and regular return on his investments. Adequacy of working capital enables a organization to pay quick and usual dividends to its investors as there may not be much force to plough back profits. This gains the assurance of its investors and creates a positive market to raise additional funds in the prospect.

10.High confidence: Sufficiency of working capital creates an surroundings of safety, confidence, and high self-esteem and creates overall competence in a business.

2.9 Factors affecting working capital necessities:

The working capital necessity of a concern depends upon a huge numbers of factors such as nature and size of business, the character of their operations, the length of manufacture cycles, the rate of stock proceeds and the state of economic condition. It is not probable to rank them because all such factors of diverse significance and the influence of individual factors changes for a firm eventually. However the following are significant factors normally influencing the working capital necessity:

1. Nature of Business:

The working capital necessity of a firm fundamentally depends upon the nature of the business. Public usefulness activities like electricity water supply and railways require very restricted working capital because they offer cash sales only and provide services, not products and as such no funds are coupled up in inventories and receivables. Usually speaking it may be said that public utility activities require small amount of working capital, trading and financial firms necessitate comparatively very large amount, whereas manufacturing activities require considerable working capital between these two limits.

2. Scale of Operations:

The working capital necessity of a concern is directly influenced by the size of its company which may be calculated in terms of scale of operations.

3. Production strategy:

In certain organizations the require is subject to wide fluctuations due to seasonal variations. The necessities of working capital in such cases depend upon the production strategy.

4. Manufacturing procedure:

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In manufacturing company the necessity of working capital increases in direct proportion of length of manufacturing procedure. Longer the procedure period of produce, larger is the amount of working capital required.

5. Seasonal disparity:

In certain companies raw material is not obtainable through out the year. They have to buy raw materials in bulk in the season to make sure and continuous flow and process them during the entire year.

6. Rate of stock proceeds:

There is a high degree of inverse co-relationship between the quantum of working capital; and the rapidity or speed with which the sales are affected. A firm having a high rate of stock turnover will need lesser amount of working capital as compared to a company, having a low rate of proceeds.

7. Credit strategy:

The credit strategy of a company in its dealing with debtors and creditors influence significantly the necessity of working capital. A company that purchases its necessity on credit and sell its products/services on cash require smaller amount of working capital.

8. Business rotation:

Business cycle refers to alternate development and contraction in common business actions. In a period of bang i.e., when the business is prosperous, there is a need of bigger amount of working capital due to amplify in sales, rise in prices, optimistic expansion of business contracts sales decline, difficulties are faced in collection from debtors and organizations may have a large amount of working capital lying inactive.

9. Rate of expansion of company:

The working capital requirement of a concern increase with the growth and expansion of its business activities. Though it is difficulties to decide the

relationship between the expansion in the volume of a company and the increase in the working capital of a business, yet it may be accomplished that of normal rate of expansion in the volume of business, we may have retained profits to provide for additional working capital but in fast growth in concern, we shall require bigger amount of working capital.

10.Price stage change:

Changes in the price stage also result on the working capital necessity. Generally the increasing prices will require the firm to maintain bigger amount of working capital as more funds will be essential to maintain the same current assets.

2.10 RATIO ANALYSIS

Ratio analysis is one of the most powerful tool and widely used technique of analyzing financial statements. It is the process of computing and interpreting relationship between the items of the financial statements for arriving at conclusions about the financial position and performance of an enterprise. With the help of ratios, the financial statements can be analyzed more clearly and scientific decisions are made from such analysis. Ratio analysis can also be defined as the yard stick that provides a measure of relationship between two accounting figures. Ratio analysis can be used both in the trend or dynamic analysis and statistical analysis.

Financial ratio analysis is the calculation and comparison of ratios which are derived from the information in a company's financial condition, its operations and attractiveness as an investment. Financial ratios are calculated from one or more pieces of information from a company's financial statements. For example, the "gross margin" is the gross profit from operations divided by the total sales or revenues of a company, expressed in percentage terms. In isolation, a financial ratio is a useless piece of information. In context, however a financial ratio can give a financial analyst an excellent picture of a company's situation and the trends that are developing.

Financial ratio analysis groups the ratio into categories which tell us about different facets of a company's finances. Some ratios which are most importance are listed below.

1. Liquidity Ratio.
2. Leverage Ratio
3. Profitability Ratio.
4. Activity Ratio

LIQUIDITY RATIO

Liquidity refers to the ability of the concern to meet its current obligations as and when they become due. These ratios are calculated to comment upon the short term paying capacity of the concern or the firm's ability to meet its current obligations. Much insight could be obtained into the present cash solvency of the firm and its ability to remain solvent in the event of emergent i.e. the firm should ensure that it does not suffer from any lack of liquidity and also that it is necessary to strike a proper balance between high liquidity and lack of liquidity. The various liquidity ratios are

- **Current Ratio**

Current ratio may be defined as the relationship between current assets and current liabilities. This ratio is also known as working capital ratio, is a measure of general liquidity and is most widely used to make the analysis of a short term financial position or liquidity of a firm. It is calculated by dividing the total of current assets to the total of current liabilities.

$$\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities}$$

- **Liquid Ratio**

It is also known as acid test ratio. Liquid ratio is more rigorous test of liquidity than the current ratio. The term liquidity refers to the ability of a firm to pay its short term obligations as and when they become due. An asset is said to be liquid if it can be converted into cash within a short period without loss of

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value: Liquid ratio may be defined as the relationship between liquid assets and current liabilities.

Liquid Ratio=Liquid Assets/Current Liabilities.

- **Absolute Liquid ratio**

Some authors are of the opinion that the absolute liquid ratio should also be calculated together with current ratio and acid test ratio so as to exclude even receivables from the current assets and find out the absolute liquid assets.

Absolute Liquid Ratio= Absolute Liquid Assets / Current Liabilities

- **Quick ratio**

The quick ratio is an indicator of a company's short-term liquidity position and measures a company's ability to meet its short term obligations with its most liquid assets.

Quick ratio=quick assets / current liabilities

LEVERAGE RATIOS

The short term creditors like the bankers and the suppliers of the raw materials are more concerned with the firm's current debt paying ability. On the other hand long-term creditors like debenture holders, financial institutions, etc are more concerned with the firm's long term financial position. To judge the long term financial position of the firm, financial leverage or capital structure ratio is used. The shareholders, debenture holders and other long term creditors like financial institutions are more interested in the long term financial position or long term solvency of the firm. Leverage or solvency ratios. Analyze the capital structure of a company; it is also known as ca 34/91 ratios. The term solvency generally refers to the firm's ability to pay the interest regularly and repay the principal amount of debt on due date.

Accordingly, there are two types of leverage ratios. The first type of leverage ratio is based on the relationship between owned capital and borrowed capital. These ratios are calculated from the balance items. The second type of leverage ratio is coverage ratio. These are computed from profit and loss account.

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- **Debt-equity ratio**

Debt-equity ratio is also known as external-internal equity ratio. It is calculated to measure the relative claims of outsiders and the owners against the firm's assets. This ratio indicates the relationship between the external equities. Or the outsiders fund and the internal equities or shareholders fund.

$$\text{Debt-equity ratio} = \text{Outsider's fund} / \text{Shareholders fund}$$

Primarily Interpretation of this ratio depends upon the financial policy of the firm and the firm's nature of business. A ratio of 1:1 may be usually considered to be satisfactory ratio although there cannot be any rule of thumb or standard norm for all types of business.

- **Capital gearing ratio**

The term capital gearing is used to describe the relationship between equity share capital including reserves and surpluses to preference share capital and other fixed interest bearing loans. If preference share capital and other fixed interest bearing loans exceed the equity share capital including reserves, the firm is said to be highly geared. The firm is said to be in low gear if preference share capital and other fixed interest bearing loans are less than equity capital and reserves.

$$\text{Capital gearing ratio} = (\text{ESC} + \text{R \& S}) / (\text{PSC} - \text{TDBFI})$$

Where, ESC equity share capital

R&S = reserve and surplus

PSC = preference share capital-term debt bearing

TDBFI = term debt bearing fixed interest

PROFITABILITY RATIOS

Profit reflects the final result of the business operations. There is two types of profitability ratios namely margin ratio and ratio on returns rates. Profit margin ratios show the relation between sales and profits.

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The ultimate aim of any business enterprise is to earn maximum profit. Lord Keens remarked, "Profit is the engine that drives the business enterprise " a firm should earn profit to survive and grow for a long period of time. To the management profit is a measurement of efficiency and control. To the owners it is to measure the worth of their investment. To the creditors it is margin of safety.

The management of the company should know how efficiently they carry out business operation. In other words, the management of the company is very much interested in the profitability of the company. Beside management, creditors and owners are also interested in the profitability of the firm, as they want to get interest and repayment of principal amount regularly. Owners want to get a reasonable return on their investment. The profitability ratio measures. The ability of the firm to earn and on sales, total assets and invested capital. Profitability ratios are generally calculated either in relation to sales or in relation to investment.

The following profitability ratios are calculated in relation to sales:

- **Gross profit ratio**

Gross profit ratio measures the relationship of gross profit to net sales and is usually represented as percentage. Thus it is calculated by dividing gross Profit by sales.

$$\text{Gross profit ratio} = \text{gross profit/ net sales}$$

- **Operating profit ratio**

This ratio is calculated by dividing operating profit by sales. Operating profit is the excess of net sales over operating costs. Operating cost is the cumulative of cost of goods sold, administrative and office expenses and selling and distribution expenses.

$$\text{Operating profit ratio} = \text{operating profits /net sales}$$

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- **Net profit ratio**

Net profit ratio establishes the relationship between net profit (after taxes) and sales, and it indicates the efficiency of the management in manufacturing, selling, administrative and other activities of the firm. This ratio is the overall measure of firm's profitability and is calculated as:

$$\text{Net profit ratio} = \text{net profit} / \text{net sales}$$

ACTIVITY RATIOS

Funds of the owners and creditors are invested in various assets to generate sales and profits. Activity ratios are employed to evaluate the efficiency with which the firm's managers utilize their assets. These ratios is also called turnover ratio because they indicate the speed with the assets are being converted or turn over into sales. The various activity ratios are:

- **Debtors turnover ratio**

Debtor's turnover ratio indicates the velocity of debt collection of a firm. In simple words, it indicates the number of times average debtors are turned Over during a year.

$$\text{Debtors turnover ratio} = \text{Net credit annual sale} / \text{Average trade debtors}$$

- **Creditors turnover ratio:**

This ratio indicates the velocity with which the creditors at the relation to purchases.

$$\text{Creditors turnover ratio} = \text{Net credit purchases} / \text{Average trade creditors}$$

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- **Inventory turnover ratio.**

It is also known as stock velocity, is normally calculated as sales/average inventory or cost of goods sold /average inventory. It indicates whether the inventory has been efficiently used or not. The purpose is to see whether only the required minimum funds have been locked up in inventory. Inventory. Turnover ratio indicates the number of times the stock has been turned over during the period and evaluates the efficiency with which a firm is able to manage its inventory.

Inventory turnover ratio= Cost of goods sold / Average inventory at cost Usually, a high inventory turnover indicates efficient management of inventory because more frequently the stocks are sold; the lesser amount of money is required to finance the inventory.

- **Fixed assets turnover ratio**

This ratio indicates the extent to which the investments in fixed assets contribute towards sales. If it is compared with a previous period, it indicates whether the investment in fixed assets has been judicious or not. The ratio is calculated as follows:

$$\text{Fixed assets turnover ratio} = \text{Net sales} / \text{Fixed assets (Net)}$$

- **Working capital turnover ratio**

It indicates the velocity of the utilization of net working capital. This ratio indicates the number of times the working capital is turned over in the course of a year. It measures the efficiency with which the working capital is being used by a firm.

This ratio is calculated as:

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Working capital turnover ratio = Cost of sales/ Average working capital

A higher ratio indicates efficient utilization of working capital and a low ratio indicates vice versa. But a very high working capital turnover ratio is not a good situation for any firm and hence care must be taken while interpreting the ratio.

CHAPTER – 3

BANK PROFILE

3.1 Profile

3.2 Vision

3.3 Mission

3.4 Board of Directors

3.5 Organization Structure

3.6 Product and Services

3.7 Area of Operation

3.8 Competitors Information

3.9 Infrastructure Facilities

3.10 Awards and Achievements

3.11 SWOT Analysis

3.12 Financial Statements

BANK PROFILE

3.1 BRIEF PROFILE OF THE BANK



IFSC Code: CNRB0000541

[Copy IFSC Code](#)

IFSC Code	CNRB0000541 (used for RTGS and NEFT transactions)
MICR Code	NA
Branch Code	000541 (Last Six Characters of IFSC Code)
Bank	Canara Bank
Branch	Ankali
District	Ankali
State	Karnataka
Address	Near Mayur Chitra Mandir, Main Road ,Ankali , Belgaum Dist, Karnataka State - 591 213
Phone No.	254235

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Widely known for customer centricity, Canara Bank was founded by Shri Ammembal Subba Rao Pai, a great visionary and philanthropist, in July 1906, at Mangalore, then a small port town in Karnataka. The Bank has gone through the various phases of its growth trajectory over hundred years of its existence. Growth of Canara Bank was phenomenal, especially after nationalization in the year 1969, attaining the status of a national level player in terms of geographical reach and clientele segments. Eighties was characterized by business diversification for the Bank. In June 2006, the Bank completed a century of operation in the Indian banking industry. The eventful journey of the Bank has been characterized by several memorable milestones. Today, Canara Bank occupies a premier position in the comity of Indian banks.

Canara Bank has several firsts to its credit. These include:

1. Launching of Inter-City ATM Network
2. Obtaining ISO Certification for a Branch
3. Articulation of 'Good Banking' – Bank's Citizen Charter
4. Commissioning of Exclusive Mahila Banking Branch
5. Launching of Exclusive Subsidiary for IT Consultancy
6. Issuing credit card for farmers
7. Providing Agricultural Consultancy Services

Over the years, the Bank has been scaling up its market position to emerge as a major 'Financial Conglomerate' with as many as ten subsidiaries/sponsored institutions/joint ventures in India and abroad. As at March 2021, Canara Bank services over 10.50 crore customers through a network of 10416 branches and 13452 ATMs/Recycler spread across all Indian states and Union Territories.

Not just in commercial banking, the Bank has also carved a distinctive mark, in various corporate social responsibilities, namely, serving national priorities, promoting rural development, enhancing rural self-employment through several training institutes and spearheading financial inclusion objective. Promoting an

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training institutes and spearheading financial inclusion objective. Promoting an inclusive growth strategy, which has been formed as the basic plank of national policy agenda today, is in fact deeply rooted in the Bank's founding principles. "A good bank is not only the financial heart of the community, but also one with an obligation of helping in every possible manner to improve the economic conditions of the common people". These insightful words of our founder continue to resonate even today in serving the society with a purpose. The growth story of Canara Bank in its first century was due, among others, to the continued patronage of its valued customers, stakeholders, committed staff and uncanny leadership ability demonstrated by its leaders at the helm of affairs. We strongly believe that the next century is going to be equally rewarding and eventful not only in service of the nation but also in helping the Bank emerge as a "Preferred Bank" by pursuing global benchmarks in profitability, operational efficiency, asset quality, risk management and expanding the global reach.

HEAD OFFICE: BENGALORE



3.2 VISION

To emerge as a 'Preferred Bank' by pursuing global benchmarks in profitability, operational efficiency, asset quality, risk management and expanding the global reach.

3.3 MISSION

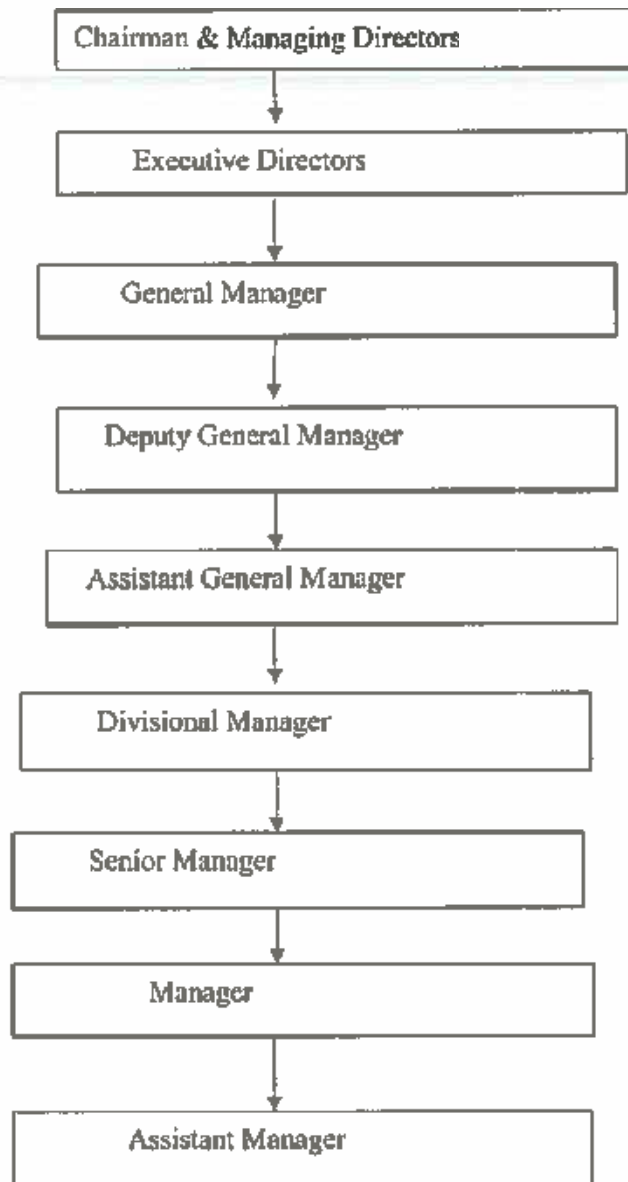
To provide quality banking services with good customer care, create value for all stakeholders and continue as a responsive corporate social citizen.

3.4 BOARD OF DIRECTORS

Sl. No.	Board of Directors	Designation
1	Shri L. V Prabhakar:	Managing Director and Chief Executive Officer
2	Shri. Debashish Mukherjee:	Executive Director
3	Ms. A. Manimekhalai:	Executive Director
4	Shri. K. Satyanarayana Raju:	Executive Director
5	Shri Brij Mohan Sharma:	Executive Director
6	Shri R Kesavan:	Director
7	Shri Suchindra Misra:	Director
8	Shri Venkatachalam Ramakrishna Iyer:	Shareholder Director
9	Shri Bimal Prasad Sharma:	Shareholder Director

3.5 ORGANIZATION STRUCTURE

BOARD OF DIRECTORS



3.6 Products and Services

1. Personal Banking

- SB Gold Scheme (Min. balance Rs. 50000)
- Canara Bank Champ Scheme (SB deposit for children)
- Canara Saral Saving Scheme (An SB product designed for the common man to provide a basic banking facility as part of the financial inclusion objective of RBI)
- Current Account
- Canara premium current account
- Fixed Deposit
- Kamadhenu Deposit (Re-investment Plan)
- Canara tax saver scheme (A term deposit scheme under the Fixed Deposit & Kamadhenu Deposit streams)
- Recurring deposit
- Special recurring deposit scheme
- Ashraya Deposit Scheme (For Senior Citizens)
- Canara Auto Renewal Deposit (Card)
- Canara Super Savings Salary Account Scheme

2. Loan Products

- Housing Loan
- Canara Mobile (Vehicle)
- Canara pension
- Canara rent (To provide loans to owners of the property to meet their business needs and / or genuine personal needs, against rents receivable)
- Canara Jeevan (Reverse Mortgage Loan (RML) scheme for senior citizens)
- Home improvement loan

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- Canara site loan
- Teachers loan
- Canara Mortgage
- Doctors choice
- Canara cash (Shares)
- Canara Budget (For employed/Business)
- Swarna Loan (Gold Loan)
- Canara guide (Loan scheme to finance individuals possessing a certificate to practice as a Tax Return Preparer (TRP) as per scheme formulated by the Ministry of Finance, Government of India for preparation of income tax returns) valid
the
India
- Education Loan

3. Technology Products

- Transactions Through the Bank ATMs And Other Bank ATMs
- Purchase Of Goods And Services At POS Merchant Establishments c.
Mobile Top up
- VISA Money transfer
- E-Ticketing

4. Mutual Funds

5. Insurance Products

6. International services

7. Credit card services

8. Depository services

9. Ancillary services

- Sale of Gold coins
- Safe deposit locker
- Safe custody services

I. Corporate Banking

1. Accounts & Deposits
2. Cash Management Services
3. Loans and Advances
4. Syndication Services
5. IPO Monitoring activity
6. Merchant banking Services
7. Canara E-Tax

II. NRI Remittance Facility

1. Deposit Products
2. Loans & Advances
3. Remittance Facilities
4. Consultancy Services

III. Internet Banking

IV. Priority & SME Banking

1. Agriculture and Rural Credit Schemes
2. Education Loan And Other Priority Sector Loans

3. Government Sponsored Schemes
4. Lead Bank Activities
5. Lending to minority communities

3.7 Area of Operation

As a premier commercial bank in India, Canara Bank has a distinct track record in the service of the nation for over 105 years. Today, Canara Bank has a strong pan India presence with 3432 branches and 2623 ATMs, catering to all segments of an ever growing clientele base of 4.04 crores. Across the borders, the Bank has 5 branches, one each at London, Hong Kong, Shanghai, Leicester and Manama and a Representative Office at Sharjah, UAE. Canara Bank is recognized as a leading financial conglomerate in India, with as many as nine subsidiaries/sponsored institutions/joint ventures in India and abroad.

3.8 Competitors Information

The competitors are surrounded in the Canara Bank, Ankali is as follows

- State Bank of India
- Corporation Bank
- HDFC Bank
- Union Bank of India
- Urban Co-Operative Bank

3.9 Infrastructure Facilities

The bank took several initiatives in the InfoTech front. The Bank covered all its branches/Offices under Core Banking Solution (CBS). With 100% CBS, the Bank now offers technology banking services, such as, Internet Banking, Funds transfer through NEFT and RTGS, SMS alerts. The bank also offers online trading facility to its clients through its subsidiary M/s Canara Bank Securities Ltd. The ATMs

have been enabled to offer value added services like Travel ticket booking, Mobile top up and utility bill payments.

In view of the increased attacks of phishing and pharming the Bank has put in place 24X7 centralized monitoring system of anti phishing and antimalware. To make the Internet Banking facility more secure a slew of measures like implementation of OTP (One Time Password) module, two live validation of account number for NEFT/RTGS transaction through Net Banking and mutual authentication of Internet Server customer PC (CAN Secure) were introduced. With increased confidence, the number of customers enrolled for internet banking has moved up to 3.86 Lakhs (March, 2011).

The Bank upgraded its Data Centre infrastructure to comply with ISO 27001 standards and did the upward migration of database to Oracle 11G version. The bank has a well designed and secured corporate network covering all the branches and offices.

customer terminal has also been provided in the branches for easy and ready reference to own accounts of customers. The Bank has also implemented Electronic Data Interchange Module for payment of customs duty and fulfilling the related formalities in electronic mode.

To connect with the youth of the country and obtain first hand unrestricted feedback, the bank has a presence at Twitter : (<http://twitter.com/canarabanktweet>).

3.10 Awards & Achievements Received during 2011-12

- Canara Bank was awarded coveted Skoch award for financial inclusion on 5.01.2012 at New Delhi. The award was handed over by Dr. C. Rangarajan, Chairman Prime Ministers' Economic Advisory Council to Smt. Archana Bhargava, Executive Director, Canara Bank in a glittering function held at New Delhi. The other dignitaries present on the occasion were Dr. D. Damodaran Former Chairman SEBI, Dr. Govinda Rao, and

Mr. Yogesh Aggarwal, Chairman PFRDA. A certificate of merit was handed over to S.S. Bhat, General Manager Financial Inclusion Wing for Canara Banks role in providing Access to Banking and Financial Services. Citation reads as "Canara Bank has a hand in every arena when it comes to promoting financial inclusion through skilling and self employment. During last one year it has shown significant improvement in its financial inclusion efforts.

- The Bank was conferred with National Award-2011 for excellence in the field of Khadi and Village Industries-Best Bank, South Zone for PMEGP (Prime Ministers Employment Generation Program).
- Corporate Social Responsibility Award-2011.
- Received during 2010-11 Awards/Accolades
- ✦ Canara Utsav & SLBC Kerala-Declaration of total banking coverage
- ✦ The Bank has been conferred with the Second Best Bank Award under National Awards for Excellence in lending to Micro Enterprises for the year 2009-10, by the Ministry of MSME and Outstanding Performer at National level for implementation of Interest Subsidy Eligibility Scheme (ISEC) of KVIC in the country for 2009-10
- ✦ The Bank was conferred 4 awards by the Public Relations Council of India (PRCI), in the following categories
 - Silver Award for Corporate Film (TV Commercial) –English
 - Bronze Award for House Journal/Magazine–Languages
 - Bronze Award for Table Calendar
 - Bronze Award for Corporate Advertisement–Single-English

Achievement of inspection wing:

- Total Number of Branches / Units risk rated: 3378
- Number of low-Risk branches:2009
- % Of LOW-Risk branches:59.47 %

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- Number of high-Risk branches: 1
- Audit / Inspection conducted as per the audit plan and there is no backlog.
- The concurrent audit of 494 branches covers 79 % of advances and 53 % of deposits of the Bank

Priority Sector Performance

Highlights of Priority Sector Performance in last 3 years.

- Bank has achieved hat-trick by crossing all mandated and Internal Targets in Priority Credit.
- Bank has doubled the growth under Agriculture in 2009-10 compared to 2008-09.
- The Agriculture disbursement in FY 07-08 was Rs.11443crores while in it in FY 10-11 Rs. 22374Crores, which is almost doubled in a period of 3 years.
- Education loan stood at Rs.3503crores, compared to O/s level of Rs.1737crores for Mar 08 more than doubled in 3 years.
- Weaker Sections, SC/ST and Minority advances also more than doubled in 3 years.

3.11 SWOT Analysis Strengths:

1.The Bank have well experienced, well trained, most dedicated and committed staff. There are sustained and focused efforts at every level, by each employee of the Bank, to continue to build up core deposits.

2.Strong rural presence.

3.It is well equipped to meet the challenges of 21st century, in the areas of IT, Knowledge and competition.

4.It has launched Core Centralized banking solutions where all branches are connected live.

5. The Bank has specialized branches catering to the specific clientele segment.

Weaknesses:

1. The Bank does not have many overseas branches.
2. As the employees are experienced the Bank has more number of aged workforces.

Opportunities:

1. Controlling NPA through cash recovery. NPA was at 1.11% (Rs. 2347 crores) for the year ended 31st March, 2011.
2. To expand overseas business.
3. Upward revision in Deposit/interest rates attracts new customers/deposits.
4. Up gradation in technological products saves time and improves business

Threats:

1. The Bank face competition from other public sector bank, private sector banks, foreign banks and other financial institutions.
2. Changing economic policies of Government will have direct impact on interest rates.
3. Globalization has allowed other industries, such as IT industry, to attract talent human resource.

3.12 FINANCIAL STATEMENTS OF 5 YEARS**PROFIT AND LOSS ACCOUNT****AS ON 31-03-2015**

LOSS	AMOUNT	PROFIT	AMOUNT
interest on deposits	9069576	interest on loan	12909918
staff salary	713852	bank interest	188430
phone and postage	4447	member share fee	17600
printing and stationery	109268	member entrance fee	17600
office rent, insurance	749442	general income(n.m.f)	2460
audit fee	42000	general income	131315
depreciation(dead stock)	61200	locker rent	1300
depreciation(building)	100800	commission	2500
provident fund	689112		
other expenses	698122		
net profit	1033304		
total	13383196	total	13383196

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BALANCE SHEET AS ON 31-03-2015

LIABILITIES	AMOUNT	ASSETS	AMOUNT
share capital	1139400	cash	62184
		cash with other banks	
reserve and surplus	8658590		4973035
deposits	20660682	reserve fund	4973035
other interest	2429489	loans and advances	500000
other liabilities	2878924	advances	28014069
		investment	2875461
		other assets	191640
net profit	1033304		
total	36800389	total	36800389

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PROFIT AND LOSS ACCOUNT

AS ON 31-03-2016

LOSS	AMOUNT	PROFIT	AMOUNT
interest on deposits	15115960	interest on loan	18448215
staff salary	1189753	bank interest	3505503
phone and postage	7411	member share fee	19800
printing and stationery	182114	member entrance fee	19800
office rent, insurance	124907	general income(n.m.f)	2925
audit fee	70000	general income	133513
depreciation(dead stock)	102000	locker rent	1319
depreciation(building)	168000	commission	2594
provident fund	114852		
other expenses	1163536		
net profit	1141596		
total	19179399	total	19179399

BALANCE SHEET AS ON 31-03-2016

LIABILITIES	AMOUNT	ASSETS	AMOUNT
share capital	1157400	cash	87268
reserve and surplus	9725561	cash with other banks	5859610
deposits	22968086	reserve fund	4200000
other interest	3331708	loans and advances	28619736
other liabilities	647877	advances	197874
		investment	0
		other assets	7740
net profit	1141596		
total	38972228	total	38972228

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PROFIT AND LOSS ACCOUNT

AS ON 31-03-2017

LOSS	AMOUNT	PROFIT	AMOUNT
interest on deposits	36064825	interest on loan	42025419
staff salary	2868756	bank interest	1595795
phone and postage	646743	member share fee	68325
printing and stationery	875326	member entrance fee	59390
office rent, insurance	100000	general income(n.m.f)	102595
audit fee	136000	general income	883034
depreciation(dead stock)	170300	locker rent	8990
depreciation(building)	141367	commission	2262293
depreciation(computer)	60000		
provident fund	139313		
cars fee	16000		
other expenses	4594734		
net profit	1374118		
total	47096662	total	47096662

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BALANCE SHEET AS ON 31-03-2017

LIABILITIES	AMOUNT	ASSETS	AMOUNT
share capital	1182900	cash	59948
reserve and surplus	10905056	cash with other banks	9794997
deposits	26856275	reserve fund	4400000
other interest	3929877	loans and advances	27909946
other liabilities	836135	advances	262856
		investment	2641870
		other assets	14744
net profit	1374118		
total	45084361	total	45084361

PROFIT AND LOSS ACCOUNT**AS ON 31-03-2018**

LOSS	AMOUNT	PROFIT	AMOUNT
interest on deposits	400400746	interest on loan	59194734
staff salary	6301768	bank interest	1726780
phone and postage	308559	member share fee	67050
printing and stationery	1280620	member entrance fee	72264
office rent, insurance	942206	general income(n.m.f)	27957367
audit fee	200000	general income	97372422
depreciation(dead stock)	125000	locker rent	8249
depreciation(building)	170000	commission	2557
provident fund	53700		
other expenses	225995		
net profit	1629908		
total	67756742	total	67756742

BALANCE SHEET AS ON 31-03-2018

LIABILITIES	AMOUNT	ASSETS	AMOUNT
share capital	1230800	cash	67020
reserve and surplus	12214970	cash with other banks	8510906
deposits	29447515	reserve fund	2300000
other interest	2797514	loans and advances	35826966
other liabilities	1171866	advances	500530
		investment	1278891
		other assets	8260
net profit	1629908		
total	48492573	total	48492573

A Study on working capital Management At Canara Bank, Ankali

PROFIT AND LOSS ACCOUNT

AS ON 31-03-2019

LOSS	AMOUNT	PROFIT	AMOUNT
interest on deposits	4691520	interest on loan	6620742
staff salary	435168	bank interest	922168
phone and postage	54928	member share fee	376393
printing and stationery	14844	member entrance fee	35231
office rent, insurance	110400	general income(n.m.f)	7163
audit fee	69520	general income	2729295
Depreciaton (dead stock)	102864	locker rent	18730
depreciation(building)	59220	commission	55231
provident fund	689112		
other expenses	698122		
net profit	3043070		
total	8272529	total	8272529

A Study on working capital Management At Canara Bank, Ankali

BALANCE SHEET AS ON 31-03-2019

LIABILITIES	AMOUNT	ASSETS	AMOUNT
share capital	1926800	cash	58219
reserve and surplus	18390148	cash with other banks	7499628
deposits	43751590	reserve fund	53594708
other interest	2753625	loans and advances	5150000
other liabilities	2568566	advances	662821
		investment	1459663
		other assets	8760
net profit	3043070		
total	72433799	total	72433799

CHAPTER – 4
DATA ANALYSIS AND INTERPRETATION

4.1 Tables

4.2 Graphs

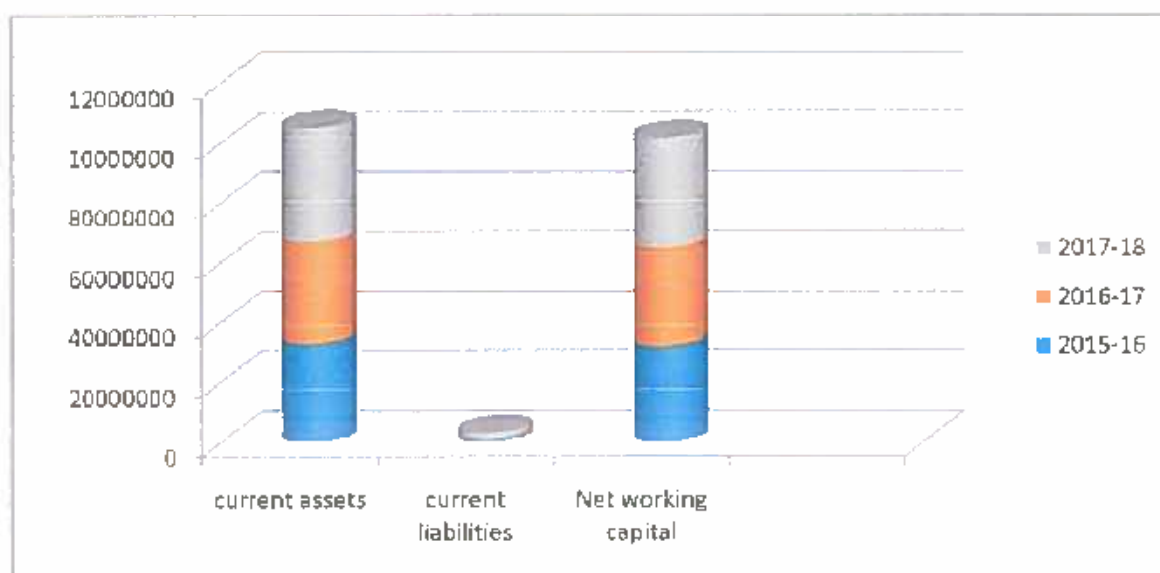
4.3 Interpretation

DATA ANALYSIS AND INTERPRETATION

Table 4.1 Shows Net working capital

Particulars	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
current assets	33240928	34574354	37779635	4413152	61161315
current liabilities	1033304	1141596	1374118	1629908	3043070
Net working capital	32207624	33432758	36405517	42783244	58118245

Source: Annual Report



INTERPRETATION:

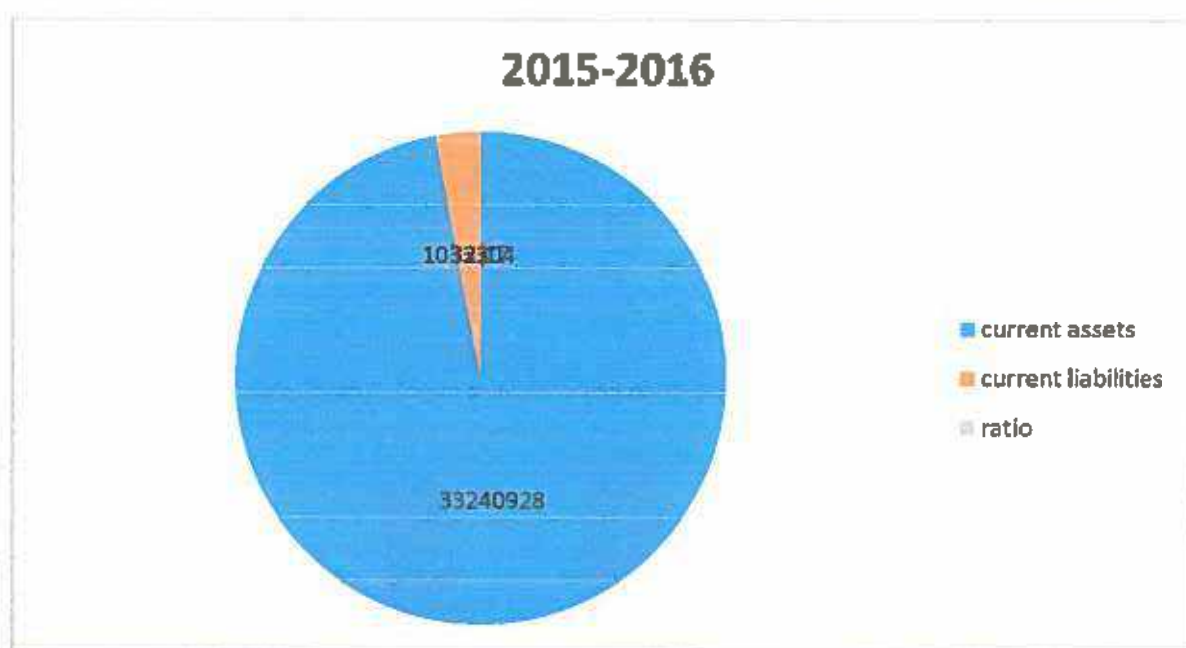
The above table shows that the working capital increased continuously from 2015-16 to 2019-20. It was increased from 3.22 lakhs to 3.34 lakhs in 2016-17 and increased 4.278 in 2018-19 to 5.81 in 2019-20.

It indicates in all the years current assets are more than current liabilities, shows bank is having sufficient working capital.

Table 4.2 Shows Current Ratio

particulars	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
current assets	33240928	34574354	37779635	44413152	61161315
current liabilities	1033304	1141596	1374118	1629908	3043070
ratio	32.17	30.29	27.49	27.25	20.1

Source: Annual Report



INTERPRETATION:

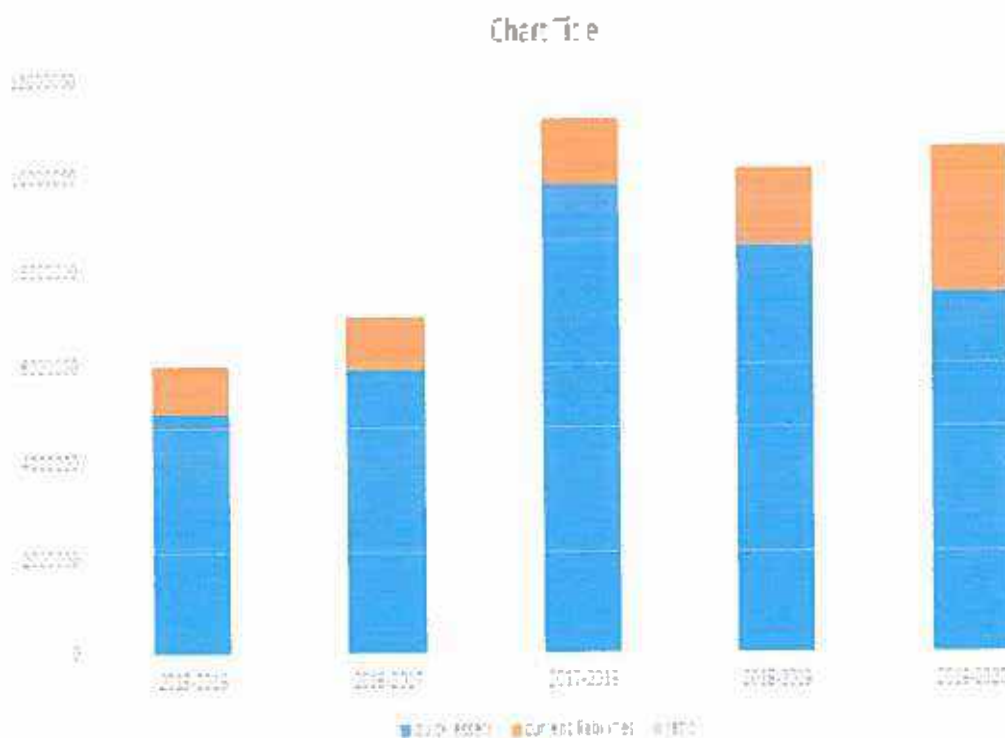
The above table shows that the working capital increased continuously from 2015-16 to 2019-20. It was increased from 32.17 to 30.29 in 2016-17 and increased 27.49 in 2018-19 to 20.1 in 2019-20.

It indicates in all the years current assets are more than current liabilities shows bank is having sufficient working capital.

Table 4.4 Shows Quick ratio

particulars	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
quick assets	5035219	5946878	9854945	8577926	7557847
current liabilities	1033304	1141596	1374118	1629908	3043070
ratio	4.87	5.21	7.19	5.26	2.48

Source: Annual Report

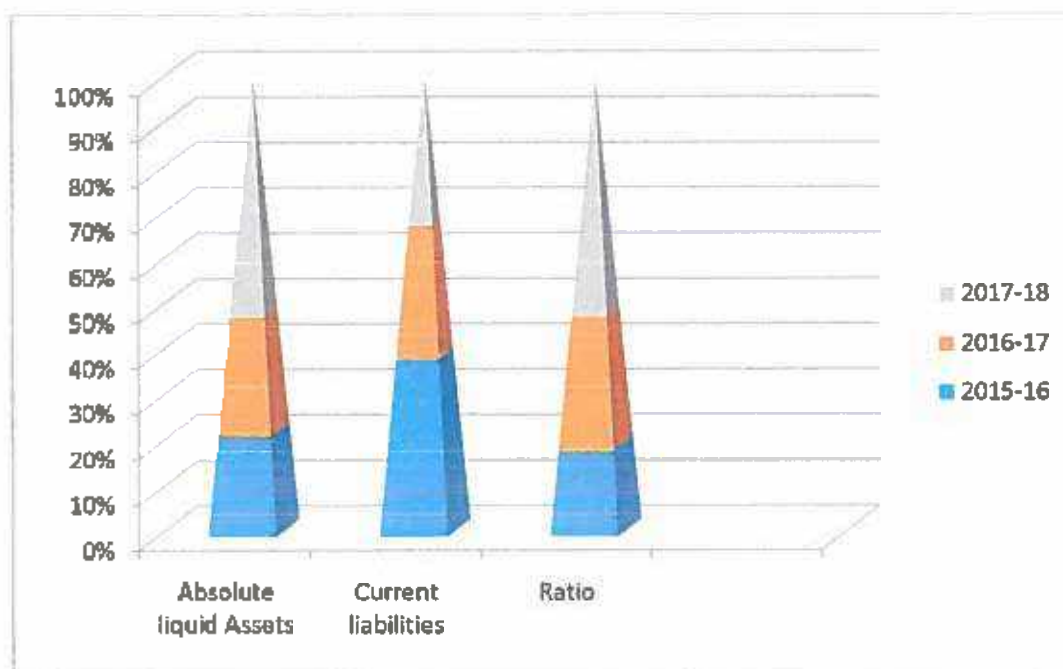
**INTERPRETATION:**

The ratio indicates that the company the ability to its short-term obligation with having cash in hand and at bank of its own. The analysis reveals that in 2015 4.87 is there in 2016 5.12 is there but in 2017 it increased to 7.19 next year it also decreased to 5.26 but in 2019 it also decreased to 2.48 .

4.6 Shows Absolute liquid ratio

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20
Absolute liquid Assets	4035218	4846878	9854945	8545645	7557847
Current liabilities	3234082	2457435	2766963	2355864	2116140
Ratio	1.24	1.97	3.56	3.62	3.57

Source: Annual report



INTERPRETATION

The above table shows that the Absolute liquid ratio is increase from 2015-2016 to 2018-19. It was increased from 1.24 to 1.97 in 2016-17 and increased in 3.56 to 3.62 in 2018-2019 and last year decreased to 3.57 in 2019-2020.

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

1. The net working capital is positive
2. The quick ratio is also below standard but considering the profitability this drawback is overcome
3. The net working capital largely increased in the year 2019
The cash at bank high for the year 2017 so working capital will be increased.
4. Current ratio of the company increasing. It shows that management is investing more in current assets.
5. Liquid ratio of the company was increasing. Bank as sufficient liquid assets to cover

Current liabilities.

5.2 SUGGESTIONS

1. To maintain the short-term solvency the bank may be recommended to use debt portion to finance the working capital, So that it can maintain proper balance between long term and short-term funds.
2. It may also be recommended to use minimum portion of contingencies to face the unexpected out flows.
3. It also suggested maintaining the consistent working capital requiring every year
4. It also suggested to use some more strategies for sufficient working capital management in the future years.
5. The bank improving its performance of working capital management.

6. The extent of current liabilities needs to be reduced and the extent of current assets should increased so as increase the amount of networking capital.

5.3 CONCLUSION

To the Practical knowledge about the service of Canara bank Ankali. Which are good and improving compared with other years, so the impact of current assets and working capital management is effective. I conclude that the bank is rendering the most possible service based on economic development to need share holder members has captured the maximum market area. It is in progress.

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**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
Study on Impact of Covid-19 on Financial performance of KSRTC
with special reference to Chikodi Depot
Submitted to**

RANI CHANNAMMA UNIVERSITY, BELAGAVI



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

Miss. Deepa M Kotiwale

M.COM-IV SEMESTER

REGISTER NO: MC191605

UNDER THE GUIDANCE OF

SHRI. S. M. BHOSAGE

**K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201
PG DEPARTMENT OF COMMERCE AND MANAGEMENT**



CERTIFICATE

This is to certify that Miss. Deepa M Kotiwale has satisfactorily completed the Project Report Entitled "Study On Impact Of Covid-19 On financial Performance of KSRTC With Special reference to Chikodi Depot" for the partial fulfilment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year 2020-2021.

SHRI. S. M. BHOSAGE

PROJECT GUIDE

SHRI. LAXMIKANTHA NAYAKA T O

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DECLARATION

I declare that the project report entitled "A Study on Impact of Covid-19 On Financial performance of KSRTC With Special Reference To Chikodi Depot" is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. S. M. Bhosage, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 17-09-2021

Place: Chikodi


Miss. Deepa M Kotiwale
Register No: MC191605

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

I sincerely express my deep sense of gratitude and appreciation to Internal Guide **Shri. S. M. Bhosage**, for his careful and valuable guidance, never ending patience and constant encouragement throughout the project.

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I express my deep intelligence of appreciation to **Shri. Udaysingh Rajput**, Principal of our college for his valuable suggestions and encouragement.

I express my sincere gratitude to **Shangappa, Bajannavar** Manager of Chikodi Depot for providing me an opportunity to do a project in their organization.

At the outset, I would like to thank all the teaching faculty of PG Department of Commerce and Management for their valuable suggestions during project work.

My thanks are also to library staff for their cooperation during the course of project work and I am also thankful to Printers for their skillful printing of this project.

Finally I owe my deep sense of gratitude to my parents, friends and relatives for their constant encouragement and support.

Miss. Deepa M Kotiwale

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CHAPTER-1
INTRODUCTION AND RESEARCH DESIGN

- 1.1 Background of the study
 - 1.2 Statement of the problem
 - 1.3 Need of the study
 - 1.4 Objectives of the study
 - 1.5 Scope of the study
 - 1.6 Research methodology of the study
 - 1.7 Limitations of the study
-

CHAPTER-1

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

Road transport or road transportation is a type of transport by using roads. Transport on roads can be roughly grouped into the transportation of goods and transportation of people. In many countries licensing requirements and safety regulations ensure a separation of the two industries. Movement along roads may be by bike or automobile, truck, or by animal such as horse or oxen. Standard networks of roads were adopted by Romans, Persians, Aztec, and other early empires, and may be regarded as a feature of empires. Cargo may be transported by trucking companies, while passengers may be transported via mass transit. Commonly defined features of modern roads include defined lanes and signage. Various classes of road exist, from two-lane local roads with at-grade intersections to controlled-access highways with all cross traffic grade-separated.

The nature of road transportation of goods depends on, apart from the degree of development of the local infrastructure, on the distance the goods are transported by road, the weight and volume of an individual shipment, and the type of goods transported. For short distances and light, small shipments a van or pickup truck may be used. For large shipments even if less than a full truckload a truck is more appropriate. (Also see Trucking and Hauling below). In some countries cargo is transported by road in horse-drawn carriages, donkey carts or other non-motorized mode. Delivery services are sometimes considered a separate category from cargo transport. In many places fast food is transported on roads by various types of vehicles. For inner city delivery of small packages and documents bike couriers are quite common.

People are transported on roads. Special modes of individual transport by road such as cycle rickshaws may also be locally available. There are also specialist modes of road transport for particular situations, such as ambulances.

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Human sensitivity has revealed an urge for mobility leading to a measure of society's progress. The history of this mobility or transport is the history of civilization. Moving persons or things from the originating point to the destination, that is, 'Transporters' perform one of the most important activities, at every stage of advanced civilization. Where roads are considered as veins and arteries of a nation, passengers and goods transported are likened to blood in circulation, enlivening economic activity of the country and Passenger Road Transport Service (PRTS) is an essential concomitant of economic development and it must keep pace with the growing requirement. The existing State Road Transport Undertakings would have to be strengthened both by the Central and State Governments, unlike in the past, with the specific objective to promote an effective, efficient, well-coordinated, comfortable and reliable, environmental, and customer friendly bus system in the urban areas in general and in metropolitan cities in particular. In the process of nationalization, one important human aspect was lost sight of. While large fleet owners, though displaced, have diversified business to stay afloat, operators with one or two stage carriage permits, when displaced, had to face traumatic future, losing their capital and earning abruptly and joining the teeming millions of unemployed. With the growing requirement of Passenger Road Transport Services and the inability of the State owned Corporation to fulfill the need adequately, satisfactorily and economically, even after the lapse of 25 years²⁷ after its inception, a reassessment as to whether the policy of nationalization will meet the needs of the people was necessitated.

1.2 STATEMENT OF THE PROBLEM

In a developing economy like India, road passenger transport deserves a high priority, as it forms the backbone of the passenger mobility system and is the principal carrier across the country. Even after five and a half decades of nationalization, passenger mobility suffers both in quantum and quality because the supply of road passenger transport facilities is not keeping pace with the rising demand.

In a transport system, there are three actors the major actor being the user of the system the passenger whose points of view must be considered. (The other two players are the

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Transport Operators and the Government). The user of the system is the first to realize the 26systems quality. It is, therefore, apparent that productivity and efficiency of the operator KSRTC, Bangalore Mangalore division in this case must be synchronized with the satisfaction of the user. Hence, the present study focuses on the operational performance of the Karnataka State Roadways Transport Corporation with reference to Bangalore Mangalore division. The study analyses customers' expectations and perceptions, satisfaction level and suggests strategies to improve the services offered by KSRTC.

There has been a rapid growth in the number of total vehicles registered in the last five decades, which are about 68 million registered vehicles as on 31 March 2020. Along with the rise in vehicle population, the increased mobility demand is reflected in rising utilization rates of private vehicles. The problem has been accentuated by the gradual reduction in the share of public transport in India reflected in the declining share of buses in the total vehicle fleet in the country, where the proportion of buses registered has declined from over 5.03 per cent in 1951 to just over 0.75 per cent in 20019-20.

Since 27 April, the Government of India has imposed a lockdown to contain the spread of the coronavirus outbreak - with public transport services limited to essential services only. Our new Statistics Brief Impact of COVID-19 on Indian Bus Operators provides an overview on the specific challenges faced by the sector and practical solutions needed to address them. The ban on operations during lockdown has caused significant financial losses to operators and it is predicted that when services resume, demand may not return to pre-lockdown levels due to the norms of physical distancing and passengers' perceived risk of travelling. Responses were received from 27 bus operators covering government, private, urban and inter-city operations. The operators covered include 14 State Transport Undertakings (STUs), two Government-supported urban bus contracting authorities and 11 private operators. 70% of these operators are involved in urban buses, 56% in intercity bus service provision and 52% in rural buses. The survey captured the key challenges which operators are likely to face during the resumption of services. These challenges were segregated into four key areas: operational and service delivery, financial

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special Reference to Chikodi Depot

management, crew management related and fleet management relate. Bus operators have a two prongs loss due to lockdown. They continue to pay fixed costs of staff.

1.2 NEED OF THE STUDY

In today's Covid -19 pandemic situation, the new statistic brief Impact of Covid-19 on KSRTC bus operators provides an overview of the specific challenges faced by the transport sector and practice solutions needed to address them. It has been observed that the ban on transport operation during lockdown has caused significant financial losses to operators and it is predicted that where services resume may not be return to per-lockdown level to the norms of physical distancing . Once the KSRTC understand the strategy such as physical distancing and frequently cleaning buses the taking care of passengers.

1.4 OBJECTIVES OF THE STUDY

1. To study the impact of Covid-19 on financial performance of Chikodi depot.
2. To study the impact of the nationwide lockdown on the transport sector
3. To determine the solutions that can be taken, to bring the transportation sector to its normal state post Covid-19

1.5 SCOPE OF THE STUDY

The Area of the study is KSRTC with special reference to Chikodi depot.

1.6 RESEARCH METHODOLOGY

This is the analytical study based on the data collected from Chikodi depo and Internet. The information necessary for this study is collected by tapping primary and secondary sources.

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special Reference to Chikodi Depot

1. Primary data

The project report of this kind will really need primary information which will be collected through the interaction with manager and staff.

2. Secondary data

The study is exploratory in nature . Makes use of mainly secondary data. The data has been collected from

- KSRTC website
- Any other related websites.

1.7 LIMITATIONS OF THE STUDY

- The study is limited to only chikodi Depo .
- The time limit was very short to prepare the project report.
- The information/data provided may be biased.

CHAPTER-2

CONCEPTUAL FRAMEWORK

- 2.1 Importance of Road transport for Indian economy.**
- 2.2 Loss of Revenue**
- 2.3 Key Challenges**

- 2.4 Some of the Guidelines**
- 2.5 KSRTC presentative measures During Covid-19**

CHAPTER-2

CONCEPTUAL FRAMEWORK

The transportation system, especially public transportation, is considered the vein of the economy. Because all the other economic sectors are directly or indirectly associated with it. It provides mobility and access to essential and recreational opportunities. India boasts of having the largest and most diverse transport sector in the world.

Public transportation services are one of the worst affected in economic sector by the coronavirus disease COVID-19. The sector has experienced a demand cum supply shock. There is an unprecedented reduction in travel and commercial activities. INDIA earns considerable revenue from the major transportation modes. coronavirus outbreak, imposed lockdown, and 'stay at home approach' has directly affected the supply and demand in the economy.

Transportation sector has been one of the primary victims of COVID-19. From rickshaw pullers to airlines, all have been affected economically by the pandemic. India's overall energy demand fell by 11% in April 2021. Due to lockdown in many countries, the demand for passenger transport has been adversely hit. The freight segment has had a mixed short-term effect in terms of transportation demand. There is a surge in demand for truck drivers in transportation of essential goods. For instance, there is 40% to 60% increase of product being moved into grocery stores and warehouses in US since COVID spread started. However, the supply chain disruption and slowdown caused by COVID is expected to pull down freight demand in the medium-term. Urban freight segments in India have also had a mixed short-term effect in terms of transportation demand. Since February, the online food orders have dropped by 20% whereas online grocery orders are overflowing. It is to yet to be seen whether these acquired habits of online grocery shopping will sustain after the pandemic passes.

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special Reference to Chikodi Depot

Even though the fall in passenger transport demand is pushed by social distancing restrictions, COVID-19 may have a long-term effect on people's travel behavior.

Various Indian states announced local and state level partial and incremental transport shutdown as early as April 27, 2021. India observed a complete lockdown including all trains, buses, airlines, cars, auto rickshaw. A nationwide complete lockdown for three weeks (21 days) was then announced, beginning midnight April 27, 2021.

2.1 Importance of Road Transport for Indian Economy

As compared to the railways, the road transport system has definite advantages which can be summarized as follow:

- 1) Motor transports as well as road constructions have contributed significantly to the growth of the Gross National Product (GNP) all over the world, but India has remained significantly backward in this regard. Besides there is tremendous scope for creating employment through road construction and maintenance. Further, India needs increased road mileage, especially to open up the vast areas which cannot be reached except through roads.
- 2) Road transport is quicker, more convenient and more flexible. It is particularly good for short distance travel for movement of goods. Motor vehicles can easily collect passengers and goods from anywhere and take them to wherever they want to be dropped. Door-to-door collection and delivery are possible in the case of road transport. But in the case of railways, the lines are fixed and the railways do not have the flexibility of the roadways. Passengers and goods will have to be taken to the railway stations.
- 3) Roads are a necessary complement to railways. India is a country of village sand it is only roads which can connect villages and railways can connect towns. The railway stations will have to be properly served by a network of feeder roads. Only through these roads the railways can receive their passengers and goods. If railways are essential for the movement of goods and people for long distances, road transport is essential for such

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special Reference to Chikodi Depot

movement for short distances. Roads and railways are, therefore, not competitive but complementary.

4) Road transport is of particular advantage to the farmers. Good roads help the farmers to move their products, particularly the perishable products; like vegetables, quickly to the midis and towns. Only by developing the road system, the farmer can be assured of a steady market for his products. It is the road system which brings the villagers into contact with the towns and the new ideas and the new systems from the towns.

5) Roads are highly significant for the defense of the country. For the movement of troops, tanks, armored cars, and field guns etc. roads are essential. The great importance given to the construction of border roads to facilitate the movement of troops for the protection of the northern borders against the Chinese aggression is an example of the great importance affordable in the defense of the country..

The Karnataka State Road Transport Corporation, abbreviated and better known as, KSRTC is a state-owned public road transport company in the Indian state of Karnataka. Corporation has the largest fleet of Volvo buses among state owned transport companies in India. It is wholly owned by the Government of Karnataka.

2.2 LOSS OF REVENUE

Since April 27, the govt of India imposed a lockdown to contain the spread of COVID-19. Public transport services has been limited to essential services only. The ban on operations during Lockdown , combined with fixed costs such as salaries , has caused significant financial losses to operators . It is predicted that even when services resume, demand will not resume to Pre-lockdown levels particularly due to the physical distancing norms and passengers risk of travelling in public transport.

The road transportation corporation is also relieved to carry passengers in all seats now, unlike the curbs earlier when social distancing was enforced . However, the loss from ticketing revenue caused by disallowing travel by standing in buses will not be overcome with operation of more schedule.

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2.3 KEY CHALLENGES

FINANCIAL MANAGEMENT CHALLENGES

- Working capital to pay staff salaries.
- Financial needs for fuel expenses, maintenance expenses
- Capital for payment to operations.

OPERATIONAL AND SERVICE DELIVERY CHALLENGES

- Service planning for uncertain demand .
- Crowd management inside and outside buses
- Difficulty in flexible scheduling

CREW MANAGEMENT CHALLENGES

- Training of staff on physical distancing
- Lack of equipment to ensure safety of crew
- Unavailability of crew

FLEET MANAGEMENT CHALLENGES

- Availability of sanitization material
- Availability of fleet infrastructure post lockdown

Institute for Transportation and development policy (ITDP-India program) has also provided comprehensive and detailed guidelines for the public bus services in India. It guidelines include a list of recommendations to ensure the smooth and safety functioning of the bus services in the post lockdown period.

2.4 SOME OF THE HIGHLIGHTS OF THE GUIDELINES ARE

Conductors must ensure that the buses do not get overcrowded.

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special Reference to Chikodi Depot

-
- Contactless ticketing systems and digital payments must be developed and promoted by the authorities and bus operators.
 - Agencies must communicate relevant and updated passengers information to avoid overcrowding at the bus terminals. Terminals, bus stops, and buses must be sanitized regularly.
 - Provide access to free healthcare, and access to medical testing, treatment, training, equipment, and facilities for training for all workers.
 - Guarantee adequate and appropriate Person protective Equipment (PPE) and access to sanitary facilities for works.
 - Identify threats to and now pressures on & workers health rights and welfare and develop and implement workplace responses. Including Standardized social distancing protocols and protections against violence at work and gender based occupational segregation.
 - Thermal scanning is used for screening passengers, drivers and conductors.
 - Use the mask and handglove if you suspect that you are sick or are helping sick people.

2.5 KSRTC PRESENTATIVE MEASURES DURING COVID19

- Cleaning, Sanitizing and disinfecting of Buses.
- 3 buses are exclusively designed and dedicated for Covid-19 Swab collection at belagavi and Dharwad.
- Buses and depots sanitization process by spraying disinfectants.
- Covid-19 awareness Programme by health department to KSRTC Staff
- Thermal screening to staff and passengers.
- Handfree sanitization Equipment developed and established at depots.
- Crew wearing PPE kit for protection.
- Masks prepared at KSRTC workshops.
- Cleaning and sanitizing the vehicles after every trip or at layovers during the route.

CHAPTER-3

DEPOT PROFILE

- 3.1 About KSRTC
- 3.2 History Of KSRTC
- 3.3 Growth and Progress of KSRTC

- 3.4 Bifurcation of KSRTC
- 3.5 IT in KSRTC
- 3.6 KSRTC Chikodi depot
- 3.7 Vision and Mission
- 3.8 Organization Structure
- 3.9 Service profile
- 3.10 Current status
- 3.11 SWOT Analysis

CHAPTER-3

CHIKODI DEPOT PROFILE

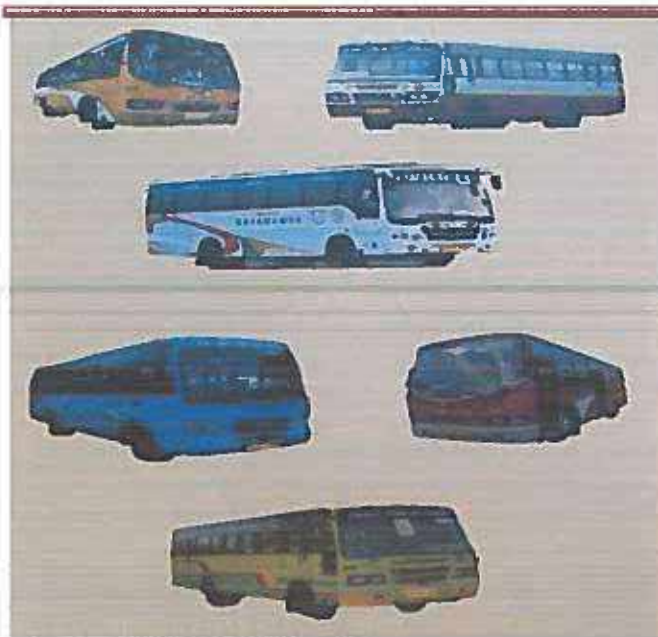
3.1 About KSRTC

In order to cater to the transport needs of the travelling public of the then state of Mysore, Mysore Government Road Transport Department (MGRTD) was inaugurated with 120 buses on 12th September 1948.

The State Transport, which was being administered as a Department of the Govt. of Mysore was subsequently converted into an independent Corporation under Section 3 of the Road Transport Corporation Act, 1950 on 1st of August 1961. The assets and liabilities of MGRTD except those of BTS unit as on 01-08-1961 were passed on to the new Corporation, which was named as MSRTC. The assets and liabilities of the residual MGRTD i.e. of BTS Unit were subsequently passed on to the Corporation on 1st of October 1961. Thus, a Corporation was ultimately established for the entire State of Mysore.

At the beginning, the passenger transport services were operated in 6 Divisions - 5 Divisions operating motor services and 1 Division operating city services of Bangalore. It had 37 Depots, 2 Regional Workshops and a Central Office at Bangalore. There were 15 permanent and 30 temporary bus stations with 35 ways idea shelters and 104 pick-up shelters. The total number of employees deployed was 9705 and the staff ratio per schedule was 9.43. The total number of routes operated was 1065 with 1029 schedules and route length of 32,134 miles, average daily scheduled mileage being 127571. The total numbers of inter-state routes operated by the Corporation on a reciprocal basis with the neighboring States were 40 i.e., 29 in Maharashtra, 1 in Goa, 7 in Andhra Pradesh, 2 in Tamilnadu and 1 in Kerala. The total number of vehicles held was 1518 with average vehicle utilization of 123.8 miles. The average number of passengers carried per day was 4.35 lakh. The rate of breakdown was 1.88 and that of accident was 1.19. Earning per Mile (EPM) realized was 161.6 Ps., and Cost per Mile (CPM) was 127.2 Ps., resulting in profit margin 34.4Ps/mile.

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3.2 HISTORY OF K.S.R.T.C

In 1948 Mysore state put forth 120 vehicles for public service in limited amount. In 12-09-1948 Mysore Government Road Transport Department (MGRTD) Has been created the Leadership of our first chief minister Sri K. Chengalaraya Reddy.

Next chief minister Sri Kengal Hanumanthaih made a revolution in the field of transportation. He abolished the privatization of vehicle in to nationalization. In 21-10-1952 he was the first person who nationalized 6 bus routes and also private BTC in to nationalization.

C.M. Nijalingappa has started bus routes to Bombay, Belgaum and Bijapur by introducing 1004 buses. By this way K.S.R.T.C came into existence.

KSRTC was set up under the Road Transport Corporation Act 1950 in the year 1961 with 1792 buses and is wholly owned by the Government of Karnataka and Government of India is also shareholder in this corporation.

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The main concern of the corporation is to provide efficient economical and well co-ordinate system of transport to the travelling public.

The corporation has been continuously striving to translate its vision of providing safe convenient reliable and economic transport serviced to public into reality. In this endeavor, KSRTC. Is guided by a strong sense of social commitment.

KSRTC has an extensive service network in Karnataka and also to important destinations in neighboring state operation 4334 schedules covering 16.33 lakh kms o carry 22.50 lakh passengers everyday 92% of the villages in monopoly area (6743 out of 7298) and 44% in non-monopoly area (5158 out of 11789) have been provided with transport facility by K.S.R.T.C.,

Type	- Public transport corporation
Industry	-Public transport bus service
Founded	- 1961
Head quarter	- Bangalore
Minister	- Ramalinga Reddy
Area served	- Karnataka
Subs diaries	- Bangalore Metro transport corporation
	North East Karnataka Road Transport Corporation
	North West Karnataka Road Transport Corporation

3.3 Growth and Progress of KSRTC:

Along with the rapid progress of Karnataka in all spheres of activity, KSRTC has emerged as the best organization in meeting the aspirations of Kannadigas and the

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special Reference to Chikodi Depot

people of neighboring states of Karnataka. As at the end of 31-03-1997, the Corporation operated its services in 19 Divisions - 17 Divisions operating motor services and 2 Division operating city services of Bangalore. It had 108 Depots, 2 Regional Workshops and a Central Office at Bangalore. There were 281 permanent and 11 temporary bus stations with 337 wayside shelters and 1009 pick-up shelters. The total number of employees deployed was 59033 and the staff ratio per schedule was 6.22. The total number of routes operated was 13273 with 9493 schedules, route length of 9.49 lakh Kms. and average daily scheduled kms of 31.10 lakh kms. The total number of inter-state routes operated by the Corporation on a reciprocal basis with the neighboring states were 602 i.e., 282 in Maharashtra, 37 in Goa, 223 in Andhra Pradesh, 33 in Tamilnadu and 27 in Kerala. The total number of vehicles held was 10476 with average vehicle utilization of 299.6Kms. The average number of passengers carried per day was 57.82 lakh. The rate of breakdown was 0.23 and the rate of accident was 0.22. EPKM realized was 807.3 Ps. and CPKM was 975.4 Ps., resulting in net loss margin of 168.1 Ps./Km. on traffic revenue.

3.4 Bifurcation of KSRTC:

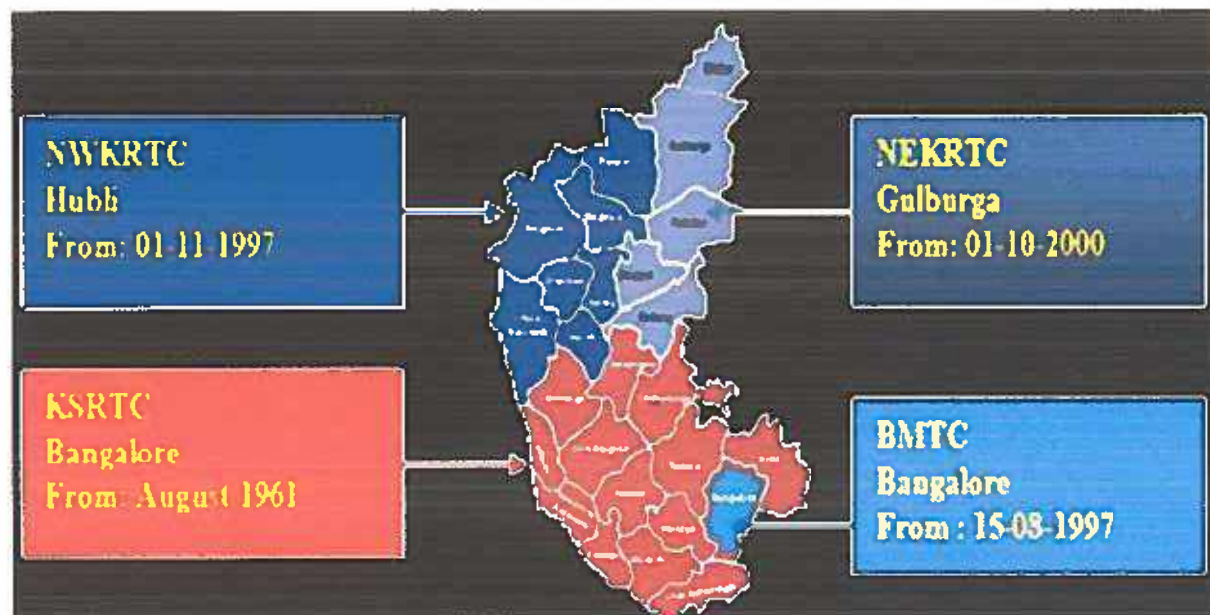
To increase operational efficiency, to provide quality transport service to the traveling public and to have an effective supervision on the operations of the Corporation, the Government of Karnataka ordered for bifurcation of KSRTC into 4 separate Corporation's vide its order No.HTD 127 TRA96 dated 22-02-1997.

Thus, KSRTC was a monolithic State Road Transport Undertaking till 1996-97. Thereafter, during the year 1997-98, the State Government divided KSRTC and carved out two new Corporations, viz., the Bangalore Metropolitan Transport Corporation (BMTCL) with its corporate office at Bangalore and the North West Karnataka Road Transport Corporation, with its corporate office at Hubli. The Bangalore Metropolitan Transport Corporation which came into being on 15-08-1997 caters exclusively to the city of Bangalore. And the North West Karnataka Road Transport Corporation which came into being with effect from 01-11-1997 caters to the north western districts of Karnataka. NWKRTC became financially independent w.e.f.01-04-1998 under RTC Act 1982. One more new Corporation called the North East Karnataka Road Transport

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Corporation was also established with effect from 15-08-2000 with its headquarters at Gulbarga to cater to the northeastern districts of Karnataka, which become financially independent w.e.f. 01-10-2000.

The organization structure of KSRTC includes Divisions and Depots. Depots are Operational Hubs and control the operations of Bus and Bus stands under them. For the purpose of tracking and managing KSRTC operations, KSRTC defines Sectors which are logical units. A sector may consist of multiple division jurisdiction areas and a Division may have multiple sectors. The proposed VTMS Project will initially cover 2,000 Buses of KSRTC, reaching out to geographical area across Karnataka and major places in neighboring states of Andhra Pradesh, Tamil Nadu, Kerala, Maharashtra, Goa, and Pondicherry. The longest routes operated are Bangalore-Shirdi, Bangalore-Mumbai, Bangalore-Vijayawada, and Bangalore-Trivandrum. Major places covered in the neighboring states are Chennai, Hyderabad, Madurai, Coimbatore, Neyveli, Tiruvannamalai, Tirukoilur, Trichur, , Pondicherry, Panjim, Shirdi, Mantralaya, Tirupathi, etc



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3.5 IT in KSRTC

IT initiatives

Karnataka State Road Transport Corporation (KSRTC) has been striving towards carving a niche in the public transport system with a vision to be the best transport service provider in the World, which is safe, reliable, courteous, economic and environment friendly to commuters. It is the first and leading State Transport Undertaking of the country to adopt Information and Communication Technology in its administrative and operational processes with the primary objective is to adopt IT in its day-to-day operations and bring every staff under the Information Technology net. KSRTC has been deploying the IT tools in the best possible measures to optimise its efficiency and reduce operational cost and at the same time, providing quality services to its customers and to its employees.

KSRTC is the first STU in India for having introduced

- RDBMS based Passenger Seat Reservation System in 1998
- Website in 1997
- Computerised Recruitment System since 1997
- e-tendering
- Oracle Financials
- Electronic Ticketing Machines on all of its routes
- Computerised Driving tracks for testing the candidates
- Web based Passenger Seat Reservation System since 2006

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ELECTRONIC BUS TICKETING MACHINES



KSRTC added a feather to its crown by being the first public transport organisation in India to deploy the Electronic Ticketing Machine on August 15, 2004 with several applications embedded in it. The ETM records and stores the information's such as the ticketing, fuelling, kilo metres of operation, checking etc. After completion of route operation, it also makes available information on important performance parameters like earning per km, kilometre per litre, percentage of cancelled kilo metres, bus-checking details etc, making the work of the crew much easier. Electronic Ticketing Machine has just made a beginning in India with KSRTC taking the lead, while other corporations convinced of its efficient operations and benefits there of, have started implementing ETM operations.

Benefits of ETM

- Reduction in costs relating to printing and stationary, making it eco-friendly.
- Instant analysis of traffic pattern
- Better decision making on account of generation of scientific information

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- Less or no fatigue to conductors
 - Better Labour relations.
 - Results have shown the increase in traffic, revenue from 4 to 5% on account of the introduction of ETM, as the system provides no scope for revenue leakage.
 - ETM system has been of great help in case of services operated with just Driver cum Conductor. Ticket through ETM is in Kannada.
 - Unlike the earlier pre-printed manual ticket system, All the information is available to passengers like - depot name, place name, for details etc.
 - Passengers can produce the ticket as a proof for documentary support.

Anywhere Anytime Advanced Reservation System (AWATAR)



KSRTC is the first State Transport Undertaking (STU) in India to have adopted the web-based passenger seat reservation system since April 29, 2006. KSRTC, today is providing anywhere to anywhere booking at all of its counters and franchisee counters situated across Karnataka and also in other prominent places wherever KSRTC operates. It is a win-win situation for both the Corporation in gaining higher revenue and private

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franchises in obtaining assured business besides providing better facilities for the travelling public.

Benefits of AWATAR

- With ease of ticketing not only for the crew but also easier availability for passengers, the number of passengers availing this facility is increasing gradually. The daily average booking has risen up to 15000 tickets corresponding to revenue of Rs 60 lakhs with 346 counters across Karnataka and other prominent places outside Karnataka. On peak days, the revenue realised has even crossed Rs 90 lakh with the total bookings of 25,000 tickets.
- Hence, KSRTC is also expanding the number of counters which ensures employment for the unemployed graduates, in turn providing them with a scope to become a KSRTC franchisee. With the introduction of AWATAR systems, passengers have an opportunity to plan their journey and book their tickets from any place to any place in advance. AWATAR has proved beneficial to KSRTC with a greater number of passengers opting for KSRTC than from other modes of transport which is evident from the increase in reservation revenue.
- Now, KSRTC has offered the passenger to book the seat through – direct e booking using a debit / credit card and also, recently KSRTC has introduced seat booking through mobile phones which is increased the convenience of the passengers.
- The KSRTC AWATAR application has more than two lakh registered users, including those residing out of the country. Around 6 lakh site visits and 94 lakh page views are recorded per month. On an average 16.08 pages are viewed per visit.
- Value added services like hotel booking, integration with Bangalore One counters, courier and parcel booking etc. are also offered.

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3.6 KSRTC CHIKODI DEPOT



BACKGROUND OF THE CHIKODI DEPOT

The North Western Karnataka Road Transport Corporation Chikodi was established on November, 1st 1961 (on the occasion of Karnataka Rajyotsav), under provision of the Road Transport Corporation Act 1950, upon bifurcation from Karnataka State Road Transport Corporation to provide adequate, efficient, economic and properly coordinated transport services to the commuters of North Western part of Karnataka.

3.7 VISION AND MISSION

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VISION

KSRTC proposes to improve its capability in managing the entire public transport system in Mysore more efficiently, safely and be more Commuter and environmentally friendly. This can be achieved by introducing real time communication interlinked with buses, passengers (in/vehicle, bus stations and bus stands) and KSRTC Management by implementing intelligent transport system.

The core objectives include:

- a) Providing effective, safe, environmental and commuter friendly solutions to the travel public who use KSRTC buses.
- b) Track and monitor the movement of buses on real time basis to enable communication of the arrival timings of buses at the bus stops through state-of-the-art GPS/GPRS technologies.
- c) Inform commuters about the bus routes and arrival timings of buses at the bus stops/terminals through LED Display systems.
- d) Effective management through a Decision Support system by collecting, collating and storing information on real time basis about the transport system and its effectiveness using communication technology.
- e) Instant access to information related to bus schedules, ETA, ETD, annunciating bus stop names, fare details, etc. at bus stops, bus terminals and within the buses and through SMS, Internet and IVRS.
- f) Issuing of Passes Daily, Weekly, monthly for commuters and examine purse facilities through Smart Cards for introduction later
- g) Facilitate timely management of Incidents/Accidents
- h) Establish meaningful instant two way interaction facility between Driver – and central control station.

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- i) Obtaining online real time information on bus operations and management.
 - j) Effective monitoring of break downs and the related information.
 - k) Effective diversion of traffic in case of emergency.
 - l) Monitoring accidents and the related aspects.
-

Mission

- a) To fulfill customer expectation in providing environment friendly and value-based services.
- b) To have continuous improvement through use of innovative technology and lay stress on creativity.
- c) To lay stress on employee welfare and human resource development and to inculcate quality consciousness in at all levels.
- d) To motivate the spirit of responsibility and openness of communication among our employees to words environment problem.
- e) To meet the safety, environment and pollution control standards.

Facilities

1. Departure Bus Bays
2. Drinking Water Facility
3. Urinals
4. Toilets
5. Sitting Arrangements
6. Refreshment Room
7. Book Stall
8. Cycle/Scooter Stand

Telephone Booth Local/STD/ISD

1. Advance Reservation Counter
2. Enquiry Counter

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3. Hobli Bus Stations.

Facilities

1. Drinking Water Facility
2. Urinals/Toilets
3. Sitting Arrangements
4. Refreshment Room
5. Book Stall
6. Telephone Booth: Local/STD/I SD

Measures for Comfort Traveling

1. K.S.R.T.C. adopts new technologies as and when they are introduced for the travelling comfort of the passengers.
2. K.S.R.T.C. assures swept, washed and cleaned buses for operations with destination boards.

Environment Friendly Programs

K.S.R.T.C. is FIRST STATE TRANSPORT UNDERTAKING in the country to have set up an environment cell at its central offices. This cell monitors the environmental impact due to air/water/noise pollution, and waste generation.

There shall be no buses belonging to K.S.R.T.C. which would emit smoke beyond permissible limits.

The general public who detect K.S.R.T.C. buses emitting black smoke will be suitable rewarded.

Accident Relief Fund

- Accident cover of Rs. 1,00,000 to the dependents in case of death of a passenger in an accident while travelling in a K.S.R.T.C. bus.

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-
- Re. 1/- in collected extra on tickets of Rs.40 and more towards this.
 - Accident cover for all passengers.
 - KSRTC has introduced a unique Passenger Relief Scheme entitling the dependents of the passengers for an immediate compensation of Rs. 1 lakh in case of accidental death of any KSRTC passenger. Such Relief will be in addition to the regular compensation awarded by the motor accidents Claims Tribunal. A corpus fund is generated by charging Re. 1 Per passenger, buying tickets worth more than Rs. 20/-.
 - Efforts made to settle the claims within 10 days. All that the dependents have to do is fill a simple form available at K.S.R.T.C. office and submit it along with Post Mortem Report, FIR Report and Affidavit signed by a Notary stating the relationship with the deceased to the nearest Divisional Office/Depot.

Service Guarantee Scheme

- Service Guarantee Coupons given to passengers travelling in Volvo, A/c, Rajahansa, services of departure/arrival is delayed by more than 30 minutes.
- Coupon value Rs. 10/- for fare up to Rs. 125/- Rs. 15/- for fare Rs. 126/- and Rs.20/- for fare above Rs.200/-
- Coupons given only if reason for delay are attribute to K.S.R.T.C. like vehicle repair, break-down, wait to crew, etc.,
- Delayed departure coupons will be issued only to those travelling from the originating bus stand and tickets booked in advance.
- In case of delays due to accidents, road blocks, bundhs, agitation's and route deviation due to those reasons, passengers are not eligible for coupons.

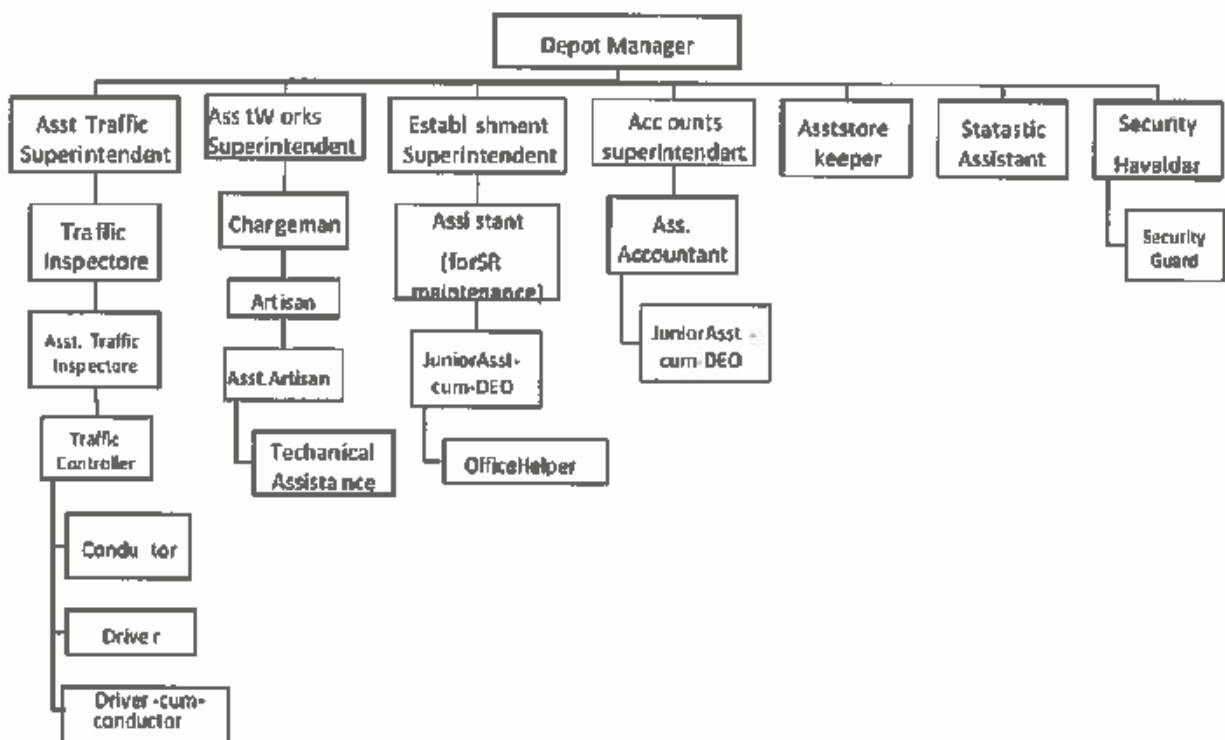
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- Coupons should be used within three months from the date of issue. Discount can be availed at the time of next journey.

3.8 Organizational Structure

The way in which an organization formally groups the work activities is called organizational structure. The effectiveness of information system depends on a systematic designing of organization structure, policies and procedures. Many studies proved that there is a close relationship between organizational structure and information system. Hence studying the organization structure and its functions is the pre-requisite to understand the management.

NWKSRTC Chikodi Depot Organizational Chart



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Structural and functional Analysis

Five or Six depots are generally grouped into a division. A divisional Manager heads each division and monitors the activities of the depot management with a special reference to operational functions.

Depot Manager:

The depot manager is responsible for the daily administration and is empowered to direct the depot employees. Planning, Organizing, Controlling and Leading are the major functions of the Manager department with the aim of the achieving organizational goal in an effective manner.

Under Manager all superintendent of different departments are responsible for combining and coordinating human, financial, physical and information resource to achieve the organizational goals.

1)Asst Traffic Superintendent

Route effectiveness analysis, identification of best profitable route to operate the fleet, identification of high revenue routes and identification of non-revenue routes.

(a)Traffic inspectors:

Look after the duty allocation for conductor and drivers, the maintain the attendance and allocate leave they operate the schedules as per target given to the depot. The traffic inspectors are responsible to achieve the earning target given to the depot.

(b)Drivers:

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Are informed for timely arrival as per the schedule timings, accidents free driving and for diesel consumption. The target for diesel consumption is measure in terms of Kilometer per Liter (KMPL) of diesel. Drivers held accountable for vehicle damage and accidents.

(c) Conductors:

They are assessed by the amount of revenue generated. The target revenue is fixed for every schedule based on pilot survey and experiments. The earnings per kilometers (EPKM) are the measurement of conductor performance. In case of lower revenue realization depending on the explanations, the conductors are penalized or warned by the traffic inspector. There are written instructions regarding duty allocation which instruct the crew and vehicles to adhere to schedule.

There is a 1% incentive for the crew in the revenue they generate. Both drivers and conductors are monitored for their behavior with the passengers. Any written or oral complaints pertaining to misbehavior is a serious concern.

(2) Assistant Works Superintendent (AWS):

Works under Depot Manger and are responsible for the mechanical maintenance of the buses. The AWS plan docking schedules which depict bus should take for repair at how many kilometers and is accountable for breakdown due to mechanical failure. They monitor the vehicle damages and KMPL achieved by the drivers. An important measurement of AWS is the number of off- road vehicles at the depot awaiting repair.

a) Mechanics

Are responsible for repairing the buses and are called Helper A and Helper B. Their duty is to make the necessary arrangements to repair the buses and they have to make preventive maintenance called docking. They are measured by the break down due to mechanical failure and are also based on bus docking.

(3) Accounts Supervisor:

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Look after the ticket issuing and cash collection duties. Accounts section at the depot has junior assistants who issues tickets and collects cash. They have the responsibility of cash collection from commercial establishments and also from pass issue. They are also responsible for proper distribution of salary and incentives to the employees.

(4) Administration Supervisor:

Look after the absenteeism of the employees and deals with leave and status and day to day administration and routine correspondence.

(5) Store Keepers:

The receipt and consumption records of the store items. He has the responsibility of ordering important items like diesel. He has to maintain the items at the optimum level so that the busses do not go off the road because of shortage of items.

(6) Statistical Assistant:

They look after the data maintenance and he is the one who prepares data of the depot in prescribed format.

3.9 SERVICES PROFILE

Different types of services are providing by Chikodi Depot, those are

1. North-West

Karnataka

Transport



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2. Double Door West-North City Transport



3. Non-Ac Bus



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-
- Hygiene Maintain
 - Advertisement
 - Pamphlets
 - Reduce the tickets charge

Implementation

- Clean all the buses every day
- Sanitizer
- Check passenger's Temperature
- Note the passenger's data base
- Voice message (in Bus)
- Send one message to passenger
- Two seats for one person and 3 seats for 2 people
- Reduce fair charge
- Avoid Children and Senior citizen
- Start canteen (only for parcel)

Post implementation

Benefits

- Increases in passenger's for Bus
- Control of Pandemic covid-19

3.11 SWOT Analysis

Strengths

- Brand
- Goodwill
- Land and Building

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-
- Public security
 - Government Support
 - Human resources

Weaknesses

-
- Schedule cancellation
 - Absence of an effective MIS
 - Lack of professional Management
 - Undue influence of trade
 - Underutilization of modern technology
 - Unsystematic schedule pattern
 - High Labour turnover

Opportunity

- Government Support
- Passenger satisfaction
- Road network

Threats

- 35% of bus transportation owned by private sector
- Pledge of key assets to raise to raise working capital Pension
- Lack of Planning
- Non profitable schedule
- Price variation of petroleum products

CHAPTER-4

DATA ANALYSIS AND INTERPRETATION

Table 4.1 Shows cost distribution for January -2021

Table 4.2 Shows cost distribution for February -2021

Table 4.3 Shows Before covid-19 Revenue and Expenditure

Table 4.4 Shows After Covid-19 Revenue and Expenditure

Table 4.5 Shows Comparision of Revenue and Expenditure

Table 4.6 Shows Before covid-19 Losses

Tables 4.7 Shows After covid-19 Losses

Table 4.8 Shows the comparision of After and Before covid-19 losses

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special
Reference to Chikodi Depot

CHAPTER-4

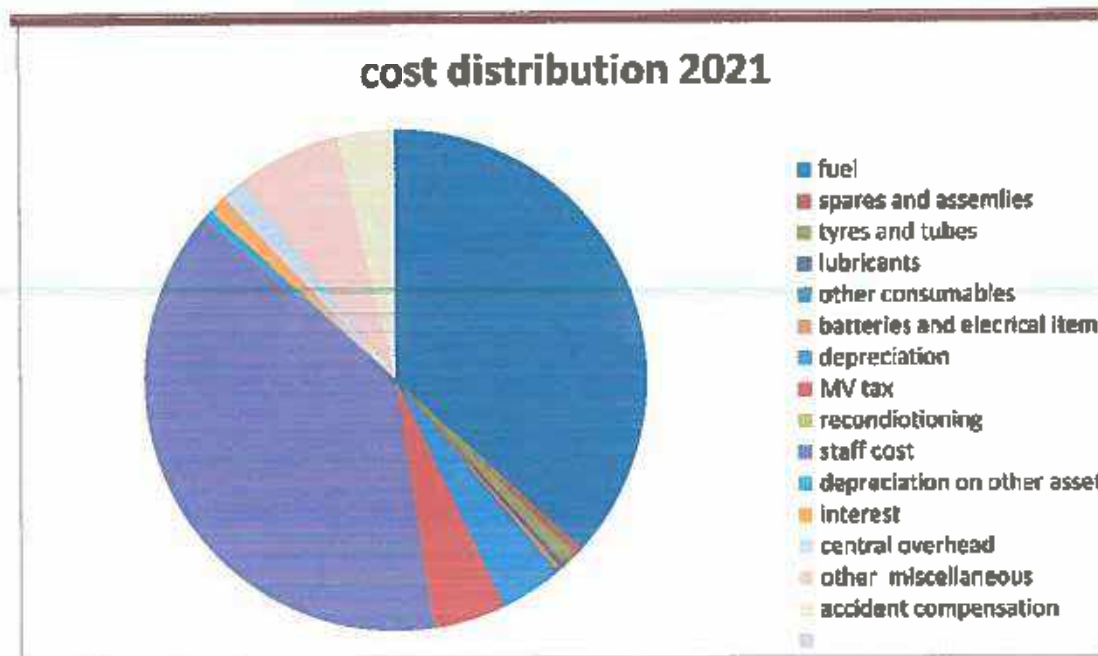
DATA ANALYSIS AND INTERPRETATION

Table 4.1 Shows Cost Distribution for January-2021

Factor	Cost(rupees in lakhs)	%
Fuel	157.92	36.83
Spares and assemblies	2.24	0.52
Tyres and tubes	4.30	1.00
Lubricants	1.16	0.27
Other consumables	0.13	0.03
Batteries and electrical items	1.18	0.28
Depreciation	17.37	4.05
MV tax	19.17	4.59
Reconditioning	0.35	0.08
Staff cost	165.38	38.57
Depreciation on other assets	2.82	0.66
Interest	5.11	1.19
Central overhead	6.77	1.58
Other miscellaneous	28.44	6.63
Accident compensation	15.92	3.71
	428.79	100.00

Source: Annual Report

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special Reference to Chikodi Depot



Interpretation: The above table shows the cost of distribution of January month. KSRTC Chikodi Depot made expense on different Factors like fuel, spares and assemblies, Tyres and tubes etc. staff and fuel incurred maximum cost.

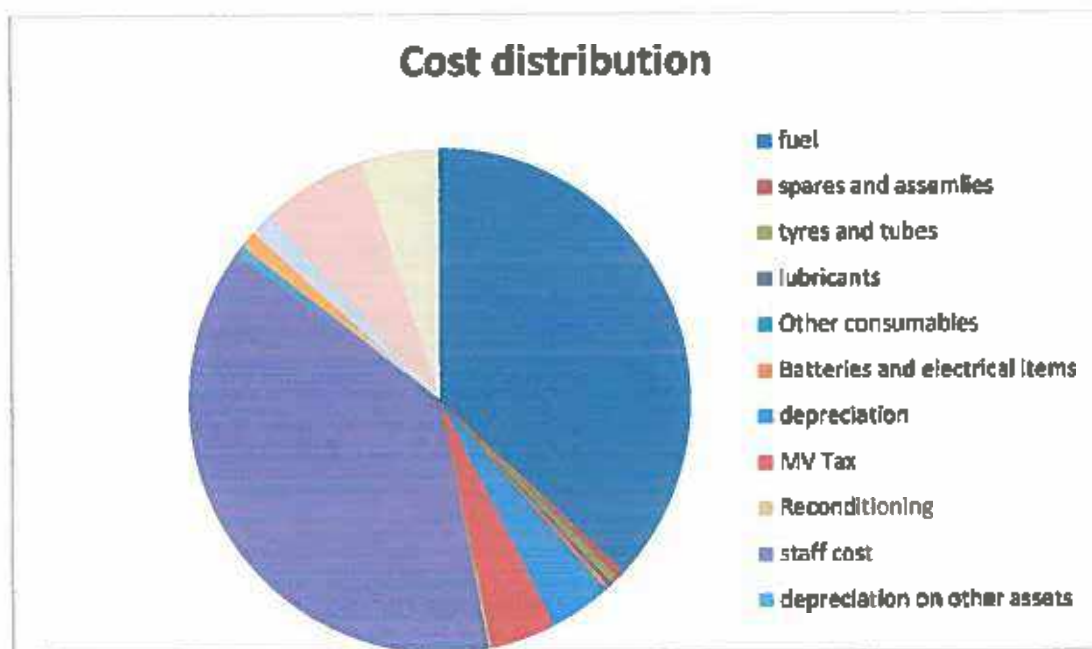
Table 4.2 Shows Cost Distribution for February-2021

Factor	Cost (Rs in Lakhs)	%
Fuel	152.02	36.93
Spares and assemblies	2.34	0.57
Tyres and tubes	2.31	0.56
lubricants	0.85	0.21
Other consumables	0.16	0.04
Batteries and electrical items	1.13	0.27
depreciation	16.36	3.97
MV tax	17.24	4.19
reconditioning	0.86	0.21

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special Reference to Chikodi Depot

Staff cost	156.62	38.05
Depreciation on other assets	2.52	0.61
Interest	4.56	1.11
Central overhead	6.06	1.47
Other miscellaneous	28.00	6.80
Accident compensation	20.62	5.01
	411.65	100.0

Source: Annual Report



Interpretation: The above table shows the percentage of cost of distribution of February Month. In this month KSRTC has been spend huge Amount on the Above Factors. It was observed from table that Highest Expenses 38.05% on staff cost and Lowest cost on other consumables.

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FINANCIAL HIGHLIGHTS

Table 4.3 Shows Before Covid-19 and After covid-19 Revenue and Expenditure

Month	Revenue(rupees in Lakhs)	Expenditure
Nov-20	268.39	358.67
Dec-20	274.72	374.15
Jan-21	362.11	443.21
Feb-21	317.82	424.90
Mar-21	272.92	444.80

Source: Annual Report



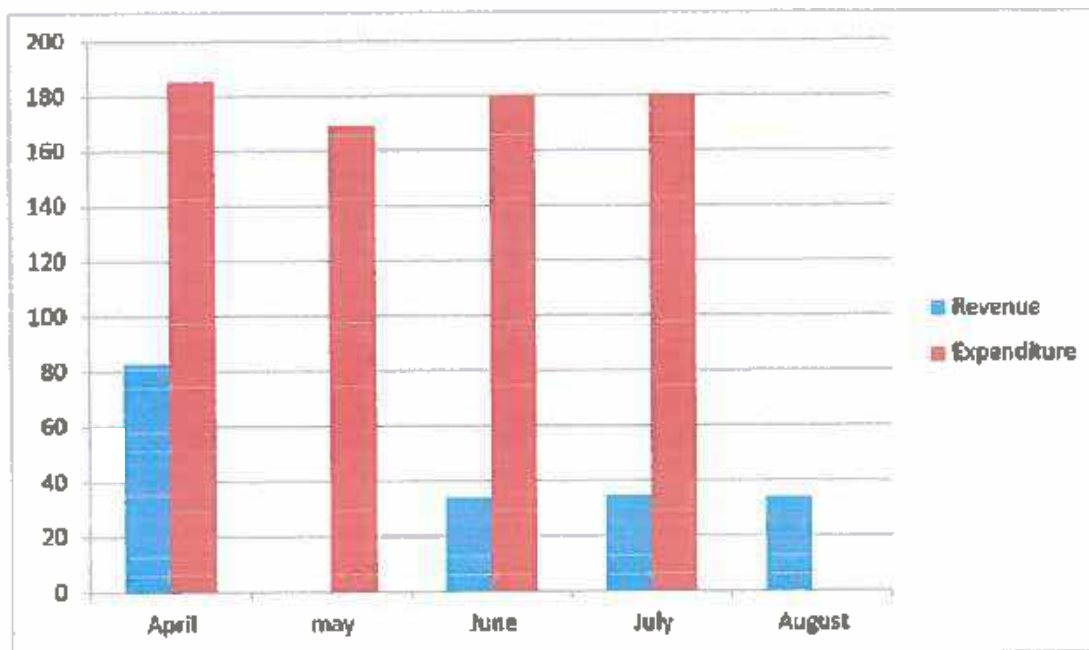
Interpretation: The above Table shows that expenditure was increased. In last 5 months decline in the Total Revenue in this period. Monthly report says that this is not increased in revenue of KSRTC Chikodi depot. It affects Bad in financial performance of Chikodi depot.

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Table 4.4 Shows After Covid-19 Revenue and Expenditure (Rupees In lakhs)

Sr.No	Month	Revenue	Expenditure
1	April	82.70	185.47
2	May		169.06
3	June	33.90	179.57
4	July	34.72	180.07
5	August	33.83	183.74

Source: Annual Report



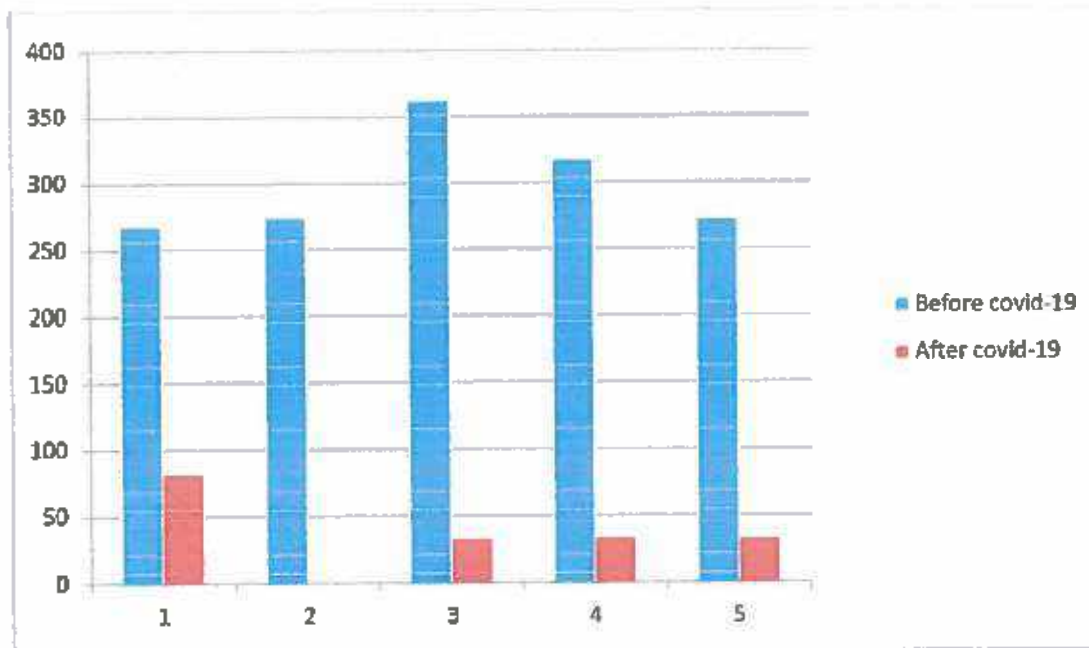
Interpretation: The Table shows the expenditure is more than Revenue. On Bus revenue collection contemplates clearly during lockdown period there will be less Revenue collected from the month November 2020 to the month March 2021. It takes lot of time to recover the losses.

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special Reference to Chikodi Depot

Table 4.5 Shows Comparison of Before Covid-19 Revenue and After Covid-19 Revenue (Rupees in lakhs)

Sl.No	Before Covid-19	Revenue	After Covid-19	Revenue
1	Nov	268.39	April	82.70
2	Dec	274.72	May	
3	Jan	362.11	June	33.90
4	Feb	317.82	July	34.72
5	Mar	272.92	August	33.83

Source; Annual Report



Interpretation: This table Represents the Comparison of Revenue Before covid-19 and After Covid-19. The Graph shows the Huge difference between Revenues. Covid situation There is no income in KSRTC chikodi. Before covid 268.39 revenue earned but after covid 82.70 it is very large difference same as the all month. Expenses are made very high but no any profit.

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special Reference to Chikodi Depot

Table 4.6 Shows Profit Before Covid-19 (Rupees In Lakhs)

Month	Loss
November	-90.28
December	-99.43
January	-81.10
February	-107.08
March	-171.96

Source: Annual Report



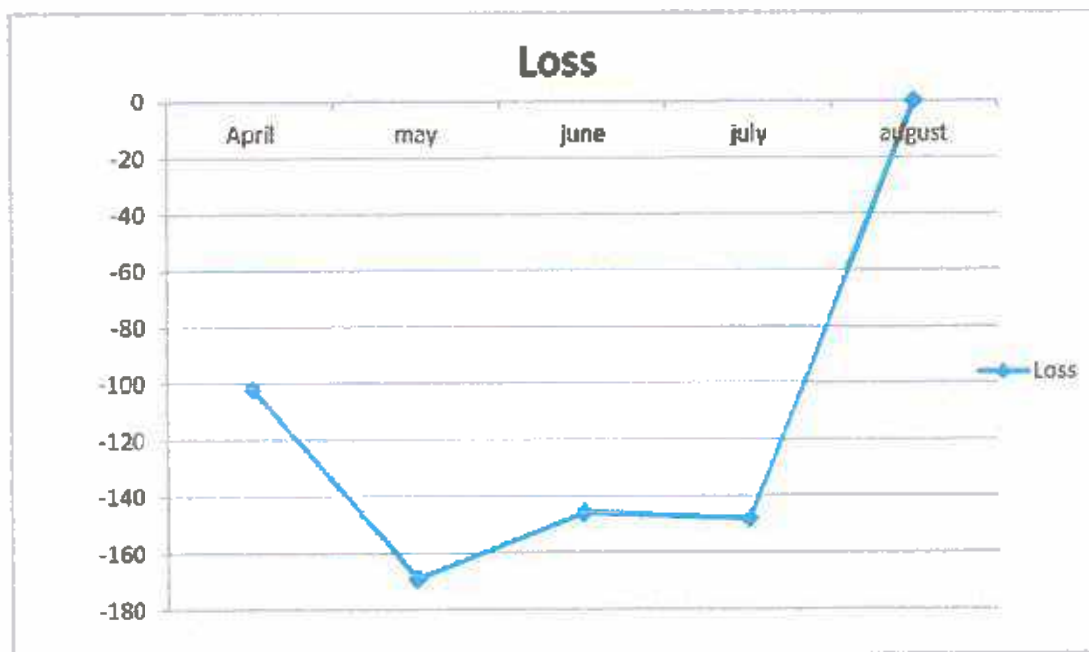
Interpretation: The above Table indicates that The Loss before Covid-19. Loss is increased from the month of November -90.28 loss incurred and the month March -171.96 loss increased respectively. Financial performance of chikodi depot declining continuously. Huge amount spent by chikodi Depot on different factors but it is not recovered.

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Table 4.7 Shows After Covid-19 Losses(Rupees in Lakhs)

S.No	Month	Loss
1	April	-102.77
2	May	-169.06
3	June	-145.67
4	July	-145.35
5	August	-149.91

Source: Annual Report



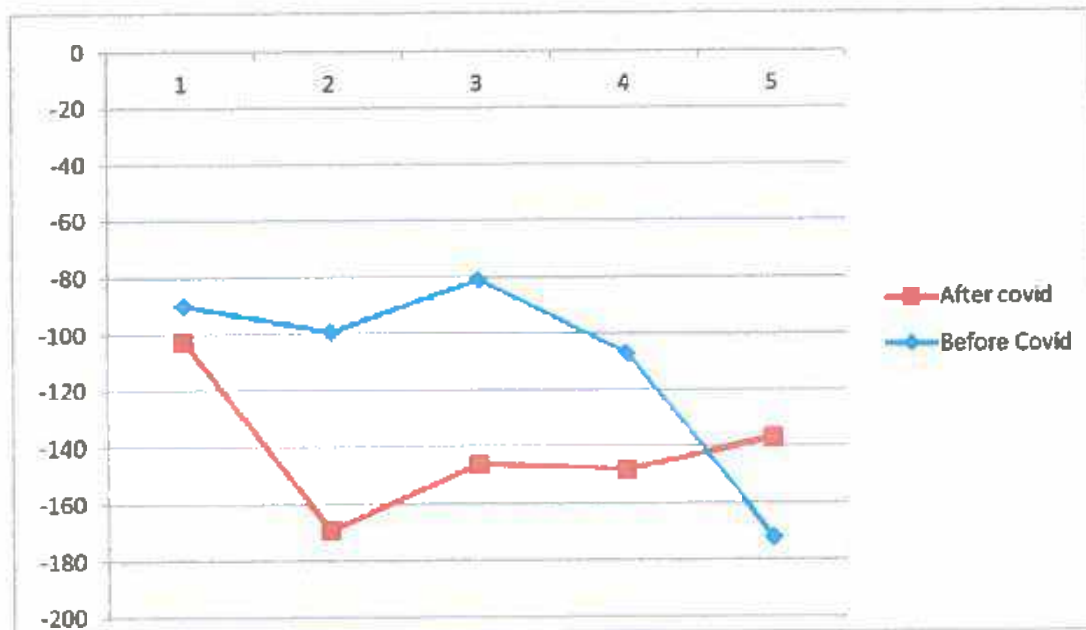
Interpretation: From the table and Graph we can understand that KSRTC management of Chikodi Depot suffering from Huge Loss During a covid-19 period. This shows that all Employees are not satisfied because of losses they are not getting regular salary. With this monthly decrease in the performance of Chikodi depot.

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Table 4.8 Shows Comparison of Losses After covid-19 and Before Covid-19 (rupees in Lakhs)

S.No	Before Covid-19	Loss	After Covid-19	Loss
1	Nov	-90.28	April	-102.77
2	Dec	-99.43	May	-169.06
3	Jan	-81.10	June	-145.67
4	Feb	-107.08	July	-145.35
5	March	-171.96	August	-149.91

Source: Annual report



Interpretation: The Above table showing Comparison of loss Before covid-19 and after covid-19. There is Huge Loss is faced by chikodi Depot in the lockdown period from 27 April to June 20. There is no any benefit to Chikodi depot, But compared to before covid-19 loss percentage is more after covid-19.

CHAPTER-5

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 Findings

5.2 Suggestions

5.3 Conclusion

CHAPTER-5

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

1. In 2020-21 Chikodi Depot incurred huge Loss, there will be no any profit. Because of Lockdown many sectors got affected Transportation sector is one of them, in transportation sector like KSRTC there is huge decrease in Revenue and profit were recorded.
2. Covid and the ensuring lockdown has been a clear shift to a private mode of transport over public modes.
3. There is a consistent increase in the percentage of app-based shared cab users as the distance traveller increases. This is specific to pre covid-19 scenario.
4. Public transport shall face huge setbacks in terms of the number of users as many of them would opt for private modes of travel post lockdown.
5. The study shows that in this covid-19 pandemic Chikodi depot position is not good.
6. On the study basis ,There is no any profit in Last 10 months because of Lockdown, they are not getting any Income from public But they made expenses in cleaning of buses , Fuel, staff salary, sanitizing vehicles etc.
7. Chikodi depot made more investment on Fuel and Staff salary In January and February month.
8. In this pandemic People are Not ready to Travel through KSRTC Chikodi buses, because of Covid-19. They are started to use their own vehicles.

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special
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5.2 SUGGESTIONS

• Suggestions to Management

With a view to improve efficiency in the operation of KSRTC and to restore financial health of KSRTC, a number of measures have been suggested. Most of the measures are aimed at increasing revenue, controlling cost, and improving service quality. These initiatives are likely to have a positive impact on the performance of KSRTC chikodi depot.

- Management should achieve high operational efficiency by effectively utilizing available resources, timely replacement of vehicles, and reduced breakdown by proper maintenance, appropriate route scheduling, punctuality and safety in operations.
- No element of cost is in such a position that its amount cannot further be reduced. Therefore, KSRTC should concentrate on cost management for improving their financial viability.
- Management should develop approach of customer orientation in terms of quality of service (punctuality and safety), appropriate pricing, and an enhanced service.
- Management should develop strong monitoring mechanism for surprise checking.
- The management should take strong actions for reducing operating expenses especially staff productivity, fleet utilization.
- The higher percentage of disagreement among the respondents is the arrival of scheduled buses on time the employees should develop professional attitude, approach and action rather than traditional or biased one.

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special Reference to Chikodi Depot

• **General Suggestions**

The following suggestion have been formulated on the basis of my study..

1.The government should provide adequate financial assistance during this covid pandemic.

2.Chikodi Depot should run only necessary number of buses.

3.The advertisement and pamphlets should be distributing to give awareness of safety of the buses.

2.It is recommended for clean the buses every day and, again and again sanitizing the buses for every trip.

3.In buses use sanitizer, Digital infrared thermometer to fight against corona.

4.Make strict rule for don't splitting and throwing anything in the bus.

5.Start canteen and shops services for passengers.

6.Speed control devices fitted to all K.S.R.T.C. buses;

7.Maintain regularity and Punctuality.

8.Suggest Government to release More funds to improvement of KSRTC.

9.Proper and periodic training to drivers, including training on simulator for safe driving.

10.Frequent breath analysis of drives and other employees through Breath Analysers supplied to Deposit and line checking staff

11.Proper maintenance officials travel in buses to check on upkeep of buses and its timely operation.

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special Reference to Chikodi Depot

12. Improve Infrastructure for Non-motorized transport and Electric vehicles, the government should prioritize investment in these two areas when compared to other sectors in transportation.

13. Increased investment in building NMT(Non Motorized Transport) infrastructure which will aid the emergence of new opportunities within the sector in future.

14. Technological advancements on ticketing and Scheduling can improve safety and help build public confidence in the Sector.

• **Suggestions to Passengers**

- Educating the commuters about maintenance of cleanliness in the bus while commuting.
- Following queue system during boarding and deboarding the buses to avoid untoward experiences.
- Educating about maintenance of modesty while travelling in the buses, i.e. not disturbing the fellow commuters, for example utilization of ear phones etc, ...
- Providing appropriate amount required for the ticket, which can avoid unwanted clash between the commuters and the staff.

5.3 CONCLUSION

The study concludes that as per our findings we come to a conclusion buses offer affordable access to livelihoods and services such as health care for the vast number of low- and middle-income families. At the sometime, buses also offer the most efficient means of mobility with regard to space, energy and emission in highly dense cities. However, Covid-19 induced lockdown and additional measures such as physical

A Study on Impact of Covid-19 on Financial Performance of KSRTC With Special Reference to Chikodi Depot

distancing and frequent cleaning has put on additional financial burden on the bus operators which risks the long-term sustainability of the sector. It is crucial to ensure the continuity of bus services as the lockdown comes to an end and the economic activities gradually resume.

The study focused on the overall financial performance of the Corporation and also various other factors like the administrative set up. Governmental support for public bus operators will help sustain operations in short-term.

From the study it can be concluded with the remarks that KSRTC is making all the effort to improve the performance and the overall performance was found to be good. While comparing between the rural and urban commuters, a significant difference was noted in terms of maintenance, infrastructure, environmental sustainability and satisfaction with the crew, where the rural commuters have given more satisfactory ratings. Maximum benefits are enjoyed by the students in district for educational purpose.

KSRTC buses are more reliable as compared to private buses and the behavior of the crew was also found to be cordial with the passengers. There has been an up liftment of the bus stands with increased number of seating arrangements for passengers, provision for drinking water and well-maintained restrooms provide more comfort while waiting for buses. KSRTC also provides additional buses during festival seasons and during peak hours of the day.

Management is striving towards providing better customer service through a safe, reliable, proper maintenance and infrastructure, regular and punctual with apt social responsibility and operational logistics.

Along with the rapid progress of Karnataka in all spheres of activities, KSRTC has emerged as the best organization, not only in meeting aspirations of Kannadigas but also the people of neighboring states.

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**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201
PG DEPARTMENT OF COMMERCE AND MANAGEMENT**



**A PROJECT REPORT ENTITLED
"A STUDY ON ORGANIZATION STRUCTURE"
AT
GATAPRABHA FERTILIZER PVT. LTD. NANDHIKORALI**

**Submitted to
RANI CHANNAMMA UNIVERSITY, BELAGAVI**



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

**SUBMITTED BY
Miss Deepa V Hegade
M.COM-IV SEMESTER
REGISTER NO: MC191606**

**UNDER THE GUIDANCE OF
SHRI. V. S. KHOT**

**K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,**

CHIKODI-591201

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that Miss Deepa V Hegade has satisfactorily completed the Project Report Entitled "A Study on Organization Structure" At Gataprabha Fertilizer Pvt. Ltd. Nandhikorali for the partial fulfilment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year 2020-2021.

SHRI. V. S. KHOT

PROJECT GUIDE

SHRI LAKSHMI ANTHA NAYAKA TO
CO-ORDINATOR

**P.G. Department of Commerce
B.K. College Chikodi**

SHRI. UDAYSINGH RAJPUT

PRINCIPAL

**KLES'S Basavaprabhu Kore
Arts, Science and Commerce College
CHIKODI - 591 201**



Subject to Raibag Jurisdiction



CERTIFICATE GHATPRABHA

Fertilizers pvt. ltd.

Date: 23/09/2021.

TO WHOMSOEVER CONCERN.

This is to certify that **Miss DEEPA V HEGADE.**

M.Com Student of **B K College CHIKKODI** has

successfully completed her project report from

23/06/2021 to 20/08/2021 on "**Organisation**

Structure"

During her tenure of study, she has taken interest to

study the Organization Structure and other related

matter.

This Certificate is issued on specific request of her.

Bhuvan A M

FOR GHATPRABHA FERTILIZERS PVT LTD
AUTHORISED SIGNATURE



GHATPRABHA Fertilizers Pvt Ltd.

249/1 A/p: NANDIKURALI Tq: Raibag Dist: Belagavi-591317 Tel: 08331-293208

GST No: 29AACCG4692B1ZM CIN: U-24-129-MH-2005-PTC-156501 Dt: 3-10-2005

DECLARATION

I declare that the project report entitled "A Study on Organization Structure" At Gataprabha Fertilizer Pvt. Ltd. Nandhikorali is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. V. S. Khot, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 25 /09 /2021

Place: Chikodi

D.V. Hegade

Miss Deepa V Hegade

Register No: MC191606

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

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At the outset, I would like to thank all the teaching faculty of PG Department of Commerce and Management for their valuable suggestions during project work.

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Miss Deepa V Hegade

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CHAPTER-I**INTRODUCTION AND RESEARCH METHODOLOGY****INTRODUCTION****REVIEW OF LITERATURE****STATEMENT OF THE PROBLEM****NEED FOR THE STUDY****OBJECTIVES OF THE STUDY****SCOPE OF THE STUDY****RESEARCH METHODOLOGY****LIMITATIONS OF THE STUDY****CHAPTER SCHEME**

CHAPTER-I

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION:

India is basically an agricultural country majority of population lives in the rural area. That directly or indirectly depends on the agricultural sector. In terms of firms output India Ranks second across the world. Agriculture and it's related sectors have significant contribution towards GDP. In the year 2009 agricultural sector contributed for 16.6% of the GDP(CIA Fact Book,2014). This sector also provides huge employment opportunities to the Indian population. Almost half (50%)of the total population in India is engaged in agriculture (India Brand Equity Foundation,2013)of late India has been able to increase the agricultural output. This has been Possible due to improved means of cultivation use of sophisticated technology, use of fertilizer etc....India's growing population in geometric means have broadened the challenge for food production, Still continues to grow in.

Since last 30 years, the fertilizer industry's in India has grown tremendously the government is keen to see that fertilizers reaches the farmers in the distant and hilly areas. This is reason why It has been decide to do control the prices, distribution and movement of phosphate and potassium Fertilizer. Some steps are implemented to assure an increase in the supply of non-chemical fertilizers at a reasonable prices in India. These are 53 fertilizers quality control laboratories. Since bio-fertilization are regarded as an effective cheap one renewable supplement chemical, the government is implementing a national and use of bio-fertilization.

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1.2 REVIEW OF LITERATURE:

ARMSTRONG AND STEPHENS(2008): Organization are open system which transform inputs into outcomes are continually dependent on and influenced by their environment. Basis issues faced by organisations are those relating to structure relationship and interdependence. The social, technical model by the researcher at the Tavistock institute led to the development of basis open system theory which states that in any organisational system technical at task aspects are interrelated with the human or social aspects focusing on the relationship between the organisation of work group's and the management structure of the organisation (Lewin 1951).

CHILD(1997): Child defines organisation structure as comprising all the tangible and regularly occurring features which help to shape the behaviour of its members according to Armstrong and Stephenson organisational structure required to achieve organisational goals moreover they define and clarify the manner by which the activity required are grouped together into units functions and departments the lines of responsibility power and authority emanating from the top of the organisation.

ALMUSTAFA (1990): Author in their book systematic, comprehensively, analysed the problem of mills workers and welfare Measures introduced especially in the urea industry. Industry and labour are mutually complementary, therefore, the Prospective growth of one depends upon the progress and prospects of the other and an attempt has been made to make suggestions to attain the goal of providing the factory workers of urea industry with the opportunity to lead a better and happier life.

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OLIVIER (1957): In the book concentration on technology matter at the end of the book has been abandoned as it was leading to difficulties.

PIETER HONING(1963): This book has laid the accept an principal of the technology the physical operating conditions and the Chemical reaction involved in urea industry.

DR O P TALWAR(1968): This book deals measures to remedy unknown losses in urea factory raise clarification efficiency minimize losses by various pan boiling schemes, as well as lower the financial molasses purity by high-speed electrical centrifugation.

S.V PARTHASWATH (1972): This book was discussing on following topics soil climate urea land preparation of peats disease etc...

PROF.RAM VICHAR SINHA(1968): This book analysis historical background of India urea industry economics of year problems of Product marketing and performance utilisation of by products labour and relation policies on sugar scale and financial aspects of The industry and forecast about the industry.

1.3 STATEMENT OF THE PROBLEM:

Employee satisfaction survey is very helpful to the organisation to increases productivity and ensure the smooth running of the Organisation ensuring the satisfaction of employees is essential to maintaining a healthy organisation. When employees are happy companies, they will want to produce and perform better and are loyal to their employers. As such , employers use satisfaction surveys to gauge their employees perception of their jobs,

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survey's allow employers to know what's going on so that they can minimize unpredictable behaviour. Employee satisfaction survey keep so that they can appropriately respond to workplace.

1.4 NEED FOR THE STUDY:

Fertilizer have played an essential role in agricultural production, providing vital nutrients for crops, increasing demands over the years. As an agrarian country, India is home to numerous small and marginal farmers and is often plagued by low productivity and low quality. Increasing agricultural production in India. Increasing the fertility level of the soil and increase the quantity of the products.

1.5 OBJECTIVES OF THE STUDY:

- ✓ To gain the first hand practical knowledge of overall function of the organisation interns of various functional departments.
- ✓ To identify the impact of organisational culture climate and commitment on organisational effectiveness.
- ✓ To understand how the key business process are carried out in an organisation.
- ✓ To ensure the right soil cultivation at the right time.
- ✓ To keep and build good soil structure and fertility.
- ✓ Income genetic diversity.
- ✓ Promote more usage of nature pesticides.
- ✓ Control pests, diseases and weeds.

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1.6 SCOPE OF THE STUDY:

The present study has attempt to describe the urea factory of NANDHIKORALI it focus only on the causes and consequences of abandonment and/or closure an evaluation of the special purpose urea fund as a scheme of re-plantation and rejuvenation to functions of the urea factory interims of working capital position operation position labour welfare and after the abandonment and for closure and the socio -economic position of the labour household in terms of the educational States.

1.7 RESEARCH METHODOLOGY:

DATA COLLECTION

This report was prepared with the help of both primary and secondary data.

SOURCE OF DATA

1. Primary Data:

Data originally collected for an investigation data are also called as first hand investigation.

Method of collecting data – directly personal interview.

2. Secondary data:

Data which are not originally collected but obtained from published or unpublished sources it is second hand Information collected by the researcher .

This data can be collected through company method.

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1.8 LIMITATIONS OF THE STUDY:

- ✓ The survey is limited to employee of GFPL NANDHIKORALI.
- ✓ The sample size is limited to only 70 employees.
- ✓ They get washed away by water easily and cause pollution.
- ✓ They reduce soils fertility.
- ✓ They change the Nature of soil, making it either too acidic or too alkaline.
- ✓ They are expensive.

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1.9 CHAPTER SCHEME:

Chapter 1 : Introduction and research methodology

This chapter deals with Introduction, review of literature, need for the study, objectives of the study, scope of the study, research methodology and limitations of the study.

Chapter 2 : conceptual framework

This chapter deals with definition of organisational structure, objectives of the organisational structure, organisation process, different types of organisation structure, production department, market department and finance HRD department Mickey's framework.

Chapter 3 : Industry profile

This chapter deals with the industry profile, product profile of the industry, vision and mission of industry, quality analysis Of industry achievement and awards of industry, comporation of industry and SWOT analysis of industry.

Chapter 4 : Data analysis and interpretation

This chapter deals with data analysis and interpretation.

Chapter 5 : findings, suggestions and conclusions

This chapter deals with findings, suggestions and conclusions

CHAPTER – 2**CONCEPTUAL FRAMEWORK****2.1 DEFINITION OF ORGANIZATIONAL STRUCTURE****2.2 OBJECTIVE OF THE INDUSTRY****2.3 PRODUCTION PROCESS****2.4 TYPES OF ORGANIZATIONAL STRUCTURE****2.5 PRODUCTION DEPARTMENT****2.6 MARKETING DEPARTMENT****2.7 FINANCE DEPARTMENT****2.8 HRD DEPARTMENT****2.9 MCKINSEY 7s MODEL**

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CHAPTER-2

CONCEPTUAL FRAMEWORK

2.1. DEFINITION OF ORGANISATIONAL STRUCTURE:

Organisational structure is the framework of reporting relationships in an organisation these relationships can usually be diagrams in the form of an organisation chart. The organisation chart does not necessarily reflect actual reporting or decision- making relationship in an organisation, so we can make a distinction between formal and the informal structure, this note will deal primarily with the formal structure.

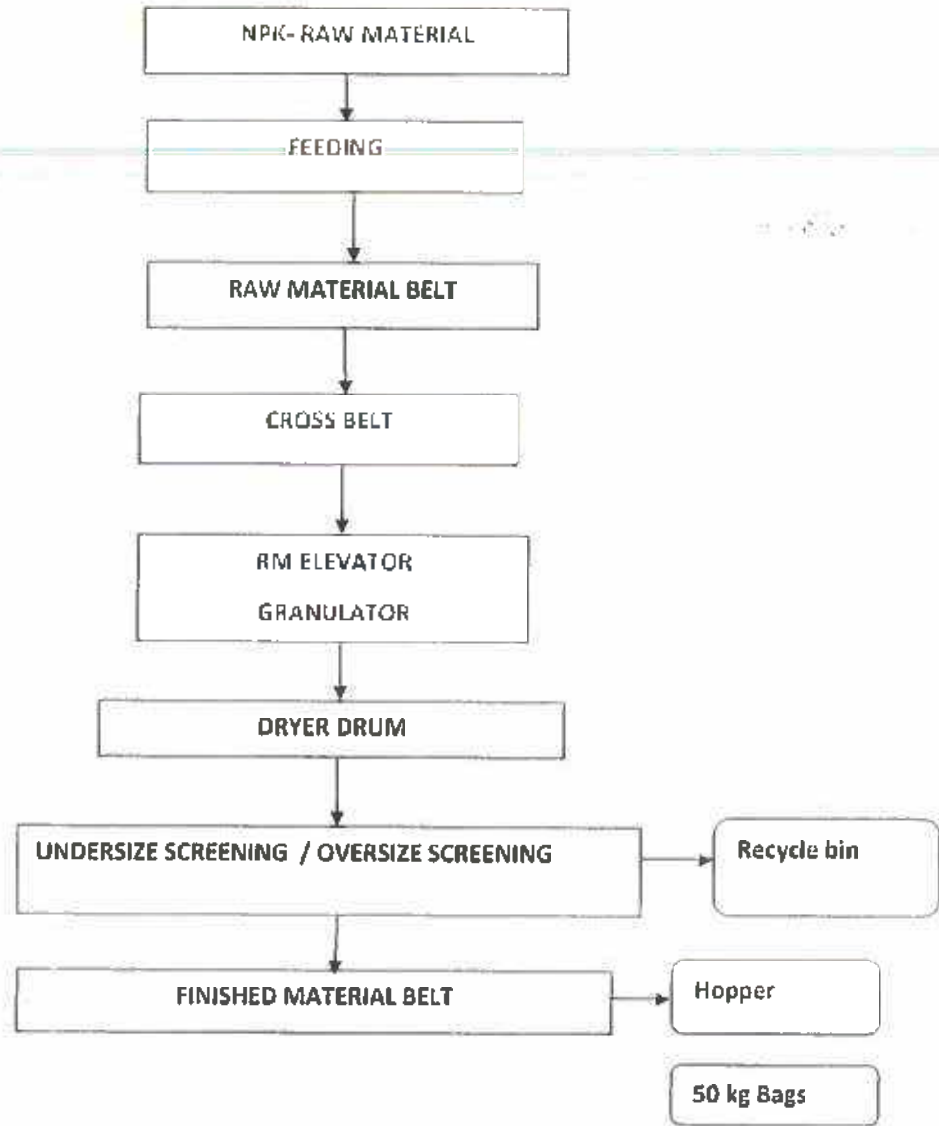
Organisational structure is only one of many aspects of organisational design. Other aspects would include the nature of an organisation leadership, the various systems operating in it, and organisational culture . Organisational structure reflects way in which work in an organisation is divided. Historically, organisations have developed number of ways to do this, the formation age is creating even more forms as we move ahead

2.2. OBJECTIVES OF THE INDUSTRY:

- To maintain a sustained growth in productivity.
- To enhance gainful employment.
- To achieve optimal utilisation of human resources.
- To attain international competitiveness and
- To transform India in to a major partner and player.

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2.3. PRODUCTION PROCESS



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2.4 TYPES OF ORGANIZATIONAL STRUCTURE:

Organizations are set up in specific ways to accomplish different goals, and the structure of an organization can help or hinder its progress towards accomplishing these goals. Organization large and small can achieve higher sales and other profit by properly matching their needs with the structure they use to operate. There are three main types of organizational structure functional structure, division structure and a blend of the two, called matrix structure.

1. LINE ORGANIZATIONAL STRUCTURE

Line organizational has only direct vertical relationship between different levels in the firm. There are only line departments directly involved in accomplishing the primary goal of the organization.

Features:

Has only direct vertical relationship between levels in the firm.

Advantages:

- Tends to simplify and clarify authority, responsibility and accountability relationship.
- Promotes past decision making
- Simple to understand.
- A line structure tends to simplify and clarify responsibility, authority and accountability relationships.the levels of responsibility and authority are likely to be precise and understandable
- A line structure promotes past decision making and flexibility
- Because line organizations are usually small, managements and employees have greater closeness.

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Disadvantages:

- Neglects specialist's in planning
- Overloads key persons
- As the firm grows larger, line organization becomes more in effective
- Improved speed flexibility may not upset the lack off specialized knowledge.
- Managers may have to become overly dependent on the few key people who can perform numbers jobs.

2. STAFF OR FUNCTIONAL AUTHORITY ORGANIZATIONAL STRUCTURE:

- I. **Line position:** A position in the direct chain of command that is responsible for the achievement of an organization's goals.
- II. **Staff position:** A position intended to provide expertise, advise and support for the line position

The line officers or managers have the direct authority to be expressed but them to achieve the organizational goals. The staff officers or managers have staff authority over the line. This is also known as functional authority.

An organization where staff's departments have authority over line personal in narrow Ares of specialization is known as functional authority organizational. Exhibited 10.4 illustrate a staff or functional authority organizational structure.

The principal of unity of command is violated when functional authority exists i.e. a worker are a group of workers may have to receive instructions or orders from the line supervisor as well as the staff specialist which may result in confusion and conflicting orders from multiple sources may live increased in effectiveness. Some staff specialist may exert advice authority.

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3. LINE & STAFF ORGANIZATIONAL STRUCTURE:

Most large organizations belongs to this type of organizational structure this organizations have direct vertical relationships between different levels and also specialized respocibal for advising and assisting line managers. Such organizations have both line and staff the departments. Staff departments provide line people with advice and assistance in specialized areas.

Three types of specialized staff can be identified.

- ❖ Advising
- ❖ Service and
- ❖ Control

Some staff performs only one of this functions but some may perform to are all the three functions. The primary advantage is the use of expertise of staff specializes by the line personnel. The span of control of line managers can be increased because they are relived of many functions which the staff people perform to assist the line.

SOME ADVANTAGES ARE:

- I. Even through a line and staff structure allows higher flexibility and specilization it may create conflict between line and staff personal.
- II. Line managers may not like staff personnel telling them what to do and how to do it even though they recongise the specilizeest knowledge and expertize.
- III. Sum stop people have difficulty adjusting to the roal, especially when line managers are reluctant to accept advise
- IV. Staff may people may resent there lack of authority and this msay cause line and staff conflict

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4 DIVISIONAL ORGANIZATIONAL STRUCTURE:

In this type of structure, the organization can have different bases on which departments are formed they are:

- a) Function
- b) Product,
- c) Geographic territory
- d) Project and
- e) Combination approach

5 PROJECT ORGANIZATIONAL STRUCTURE:

The line and staff and functional authority organizational structure facilitate establishment and distribution and authority for vertical coordination and control rather than horizontal relationships. In sum projects work process may flow horizontally, diagonally, upwards and downwards, the direction of work flow depends on the distribution of talents and abilities in the organization and the need to apply them to the problem that exists. The cope off which such situations project organization and matrix organizations have emerged.

IMPORTANCE OF ORGANIZATIONAL STRUCTURE:

- a) Work is defined by a specific goal and target date for completion.
- b) Work is unique and unfamiliar to the organization
- c) Work is complex having independent activities and specialized skills are necessary for accomplishment
- d) Work is critical in terms of possible gains or losses
- e) Work is not repetitive in nature

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CHARACTERISTICS OF PROJECT ORGANIZATION:

1. Personnel are assigned to a project from the existing permanent organization and are under the direction and control to the project manager.
2. The project manager specifies what effort is needed and when work will be performed whereas the concerned department manager executes the work using his resources
3. The project manager gets needed support from production, quality control, engineering etc

6. MATRIX ORGANIZATIONA STRUCTURE:

It is permant organization designed to achive specific results by using teams of sprific results from different functional areas in the organization.the matrix organization is illustrated in exhibit 10.8.

Features:

Super imposes a horizontal set ofl devisions and reporting relationships on to a hierarchical functional structure.

Advantages:

1. Decentralized deciston making.
2. Strong product/project co-ordination
3. Improved environmental monitarring.
4. Past response to change
5. Flexible use of resource
6. Efficien use of support system.

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

Disadvantages:

1. High administration cost.
2. Potential confusion over authority and responsibility.
3. High prospects of conflict
4. Overemphasis on group decision making
5. Excessive focus on internal relations

7 HYBRID ORGANIZATION STRUCTURE:

Advantages:

1. Alignment of corporate and divisional goals.
2. Functional expertise and efficiency
3. Adaptability and flexibility in decisions.

Disadvantages:

1. Conflicts between corporate department and units
2. Excessive administration overhead slow response to exceptional situations.

2.5 PRODUCTION DEPARTMENT:

Production implies the creation of goods & services to satisfy wants. It involves the transformation of inputs in to outputs. According to Carl heel "Production is the process of transforming raw materials or purchase components in to the finished product for sale" production is the fabrication of always physical object through the use of men, Material & Machine. In modern connection production is the very wide term including which creates utility or add value to inputs.

A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI

2.6 MARKETING DEPARTMENT:

Marketing is an integrated system of action that creates value in goods through is created of form place time & ownership Utilities. Marketing is thus art & getting keeping & growing customers through creating delivering & communicating superior customer value. Mr. K. B. AWATGERI is a marketing manager. In the Marketing Department we are going to study the whole structure of the business I e the Sale, delivery, packing & dispatch etc. Marketing manager has to struggle to control internal environmental facts. He has control over namely four P's of mix Namely Product, Price, promotion & place.

PRODUCT:

GHATAPRABHA FERTILIZER PVT LTD is a manufacturing unit. It produces different types of Products like, BIJUMATA FERTILIZERS, GHATAPRABHA FERTILIZERS, Provides quality FERTILIZERS at the lowest possible price that the farmer can buy.

PLACE :

The GHATAPRABHA FERTILIZER PVT LTD IS situated in the NANDHIKURALI It is a place which is nearest to market and city, All the facilities are available like transportation facilities, salesmen and 24 hours power supply is available.

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
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DISRIBUTION CHANNEL

The GHATAPRABHA FERTILIZERS PVT LTD nandhikurali is a company has 800 main dealers and under them some sub dealers. The company uses the following distribution channel such as



The company produce Fertilizer & moves their products to their dealers. The company settled marketing managers on district bases and dealers will give the order to their marketing managers.

PRICE:

Price of GHATAPRABHA FERTILIZERS PVT LTD in the discount price level for the balance of the calender year. Dealers must qualify each year for discount pricing.

GHATAPRABHA FERTILIZERS KEEP PRICES OF PRODUCT

PRODUCTION	PRICE
Bhumata (17:17:17)	775
Bhumata (20:20:0)	725
Bhumata (18:18:10)	750
Bhumata(20:20:10)	-
Bhumata(15:15:5)	-
Bhumata real power	500
Bhumata real power-40kg	299
Bhumata real grandess	550
Bhumata all grow -40 kg	640

A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI

PROMOTION:

GHATAPRABHA FERTILIZERS PVT LTD is advertise about here product in news Papers magazines, interent, Wall Pictures and pamphlets, etc.

2.7 FINANCE DEPARTMENT

Financial affairs are one of the most imporment Function of management requiring skill & technical expertise knowledge. In always small concern one man many have control over finance function. But in large scale enterprises a separate department is established under the control of an expert in financial matters know as financial manager of finance controller or director of finance. Finance department means the division classification of various function which are to be performed by the finance department the finance manager is responcial for over all success of the finance department is associated by two are more subordinate officers the treasures and the controller of finance . Generally chief financial manager is appointed look after the finance department.

2.8 HRD DEPARTMENT

Security departmen is the main thing of organization this dept. is the watchmen cannot give permission to enter in the plant. After doing you work this pass will be submitted on the gate & watchmen take checking of every person.

Therefore the any four- wheelr from village comes to plant & going out of the plant they must be check for the motor vehicle **The main function Are:**

- Conducting job analysis
- Planning labour needs and recruiting job candidates
- Selecting job candidates
- Conducting orientation and training programs for new employees
- Managing wages and salaries
- Providing incentives and benefits
- Apprasing the performance
- Communication with employees

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATA PRABHA FERTILIZER PVT, LTD NANDHIKURALI**

- Training and developing managers
- Building employees commitment

Administrative function:

- a) Liaoning with government and local bodies
- b) Correspondence with various government and nongovernment organization. All the internal and external mail, letter and memo, registered items handled by this department.
- c) Security- a will required security forced is provided for safeguarding everthing inside the factory complex.
- d) Monitoring the daily inward and outward dispatch

I. Recruitment :

Recruitment is the process of searching right person and stimulating them to apply for job in the organization recruitment in urea is carried out based on department requirement.

- a) Recruitment done throught reference or consultants. Probationary period of 6 months.
- b) CV is collected from the employees. It is scrutinized and list for interview is conducted under the observation of hr and the respective department had conducted in the corporative office.

I Staff- supervisors, line employees

- A. Recruitment done throught reference or consultantss Machine operators-they are selected from local environment ,first 2 years, they are employed as trainees and the 3 year will be probation period. After this, they will be

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATA PRABHA FERTILIZER PVT, LTD NANDHIKURAJ**

promoted as permanent employees. Employees are selected strictly based on their educational qualification, work experience, technical knowhow and age.

Induction:

- 12 day induction program is conducted for the newly selected employees
- 6 day class room training and 6 days on the job training
- Conducted by the hod and HR
- During the induction program the company policies, rules and regulation, plant overview, job overview are explained to the employees
- The induction helps the employees to gain information on the company and the operation carried out.

➤ **Training:**

1. Annual training plan is prepared and conducted through the plant
2. Training conducted for the employees at all level
3. After training the effectiveness analysis is conducted
4. Different training conducted are :
 - a) Orientation training
 - b) On the job orientation
 - c) External training
 - d) Internal training

A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI

HR:

- ❖ Hr plans an important role to maintain good relationship between the employees and the department heads, strictly based on their educational qualification, work experience, technical knowhow and age
- ❖ Frequent meetings are conducted between the HOD and the employees
- ❖ Monthly department review meeting is also conducted to make the employees aware of the department performances.

Grievance handling

Grievance handling is done by HR and the associated department heads. Employees grievance is given greater importance in MEHL. Immediate action will be taken in case of grievance.

Separation:

1. Notice period of 1 month.
2. No specific exit interview conducted
3. Separation procedures are done manually

Attendance Management:

1. The employees attendance management is also carried HR department.
2. Punch card system for permanent employees
3. Manual attendance management for the contractual employees

The HR department Takes care of the following statutory function also

- ❖ Companies holidays calendar making
- ❖ Salary and other remuneration
- ❖ PFES DA
- ❖ HRA
- ❖ Conveyance & other allowances

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

2.9 McKinsey 7 S' Model:

1. **Strategy:** The strategy of Ghataprabha fertilizers Pvt. Ltd, Nandikurali is "low cost for the product and high quality" to achieve high volume of business in targeting area. For motivating the employee company gives the followings

- Basic salary / wages scale
- Perk: apart from salary company gives the followings
 - ❖ Education allowances
 - ❖ Leave travel
 - ❖ Scheme for medical benefits
- Incentives and bonus

Which help to the company is for increase its productivity.

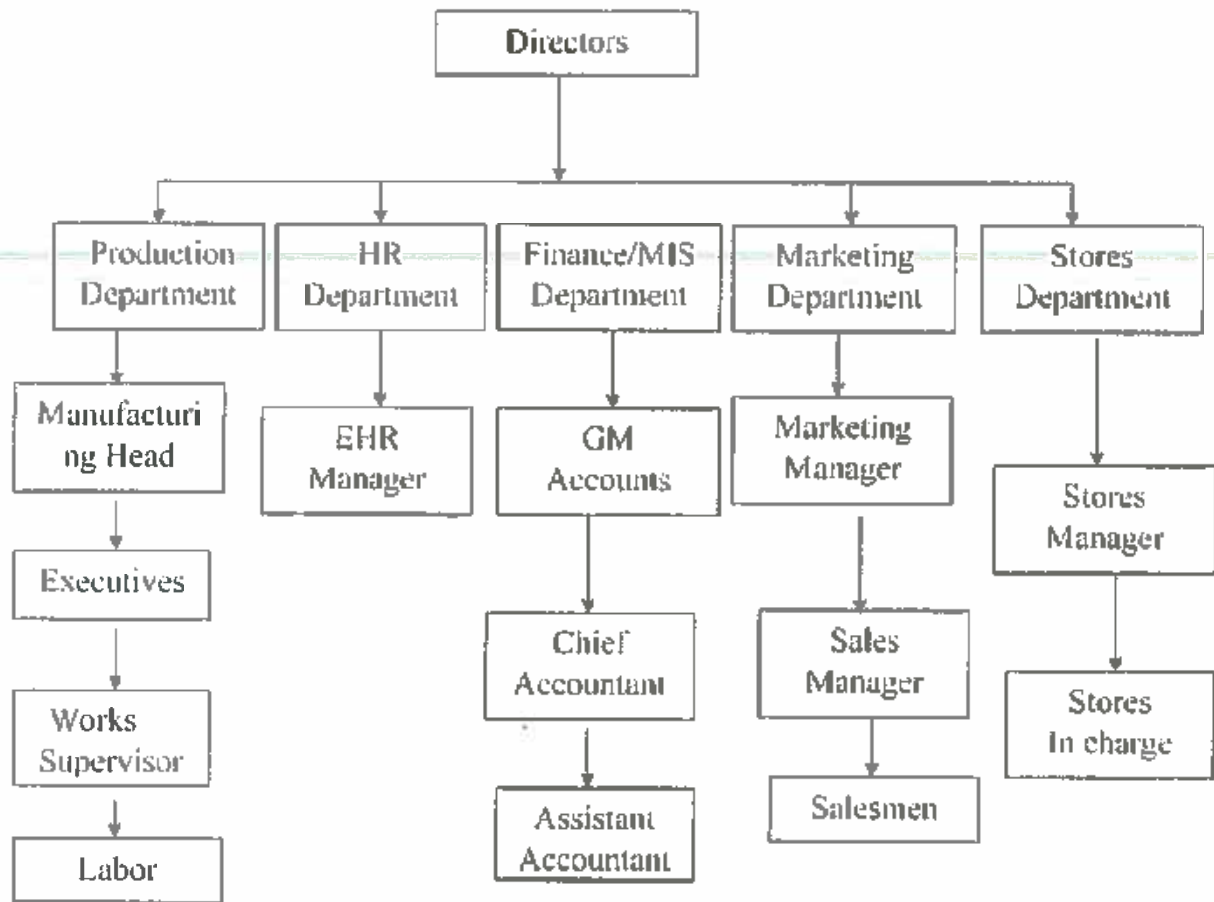
These are help to the company to achieve its objective and deal with competitive pressure and deal with the customer demand

2. **System:** In production department hierarchy is general manager to head of the manufacturer and head material engineering purchase then production supervisor lab supervisor, purchase supervisor chemical supervisor, quality control supervisor, then its goes to worker. In marketing department hierarchy is managing director to sales manager, to branch officer general manager to product manager then sales representative and service people.

3. **Shared Value:** To partner and participate in the socio-economic growth of farmers, to promote research and development in the field and to achieve our goals with honesty and commitment towards our customers, investors, partners, employees and h greater Society.

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
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4 Structures



**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

Style: It is used when leaders tell their employees what they want done and how they want it accomplished, without getting the advice of their followers. Some of the appropriate conditions to use it is when you have all the information to solve the problem. You are short on time, and your employees are well motivated between the followers, the leader, and the situation using an authoritarian style on a new employee who is just learning the job. The leader is competent and a good coach. The employee is motivated to learn a new skill. The situation is a new environment for the employee.

Staff: Managerial, financial, HR, marketing specialization are represented a team. Company is selecting candidates through employment exchange, through labor constancy, campus selection and through placement agencies with at least qualification of graduation.

Skills: The strongest skills represented within the company are analytical skill, stress management skill, decision making skill, and creative skill. Which are helps employees to work more effectively and efficiently.

CHAPTER – 3**INDUSTRY PROFILE****3.1 INDUSTRY PROFILE****3.2 HISTORY OF ORGANIZATION****3.3 VISION****3.4 MISSION****3.5 QUALITY ANALYSIS****3.6 COMPETITION INFORMATION****3.7 ACHIEVEMENTS AND AWARDS****3.8 PRODUCT PROFILE****3.9 SWOT ANALYSIS**

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

INDUSTRY PROFILE:

3.1 INDUSTRY PROFILE:



GHATPRABHA
Fertilizers pvt. ltd.



**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

Ghataprabha Fertilizer Pvt. Ltd, a Private limited company was incorporated on 3rd October 2005 with the main objective of NPK Mix fertilizer Manufacturing. The company had commenced the commercial operation in May -2006 and achieved a turnover of Rs 12.19 corers in its first production year and from thereon company has always shown increasing graph. Company is situated at village Nandikurli Dist: Belgaum in the state of Karnataka. Company reached turnover of Rs. 53 Corers and has 300 distributed networks spread across Karnataka & western Maharashtra. The day to day activities are managed under the supervision of Mr. kailash Puramwar Chief Executive Officer of the Company. The company stood first in private sector in Karnataka state in the year 200809. Company has also received marketing license for Maharashtra state. Within a very short period of time companies brand BHUMATA has reached to village block level. Following are the main products offered by the company.



**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

INDUSTRY PROFILE

Name of the company	GHATAPRABHA FERTILIZER PVT. LTD., NANDIKURALI
Address	At/Post: Nandikurali, Tal: Raibag Dist: Belgaum, State: Karnataka
Register No.	CIN-U-24129-MH-2005-PTC-156501
Registered Office	"SHIVA HOUSE" NEW MONDA NANDED (MAHARASHTRA)
Date of Establishment	19 June 2006
Form of Business	Private Limited
Phone No	224048
Pin code	591317
Office address	3132/4, Sharbidhre Building, Ankali Road, Raibag
Board of directors	Mr. Madhusudan Kalantri Mr. Shashikant Puramwar Mr. Anand Gilda
Annual Turn Over	Up to 12 Crores.
Administrative Office	249/1 Nandikurali, Tal : Raibag, Dist: Belgaum State :Karnataka Ph. No. 8970651800 Email: ghatprabha@gmail.com
Date of Incorporation	03-12-2005
Website	www.ghatprabhafertilizer Pvt. Ltd.com
Number of employees	100
Date of Commercial Production	06-06-2006
Authorized Share Capital	Rs. 5.00 Cr.
Issued Share Capital	Rs. 2.78 Cr.

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

Shiva Fertilizers Limited is one of the leading fertilizer companies in the Marathwada Region. Shiva Fertilizers was incorporated as a Public Limited Company on 6th January 1993 with an objective of providing quality fertilizers product. The Company got listed on the Bombay Stock Exchange in the year 1995. Since then shares of the company are listed on The Bombay Stock Exchange (BSE) and The Hyderabad Stock Exchange (HSE).

The businesses at SFL have been structured in two product lines NPK and SSP. SFL is one of the leading manufacturers of NPK & SSP in Marathwada. Having the most modern manufacturing technique NPK & SSP are manufactured under strict quality control, by a team of skilled work force and highly experienced & qualified professionals. SFL partners are large scale distributors all over Maharashtra, Andhra Pradesh & Karnataka. Shiva is striving to be an efficient & reliable partner to their customers. SFL aims to continuously upgrade production technique in order to offer distributors & consumers an excellent quality at reasonable price.

4.2 HISTORY OF THE ORGANIZATION

Ghataprabha Fertilizers Pvt Ltd Nandikuruli is a company established by four Partners i.e. Madhusudhan Kalantari, Deepak Maliwal, Anand Gilda, Shashikanth Puramwar well experienced in fertilizers unit. They are directors/ relative of Shiva Fertilizers Ltd a listed company Bombay Stock Exchange.

➤ Growth of the organization.

Ghataprabha Fertilizer Pvt Ltd, A private limited company was incorporated on 3rd October 2005 with the main objective of NPK Mix Fertilizer Manufacturing. The company had commenced the commercial operation in May-2006 and achieved a turnover of 12.19 cores in its first production year and from thereon company has always shown increasing graph. Company is situated at village Nandikurli Dist. Belgaum in the State of Karnataka. Company reached turnover of Rs. 30 Crores and has 300 distributed networks spread across Karnataka & Western Maharashtra. The day to day activities are managed under the guidance of Mr. Kailash Puramwar.

A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI

The company stood first in private sector in Karnataka state in the year 2007-08. Company has also received marketing license for Maharashtra state. Due to this fact company has exceeded target production of 30000MT in 2007-08 and reached to the height of 40000MT per annum. Within a very short period of time companies brand, BHUMATA, Has reached to village block level. Following are the main products offered by the company:

- 17*17*17
- 20*20*0
- 18*18*10
- 20*10*10

Company is banking with UBI who has opened its branch at Raibag to cater the needs of clientele of Ghatprabha Fertilizers Pvt. Ltd. Easy connectivity, availability of raw material, power and passing of Krishna River through the region is an advantage for the firm as sugarcane is one of the major crop cultivated in this region which involves maximum fertilizer consumption. Company has also established a manufacturing unit of bio-coal at its factory site and is likely to expand its business line in Bio-fertilizers and crop nutrients domains

3.3 VISION:

To be an evolving organization providing farmers in india and asian at large with next generation seed and fertilizer products in the most cost effective manner through substained cutting edge research in fertilizer , seeds technology, plant nutrition and soil health.

3.4 MISSION:

To partner and participate in socio-economic growth of farmer, to promote research and development in the field of farmer , to honesty and commitment towards our customer investor , parnter , employees and greater society.

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHUKURALI**

3.5 QUALITY ANALYSIS

Ghataprabha Fertilizers Pvt Ltd Shall satisfy their customer by Delivery Granulated fertilizers of consistent high quality through Trained, motivated and empower employees and with appropriate technology and established quality system.

3.6 COMPETITION INFORMATION

The company has sevirour competation from other companies of same industries; the competitors in the race are as follows:

- Madras Fertilizers Ltd
- Jai kisan Fertilizers Ltd
- Deepak Fertilizers Ltd
- Nagarjun Fertilizers Ltd

3.7 ACHIVEMENT AND AWARDS:

The state government of Maharashtra recognized products of Ghataprabha Fertilizers as top most quality in maharashtra state.

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

3.8. PRODUCT PROFILE

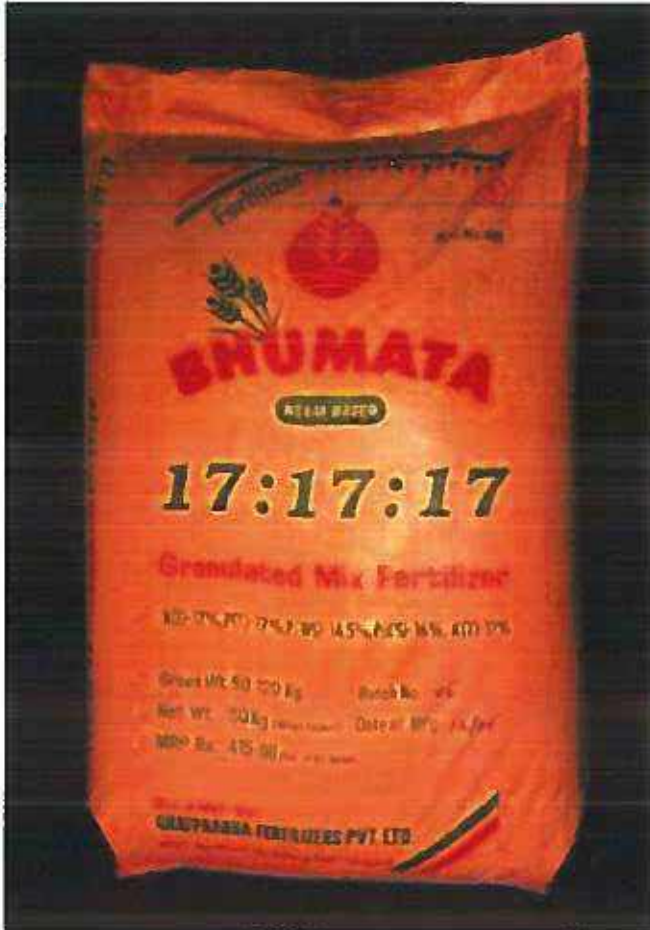
Products



MgSO₄ (magnesium sulphate)

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

Products of GFPL



BHUMATA

(17:17:17)

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**



BHUMATA
(20:10:0)

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
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BHUMATA
(18:18:10)

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATA PRABHA FERTILIZER PVT, LTD NANDHIKURALI**

3.9. SWOT ANALYSIS:

A SWOT analysis summarizes the key issues from the business environment & the strategic capacity of an organization that are most likely to impact on strategy development. SWOT analysis is a tool for auditing an organization & its environment . Its environment. It is the 1st stage of planning & helps marketers to focus on key issues.

In SWOT analysis

S-Stands for strengths of the company

1. Well – developed industry with strong manufacturing base
2. Easy available of raw material
3. Better working facilities & condition for workers
4. Updated technology

W- Stands for weakness

1. Production process is very complicated
2. Depend upon customer needs & wants
3. Absent of motivation incentives

O- Stands for opportunity

1. Larger number of customers
2. Diversification
3. More opportunities in foreign market

T- Stands for Threats

1. High competition.
2. Tax & regulatory structure.
3. Dealer problem.

CHAPTER 4**DATA ANALYSIS AND INTERPRETATION****Table 4.1 Shows Capacity of product during 2018-2019****Table 4.2 Shows production and sales analysis****Table 4.3 Shows production and consumption of GHATAPRABHA FERTILIZER****Table 4.4 Shows Demand of GHATAPRABHA FERTILIZER****Table 4.5 Profit and Loss Account****Table 4.6 Balance Sheet**

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

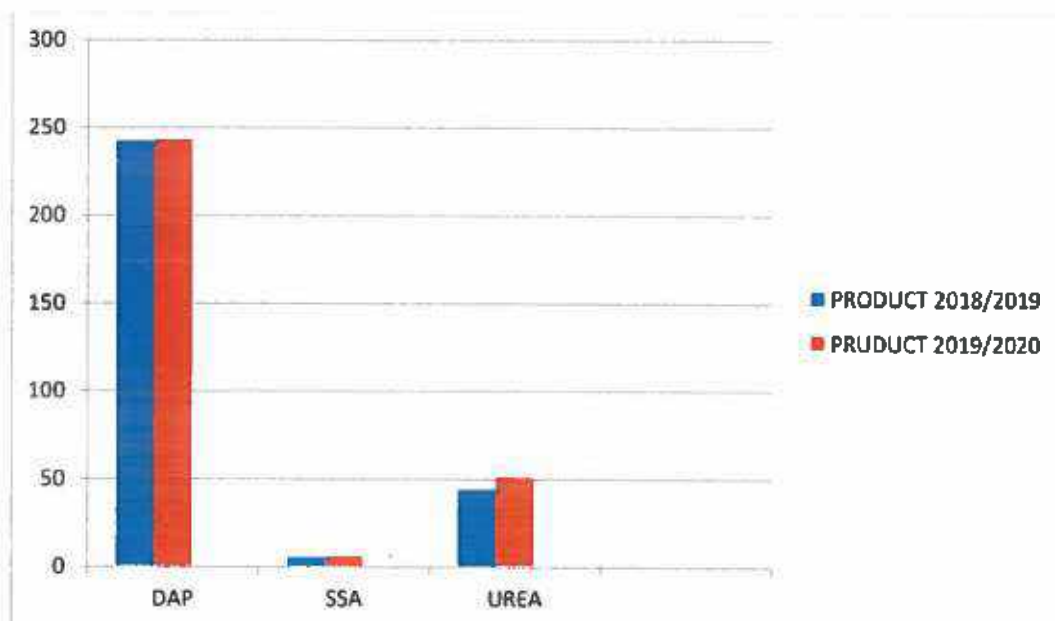
CHAPTER-4

DATA ANALYSIS AND INTERPRETATION

**TABLE NO 4.1 : CAPACITY OF PRODUCT DURING 2018-19
AND 2019-20**

(In units)

Product name	Product2017/19	Product2018/20
DAP	242.01	242.51
SSA	4.90	5.18
UREA	43.65	50.36



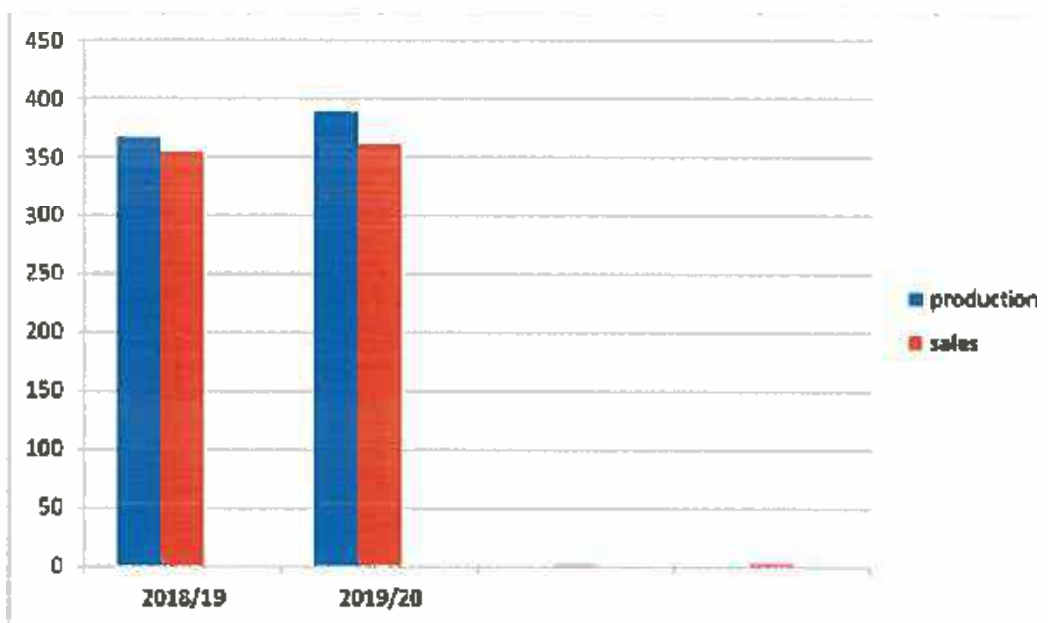
From the above table 4.4 it can be observed that The capacity of the product has been increased in 2019-20 compared to 2018-19

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

TABLE NO 4.2: PRODUCTION AND SALES PERFORMANCE

(In crores)

Product	2018/19	2019/20
Production	366.82	388.63
Sales	353.83	360.36



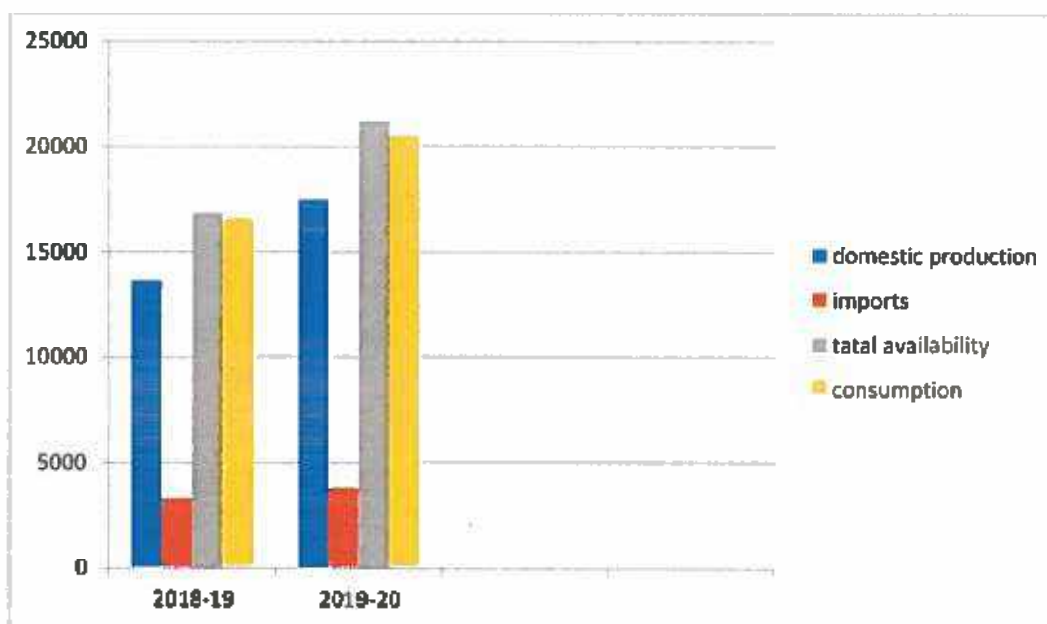
From the above table4.5 it can be observed that the capacity of the production and sales performance has been increased in 2019-20 compared to 2018-19

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

**TABLE NO 4.3 : PRODUCTION AND CONSUMPTION OF
GHATAPRABHA FERTILIZER**

(In lack)

Year	Domestic production	Imports	Total availability	consumption
2018-19	13610	3250	16860	16440
2019-20	17470	3750	21220	20420



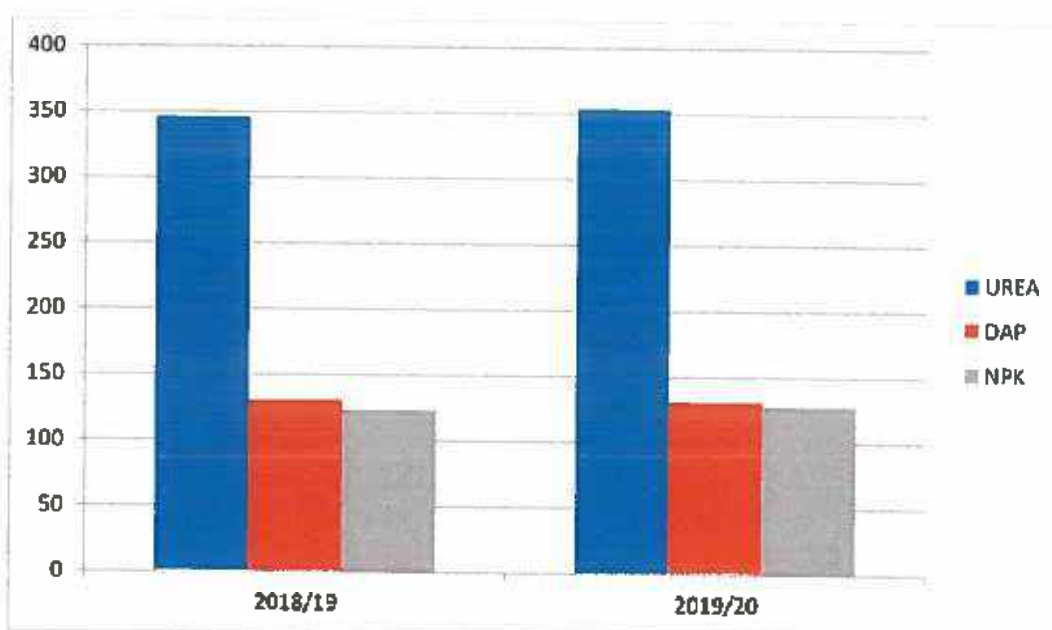
From the above table 4.6 it can be observed that the production and consumption has been increased in 2019-20 compared to 2018-19.

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

TABLE NO 4.4: DEMAND OF GHATAPRABHA FERTILIZER

(in lack)

Year	Urea	DAP	NPK
2018/19	345.36	129.50	123.18
2019/20	353.07	130.17	127.99



Interpretation:

From the above table 4.7 it can be observed that the demand of the product has been increased in 2019-20 compared to 2018-19

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

PROFIT & LOSS ACCOUNT FOR THE YEAR 2019 AND 2020

PARTICULARS	AS AT 31.3.2019 (RS)	AS AT 31.3. 2020 (RS)
I INCOME		
Sale	417821012.00	455754667.49
Other income	624877.00	265512.00
TOTAL	418445889.00	456020179.49
II EXPENDITURES		
Materials	313924696.00	344320064.88
Manufacturing & other expences	37508183.00	42191691.03
Admistration, selling & Dist. Exps.	35509709.00	29843096.06
Interest & other Finance charges	10492888.00	17559254.52
Depreciation	3019330.00	3272741.00
Miscellaneous Expenses written off	23474.00	235474.00
TOTAL	400690286.00	437422321.49
Profit before prior peroid Items	177556.300	18597858.00
Add/ less:prior period adjustment	-29000.00	-175463.00
III PROFIT BEFORE TAX	17726603.00	18422395.00
Current Tax	422600.00	4735500.00
Deferred Tax	549989.00	522851.00
4 PROFIT AFTER TAX	4775989.00	5258351.00
Add : profit before forward	12950614.00	13164044.00
5 BALANCE AVAILABLE FOR APPROPRIATION	26920277.00	39584321.00
Appropriations transfer to General Reserve	500000.00	500000.00
6 BALANCE CARRIED TO BALANCE SHEET	26420277.00	39084321.00
Basic & Diluted Earnings per share	56.72	57.67

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

**BALANCESHEET OF THE YEAR ENDING 31/3/ 2019 AND 31/3
2020**

PARTICULARS	AS AT 31.3.2019	AS AT 31.3.2020
SOURCE OF FUND		
A)SHAREHOLDERS FUND		
Share capital	22,833,300.00	22,833,300.00
Reserve & surplus	42,751,021.00	29,586,977.00
B) LOAN FUNDS		
Secured loans	101,472,392.48	70,738,940.00
Unsecured loans	50,580,304.00	38,052,948.00
C)DEFERED TAX LIABILITY	3,107,885.00	2,585,034.00
TOTAL-	220,744,902.48	163,797,199.00
APPLICATION OF FUNDS		
A) FIXES ASSET		
Gross block	54,609,056.00	52,337,981.00
Less: depreciation	11,210,995.00	7,938,255.00
Net block	43,399,061.00	44,399,726.00
Capital work in progress	0.00	0.00
	43,398,061.00	44,399,726.00
B) INVESTMENTS	7,000.00	7,000.00
C) CURRENT ASSETS		
LOANS AND ADVANCES		
Inventories	109,939,577.34	106,014,452.00
Sundry debtors	61,334,919.50	50,774,137.00
Cash & bank balances	9,745,152.70	24,796,976.00
Loans & advances	33,733,163.06	196,911,188.00
D) current liabilities & provisions	37,506,972.12	77,850,190.00
E)net current assets (e-d)	177,245,840.48	119,060,998.00

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

F) miscellaneous expences	94,001.00	329,475.00
(to the extent not written off*)		
TOTAL	220,744,902,48	329,475.00

CHAPTER 5**FINDINGS, SUGGESTIONS AND CONCLUSION****5.1 FINDINGS****5.2 SUGGESTIONS****5.3 CONCLUSION**

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

CHAPTER-5

FINDING SUGGESTION AND CONCLUSION

5.1 FINDINGS;

- The product demand will increase in 2019-20 compare of 2018-19
- No major environment pollution has been reported for the past 50 years of operations.
- New technology of membranes cell has the advantage of pollution the environment and also it brings about 30% Reduction in electrical power requirements.
- The factory is depending heavily on electricity and around 60% of their product price is for this.
- The strength of factory is the quality of their products, services and the delivery.
- In case of lead time, it was noted that order processing took too much time due to lot of work.

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

5.2 SUGGESTION

- The company should give training to newly appointed employees and workers.
- The company should carry out advertisement activities.
- New application should be made through the qualification and experiences of the candidate in this field.
- The company has to improve the supply of the product, if possible.
- Urea factory should take certain adjustment in the price of the product.
- In order to increase the production the company may try giving some motivation to the employees. For the smooth functioning they must invest a reasonable amount of working capital.
- The company shall take necessary actions to maintain good relationship between employees and management.
- Urea factory should take necessary steps to increase the net profit.

**A STUDY ON ORGANIZATION STRUCTURE WITH REFERENCE TO
GHATAPRABHA FERTILIZER PVT, LTD NANDHIKURALI**

5.3 CONCLUSION

Ghataprabha fertilizer has reached its present level competence and breadth of switch out facing problems several challenges that come its way had been faced with confidence and overcome achievements need to observe in proper prospective.

By the company for defining the parameters for measuring the performances of sales under this system of management is given full power of day to day administration with a view to achieve the targets as through its situated in the rural area. The organization study carried out in ghataprabha fertilizer pvt. ltd raibag.

**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON ASSETS AND LIABILITY MANAGEMENT"**

AT

**URBAN CO-OPRATIVE BANK ANKALI
Submitted to**

RANI CHANNAMMA UNIVERSITY, BELAGAVI



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

Miss. POOJA GUNDAKALLE

M.COM-IV SEMESTER

REGISTER NO: MC191607

UNDER THE GUIDANCE OF

SHRI. S. M. BHOSAGE

**K.L.E. SOCIETY'S
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CHIKODI-591201
PG DEPARTMENT OF COMMERCE AND MANAGEMENT**



CERTIFICATE

This is to certify that Miss. **Pooja Gundakalle** has satisfactorily completed the Project Report Entitled **"A Study on Assets and Liability Management"** At **Urban Co-operative Bank, Ankali** for the partial fulfilment of Degree in **Master of Commerce** in **Rani Channamma University, Belagavi** during the academic year **2020-2021**.

SHRI S. M. BHOSAGE

PROJECT GUIDE

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ಡಾ. ಪ್ರಭಾಕರ ಕೋರೆ ಕ್ರೆಡಿಟ್ ಸೌಹಾರ್ದ ಸಹಕಾರಿ ನಿ., ಅಂಕಲಿ.
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Ref. No. DRPKCSSN/1350/2021

Date: 9 SEP 2021

CERTIFICATE

This is to certify that **MISS. POOJA GUNDAKALLE** the student of the Rani Channamma University ; Belgavi with Reg No : **MC191607** of Master of Commerce has successfully completed her project on "A STUDY ON ASSETS AND LIABILITY MANAGEMENT" of **Dr. Prabhakar Kore Credit Souhard Sahakari Ny; Ankali** " for the period from 20th June 2021 to 20th August 2021 .

During the project, She was found sincere and hardworking. We wish her all the success in future and best of luck.

ADM Ankali

Date: 9 SEP 2021



Your's faithfully,

(D.S.Karoshi)

General Manager

DECLARATION

I declare that the project report entitled "A Study on Assets and Liability Management" At Urban Co-operative Bank, Ankali is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. S. M. Bhosage, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 17/09/2021

Place: Chikodi


Miss. Pooja Gundakalle
Register No: MC191607

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

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Finally I owe my deep sense of gratitude to my parents, friends and relatives for their constant encouragement and support.

Miss. Pooja Gundakalle

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CHAPTER-I INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

Assets & Liability Management (ALM) is a strategic approach of managing the balance sheet dynamics in such a way that the net earnings are maximized. This approach is concerned with managements of interest margin to ensure that its level and riskiness are compatible with the return objectivities

If one has to define Asset and Liability Management without going into detail about its need and utility, it can be defined as simply "Management of money" which carries value and can change its shape very quickly and has an ability to come back to its original shape with or without an additional growth. The art of proper management of money is ASSET AND LIABILITY MANAGEMENT (ALM)

The Liberalization measures initiated in the country resulted in revolutionary changes in the sector. There was a shift in the policy approach from the traditionally administered market to a free market driven regime. This has put pressure on the earning capacity of co-operative, which forced them to foray into new operational areas thereby exposing themselves to new risk. A major part of funds at the disposal

from outside sources, the management are concerned about RISK arising out of shrinkage in the value of asset. And managing such risks become critically important to them. Although co-operatives are able to mobilize deposits, major portions of it are high cost fixed deposits. Maturities of these fixed deposits were not properly matched with the maturities of assets created out of them. The tool called ASSET AND LIABILITY MANAGEMENT provides a better solution for this.

Asset Liability Management (ALM) is a portfolio Management of Assets and Liability of an organization. This is a method of matching various assets with liabilities on the basis of expected rates of return and expected maturity pattern in the context of ALM is defined as "a process of adjusting liability to meet loan demands, liquidity needs and safety requirements". This will result in

optimum value of the same time reducing the risks faced by them and managing the different type of risks by keeping it within acceptable levels.

RBI Revises the Asset Liability Management Guidelines (February 6/2012)

In the era of changing interest rates, Reserve Bank of India (RBI) has now revised its Asset Liability Management guidelines. Banks have now been asked to calculate modified duration of Assets (loans) and Liabilities (deposits) and duration of equity.

This was stated by the executive Director of RBI, V.K Sharama, and here today. He said that this concept gives banks a single number indicating the impact of a 1 percent change of interest rate on its capital, captures the interest rate risk, and can thus help them move forward toward assessment of risk based capital. This approach will be a graduation from the earlier approach, which led to a mismatch between the Assets and Liabilities.

The ED said that RBI has been laying emphasis that banks should maintain a more realistic balance sheet by giving a true picture of their non- performing assets (NPAs), and they should not be deleted to show huge profits. Though the banking system in India has strong risk management architecture, initiatives have to be taken at the bank specific level as well as broader systematic level. He also emphasized on the need for sophisticated credit-scoring models for measuring the credit risks of commercial and industrial portfolios.

Emphasizing on a need for an effective control system to manage risks, he said that the implementation of BASEL 2 norms by commercial banks should not be delayed. He said that the bank should have a robust stress testing process for assessment of capital adequacy in wake of economic downturns, industrial downturns, market risk events and sudden shifts in liquidity conditions stress tests should enable the banks to assess risks more accurately and facilitate planning for appropriate capital requirements.

Sharma spoke at length about the need to extend the framework of integrated risk management to group –wide level especially among financial conglomerates. He said that RBI has already put in place framework for oversight of financial conglomerates, along with SEBI and IRDA. He also said

that at the systematic level efforts are being made to create an enabling environment for all market participants in terms of regulation, infrastructure and instruments.

1.2 REVIEW OF LITERATURE

Mr. Chetan Shetty Ms. Pooja Patel 2, Ms.Nandini3 (2016) Assets and Liability Management (ALM) is a systematic and dynamic process of planning, Organizing, Coordinating and controlling the assets and liabilities or in the sense management of balance sheet structure in such a way the net earnings from interest are maximized

within the overall risk preference of the banks. This study examined the effect of ALM on the Five Private Sector Banks profitability in Indian financial marker by using Gap Analysis and Ratio Analysis Technique. The finding from the study revealed that banks have been exposed to liquidity risk.

Ashok Kumar.M(2009) found that the financial performance of DPKCSS group, nationalized banks group, private banks group and foreign banks group has been affected by the financial deregulation of the economy. The main objective of the empirical study is to assess the financial performance of scheduled commercial banks through CAMEL Analysis.

Kanjana.E.N (2007) examined, "Efficiency, profitability and growth of scheduled Commercial Banks in India" tested (1) whether the establishment expense was a major expense, and (2) out of total expense which is met by scheduled commercial banks in more due to more number of employees. In her empirical study, the earning factor and expense factor which are controllable and non- controllable by the bank.

Fabozzikanishi, (1991) investigated Asset-Liability Management basically refers to the process by which an institution manages its balance sheet in order to allow for alternative interest rate and liquidity scenarios. Banks and other financial institution provide services which expose them to various kinds of risks like credit risk, interest risk, and liquidity risk. Asset Liability Management is an approach that provides

institutions with protection that makes such risk acceptable. Asset-Liability Management model seeable institutions to measure and monitor risk, and provide suitable strategies for their management.

It is therefore appropriate for institution (banks, finance companies, leasing companies, insurance companies, and other) to focus on Asset Liability Management when they face financial risks of different types. Asset-Liability Management includes not only a formalization of this understanding, but also a way to quantify and manage these risks. Further, even in the absence of a formal Asset-Liability Management program, the understanding of these concepts is of value to an institution as it provides a truer picture of the risk/reward trade-off in which the institution is engaged.

1.3 STATEMENT OF THE PROBLEM

The basic objective behind the bank is to serve the public. The bank has an unnumbered of assets & liabilities. Assets & Liability Management is a one of the risk tool the risk Management it is analyze the financial position of the bank and also analyze the overall Assets & Liabilities in the organization the view of this the Asset & Liability to minimize the risk in the bank.

1.4 NEED FOR STUDY

1. This study will helpful to know in managing the Asset-Liability Management and the probability of Management. 34w
2. This study will also suggest the way & means for improving the Asset Management in bank. It also helps to know the proper Management of Asset liability Management. This study will helpful to know the financial performance of bank.
3. We can gain the practical knowledge and experience of the bank. The Management will be helpful to identify the risk of the bank. The research will help the Management to measure to overcome problems prevailing the bank.

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3. We can gain the practical knowledge and experience of the bank. The Management will be helpful to identify the risk of the bank. The research will help the Management to measure to overcome problems prevailing the bank.

1.5 OBJECTIVES OF THE STUDY

1. To study the importance of Assets & Liability Management
2. To know the financial risks in Kore bank Ankali
3. To know the financial position of the Kore bank Ankali
4. To find out the appropriate balance between profitability & liquidity consideration.

1.6 Scope of the study

The study confined to Dr. Prabhakar Kore Credit Souhard Sahakari Ltd., Ankali. In this study the analysis based on ratios to know asset and liabilities management under and to analyze the growth and performance of Dr. Prabhakar Kore Credit Souhard Sahakari Ltd., Ankali. By using the calculations under Asset and Liability Management based on ratio.

- Ratio analysis
- Comparative statement
- Common size balance sheet.

1.7 RESEARCH METHODOLOGY

The study of Asset and Liability Management is based on the following.

1. Primary data collection.
2. Secondary data collection

1) Primary data collection:

Here the primary data has been collected through personal observations and discussions with various departmental heads, and the employees. Here the information is collected by direct method, using communication and interview. Collected the data from the company internal guide.

2) Secondary data collection:

Secondary data means data that are already available that is they refer to the data which have been collected and analyzed by someone can save the time of the researcher.

Secondary data may be available in the form of company records, trade publications, libraries etc.

The secondary data sources are:

- ❖ Company reports
- ❖ Articles
- ❖ Text books
- ❖ Internet (various web sites)
- ❖ Journals, annual reports and other documents of the Bank.

1.8 Limitations of the study:

1. The study restricted to Dr.Prabhakar Kore Credit Souhard Sahakari Ltd., Ankali.
2. lockdown due to covid-19 made a huge problem to collect the information, so all the information was not possible to be collected.
3. The study was exclusively limited to performance of the Asset & Liability Management in Dr.Prabhakar Kore Credit Souhard Sahakari Niyamit, Ankali.

1.9 CHAPTER SCHEME

Chapter 1:-

This chapter deals with the introduction, background of study, statement of problem, objective of study, literature of review, methodology, data sources and limitations of study, and chapter scheme.

Chapter 2:-

In this chapter is viewed on various concepts related to the study which are introduction of Assets and Liability Management, significance of Asset-Liability Management, risk Management of Asset- Liability Management, Asset-Liability Management process, risk measurement techniques.

Chapter 3 :-

This chapter deals with the bank profile which include profile of the bank, historical back ground , vision and mission organization structure, product and service profile, SWOT analysis.

Chapter 4:-

In this chapter data has been analyzed as per the information available through the graph

Chapter: 5:- In this chapter findings, suggestions and conclusion are presented

CHAPTER 2

CONCEPTUAL FRAMEWORK

- 2.1 Introduction Of Asset & Liability Management**
- 2.2 Significance Of Assets And Liability Management**
- 2.3 Risk Management In Assets And Liability Management**

- 2.4 Assets And Liability Management-Process**
- 2.5 Risk Measurement Techniques**

CHAPTER-2

THEROTICAL FRAME WORK

2.1 Introduction of Asset & Liability Management:-

Asset Liability Management

Asset Liability Management (ALM) is the administration of policies and procedures that address financial risks associated with changing rates, foreign exchange rates and other factor that can affect a sahakari bank's liquidity.

Asset Liability Management (ALM) seeks to limit risk to acceptable levels by monitoring and anticipating possible pricing differences between a sahakari banks Assets and liabilities

Asset and Liabilities Management (ALM) is a dynamic process of planning, organizing, co-ordinating and controlling the assets and liabilities- their mixes, volumes, maturities, yield and costs in order to achieve a specified Net Interest Income (NII).

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Assets and liabilities. Assets & Liabilities Management (ALM) is a dynamic process of planning, organizing, co-ordination and controlling the assets and liabilities- their mixes, volumes, maturities, yields and costs in order to achieve a specifies Net Interest Income (NII).

Asset Liability Management (ALM) is one of the important tools of risk Management infomercial banks of India. Indian banking industry is exposed to number of risk prevailed in the market such as market risk, financial risk, interest rate risk etc. The net income of the banks is very sensitive to these factors or risk. For this purpose Reserve Bank of India (RBI), regulator banking industry evolved the tool known as ALM. This tool discusses issues

in Asset Liability Management and elaborates on various categories of risk that require to be managed.

It examines strategies for Asset – Liability Management from the asset side well as the liability side, particularly in the Indian context. It also discusses the specificity of financial institutions in India and the new information technology initiatives that beneficially affect Asset-Liability Management. The emerging contours of conglomerate financial services and their implications for Asset-Liability Management are also described. The objective of the study is to describe the concept and application of ALM technique. The research article is descriptive in nature. The data had been collected from the secondary sources such as RBI guidelines, reports etc. It has been found in the study that ALM is a successful tool for risk Management.

Asset and Liability Management-CONCEPT

Asset and Liability Management is a comprehensive and dynamic framework for measuring, monitoring and managing the market risk of bank. It is the management of structure of balance sheet (liabilities and Assets) in such way that the net earnings from interest is maximized within the overall risk-preference (present and future) of the institution. The ALM functions extend to liquidity risk management, Management

of market risk, trading risk management, funding and capital planning and profit planning and growth projection.

The concept of Asset and Liability Management is of recent in India. It has been introduced in Indian banking industry w.e.f 1st April, 1999. ALM is concerned with risk management and provides a comprehensive and dynamic framework for measuring, monitoring and managing liquidity, interest rate, foreign exchange and commodity price risks of a bank that needs to be closely integrated with the bank's business strategy. Asset-Liability Management basically refers to the process by which an institution manages its balance sheet in order to allow for alternative interest rate and liquidity scenarios.

Banks and other financial institutions provide services which expose them to various kinds of risks like credit risk, interest risk, and liquidity risk. Asset

Liability Management is an approach that provides institution with protection that make such risk acceptable. Asset Liability Management models enable institutions to measure and monitor risk, and provide suitable strategies for their management.

It is therefore appropriate for institution (banks, finance companies, leasing companies, insurance companies, and others) to focus on Asset-Liability Management when they face financial risks on different types. Asset-Liability Management includes not only a formalization of this understanding, but also a way to quantify and manage program, the understanding of these concepts is of value to an institution as it provides a truer picture of the risk/ reward trade-off in which the institution is engaged (Fabozzi & Kanishi, 1991), Asset - Liability Management is a first step in the long term strategic planning process. There for, it can be considered as a planning function for an intermediate term. In a sense, the various aspects of balance sheet management deal with planning as well as direction and control of the levels, changes and mixes of Assets, liabilities and capital.

Asset Liability Management (ALM) system:

In the normal course, they are exposed to credit and market risks in view of the Asset Liability transformation. With the liberalization in the Indian financial markets over the last few years and growing integration of domestic market and with external markets the risks associated with operations have become complex, large, requiring strategic management. Are now operating in a fairly deregulated environment and are required to determine on their own, interest rates on deposits and advance in both domestic and foreign currencies on a dynamic basis. The interest rates on investments in government and other securities are also now market related. Intense competition for business involving both the Assets and Liabilities, together with increasing volatility in the domestic interest rates, has brought pressure on the management of to maintain a good balance among spreads, profitability and ling-term viability. Impudent liquidity management can put earnings and reputation at great risk.

These pressures call for structured and comprehensive measures and not just adhocaction. The management of has to base their business decisions on a dynamic and integrated risk management system and process, driven by corporate strategy. Are exposed to several major risks in course of their business-credit risk, interest rate and operational risk therefore important that introduce effective risk management systems that address the issues related to interest rate, currency and liquidity risks.

Its need to address these risks in a structured manner by upgrading their risk management and adopting more comprehensive Asset-Liability Management (ALM) practices than has been done hitherto. ALM among other function is also concerned with risk management and provides a comprehensive and dynamic framework for measuring, monitoring and managing liquidity interest rate, foreign exchange and equity and commodity price risk of a that needs to be closely integrated with the business strategy. It involves assessment of various types of risks altering the Asset Liability portfolio in a dynamic way in order to manage risks.

The initial focus of the Asset and Liability Management function would be to enforce the risk Management discipline, viz., and managing business after assessing the risks involved. In addition, the managing the spread and riskiness, the ALM function is more appropriately viewed as an integrated approach which requires simultaneous decision about Asset/Liability mix and maturity structure.

2.2 SIGNIFICANCE OF ASSETS AND LIABILITY MANAGEMENT: ·

Volatility

- Product innovations & complexities
- Regulatory environment
- Management recognition

2.3 Risk Management in assets and liability management:

Risk Management is dynamic process, which needs constant focus and attention. The idea of risk Management is a well-known investment principal that the largest potential returns are associated with the riskiest ventures. There can be no single prescription for all times, decisions have to be reversed at short notice. Risk, which is often used to mean uncertainty, creates both opportunities and problems for business and individuals in nearly every walk of life.

Risk sometimes is consciously analyzed and managed; other times risk is simply ignored, perhaps out of lack of knowledge of its consequences. If loss regarding risk is certain to occur, it may be planned for in advance and treated as to definite, known expense. Businesses and individuals may try to avoid risk of loss as much as possible or reduce its negative consequences.

Several types of risks that affect individuals and businesses were introduced, together with ways to measure the amount of risk. The process used to systematically manage risk exposure is known as RISK MANAGEMENT. Whether the concern is with a business or an individual situation, the same general steps can be used to systematically analyze and deal with risk.

Steps in Risk Management

- Risk identification
- Risk evaluation
- Risk Management technique
- Risk measurement
- Risk review decisions

Integrated or enterprise risk Management is an emerging view that recognizes the importance of risk, regardless of its source, in affecting a firm's ability to realize its strategic objectives. The detailed risk Management process is as follows.

• Risk Identification :-

The first step in the risk Management process is to identify relevant exposures to risk. The step is important not only for traditional risk management, which focuses on uncertainty of risks, but also for enterprise risk management,

where of the focus is on identifying the firm's exposures from a variety of sources, including operational, financial, and strategic activities.

• **Risk Evaluation:-**

For each source of risk that is identified, an evaluation should be performed. At this stage, uncertainties risks can be categorized as to how often associate losses are likely to occur. In addition to this evaluation of loss frequency, an analysis of the size, or severity, of the loss is helpful. Consideration should be given both to the most probable size of any losses that may occur and to the maximum possible losses that might happen.

• **Risk Management Techniques :-**

The results of the analyses in second step are used as the basis for decisions regarding ways to handle existing risks. In some situations, the best plan may be to do nothing. In other cases, sophisticated ways to finance potential losses may be arranged. The available techniques for managing risks are GAP Analysis, VAR Analysis, Heinrich Domino theory etc., with consideration of when each technique is appropriate.

• **Risk Measurement :-**

Once risk sources have been identified it is often helpful to measure the extent of the risk that exists. As part of the overall risk evaluation, in some situations it may

be possible to measure the degree of risk in a meaningful way. In other cases, especially those involving individuals computation of the degree of risk may not yield helpful information.

• **Risk Review Decisions :-**

Following a decisions about the optimal methods for handling identified risks, the business or individual must implement the techniques selected. However, risk Management should be an ongoing process in which prior decision are reviewed regularly. Sometime new risk exposures arise or significant changes in expected loss frequency or severity occur. The dynamic nature of many risks requires a continual scrutiny of past analysis and decision.

◆ **CATEGORIES OF RISK :-**

Risk in a way can be defined as the chance or the probability of loss or damage. In the case of banks, these include credit risk, capital risk, market risk, interest rate risk, and liquidity risk. These categories of financial risk require focus, since financial institutions like banks do have complexities and rapid changes in their operating environments.

· **CREDIT RISK :-**

The risk of counterpart failure in meeting in payment obligation on the specific date is known as credit risk. Credit risk Management is as important challenge for financial institutions and failure on this front may lead to failure of banks. The recent failure of many Japanese banks and failure of savings and loan association in the 1980s in the USA are important examples, which provide lessons for other. It may be notes that the willingness to pay, which is measured by the character of the counter party, and the ability to pay need not necessarily go together. The other important issue is contract enforcement in countries like India. Legal reform is very critical in order to have timely contract enforcement. Delays and loopholes in the legal system significantly affect the ability of the lender to enforce the contract.

· **CAPITAL RISK :-**

One of the sound aspects of the banking practice is the maintenance of adequate capital on a continuous basis. There are attempts to bring in global norms in this field in order to bring in commonality and standardization in international practices. Capital adequacy also focuses on the weighted average risk of lending and to that extent, banks re in a position to realign their portfolios between more risky and less risky Assets.

· **MARKET RISK :-**

Market risk is related to the financial condition, which result from adverse movement in market prices. This will be more pronounced when financial information has to be provided on a market to market basis since significant fluctuations in Asset holdings could adversely affect the balance sheet of bank. In the Indian context, the problem is accentuated because many financial

institutions acquire bonds and hold it till maturity. When there is a significant increase in the term structure of interest rates, or violent fluctuations in the rate structure, one finds substantial erosion of the value of the securities held.

• **INTEREST RATE RISK:-**

Interest rate is the change in prices of bond that could occur as a result of change in interest rates. It also considers change in impact income due to changes in the rate on interest. In other words, price as well as reinvestment risks require focus. In so far as the terms for which interest rates were fixed on deposit different from those for which they fixed on Assets, banks incurred interest rate risk i.e., they stood to make gains or losses with every change in the level of interest rates.

• **LIQUIDITY RISK :-**

Affects many Indian institutions. It is the potential inability to generate adequate cash to cope with a decline in deposits or increase in assets. To a large extent, it is an outcome of the mismatch in the maturity patterns of Assets and Liabilities .

2.4 Assets and Liability Management-PROCESS:

The Asset-Liability Management process rates on three pillars:

1. Asset-Liability Management Information systems
 - Management information systems
 - Information availability, accuracy, adequacy and expediency
2. Asset-Liability Management Organization
 - Structure and responsibilities
 - Level of top Management involvement
3. Asset-Liability Management Process
 - Risk parameters
 - Risk identification
 - Risk measurement
 - Risk Management
 - Risk policies and tolerance levels

As per RBI guidelines commercial banks are to distribute the outflows/inflows in different residual maturity period known as time buckets. The Assets and liabilities were earlier divided into 8 maturity buckets (1-14 days: 15-28 days: 29-90 days: 91-180 days: 181-365 days: 1-3 years and 3-5 years and above 5 years). All the Liability figures are outflows while the Asset figures are inflows. In September, 2007, having regard to the international practices, the level of sophistication of banks in Indian, the need for a sharper assessment of the efficacy of liquidity management and with a view to providing a stimulus for development of the term-money market, RBI revised these guidelines and it was provided that

(a) The banks may adopt a more granular approach to measurement of liquidity risk by splitting the first time bucket (1-14 days at present) in the statement of structural liquidity into three time buckets viz., next day, 2-7 days and 8-14 days. Thus, now we have 10 time buckets.

After such an exercise, each bucket Assets is matched with the corresponding bucket of the Liability. When in a particular maturity bucket, the amount of maturing Liabilities or Assets does not match, such position is called a mismatch position, which creates liquidity surplus or liquidity crunch position and depending upon the interest rate movement, such situation may turn out to be risky for the bank. Banks are required to monitor such mismatches and take appropriate steps so that bank is not exposed to risks due to the interest rate movement during that period.

(b) The net cumulative negative mismatches during the next day, 2-7 days, 8-14 days and 15-28 days bucket should not exceed 5%, 10%, 15%, and 20% of the cumulative cash outflows in the respective time buckets in order to Recognize the cumulative impact on liquidity.

The board's of the banks have been entrusted with the overall responsibility for the management of risks and is required to decide the risk management policy and set limits for liquidity, interest rate, and foreign exchange and equity price risks.

Asset-Liability committee (ALCO) is the top most committee to oversee the implementation of ALM system and it is to be headed by CMD or ED. ALCO

considers product pricing for deposits and advances, the desired maturity profile of the incremental Assets and Liabilities in addition to monitoring the risk levels of the bank. It will have to articulate current interest rates view of the bank and base its decisions for future business strategy on this view.

RATE SENSITIVE ASSETS & LIABILITIES:

An Asset or Liability is termed as rate sensitive when:

- (a) Within the time interval under consideration, there is a cash flow, (b) The interest rate resets/reprises contractually during the interval, (c) RBI changes interest rates where rates are administered and ,
- (d) It is contractually pre-payable or withdrawal before the state maturities.

Assets and liabilities which receive/ pay interest that vary with a benchmark rate are re-priced at pre-determined intervals and rate sensitive at the time of re-pricing.

2.5 RISK MEASUREMENT TECHNIQUES:

There are various techniques for measuring exposure of banks to interest rate risks:-

1) GAP ANALYSIS MODEL

Measures the direction and extent of Asset-Liability mismatch through either funding or maturity gap. It is computed for Assets and Liabilities of differing maturities and is calculated for a set time horizon. This model looks at the re-pricing gap that exists between the interest revenue earned on the bank's assets and the interest paid on its liabilities over a particular period of time (Saunders, 1997). It highlights the net interest income exposure of the bank, to changes in interest rates in different maturity buckets. Re-pricing gaps are calculated for Assets and Liabilities of differing maturities. A positive gap indicates that assets get re priced before liabilities, whereas, a negative gap indicates that liabilities get re priced before assets. The bank looks at the rate sensitivity (the time the

bank manager will have to wait in order to change the posted rates on any Asset or Liability) of each Asset and Liability on the balance sheet. The general formula that is used is as follows.

$$NII_i = R_i \cdot GAP_i$$

While NII is the net interest income, R refers to the interest rates impacting Assets and Liabilities in the relevant maturity bucket and GAP refers to the differences between the

book value of the rate sensitive assets and rate sensitive liabilities. Thus when there is a change in the interest rate, one can easily identify the change on the net interest income of the bank.

The various items of rate sensitive Assets and Liabilities and off-balance sheet items are classified into time buckets such as 1-28 days, 29-days and up to 3 months etc. and items non sensitive to interest based on the probable date for change in interest. The gap is the difference between rate sensitive Assets (RSA) and rate sensitive liabilities (RSL) in various time buckets, the positive gap indicates that it has more RSAS than RSLs whereas the negative gap indicates that it has more RSLs. The gap reports indicate whether the institution is in a positive to benefit from rising interest rates by having a positive gap (RSA > RSL) or whether it is a position to benefit from declining interest rate by a negative gap (RSL > RSA).

2) DURATION MODEL:

Duration is an important measure of the interest rate sensitivity of Assets and Liabilities as it takes into account the time of arrival of cash flows and maturity of Assets and Liabilities. It is the weighted average time to maturity of all the preset values of cash flows. Duration basis-ally refers to the average of the Asset or the Liability.

$$DPP = D \cdot (dR / (1 + R))$$

3) VALUE AT RISK:

Refers to the maximum expected loss that a bank can suffer over a target horizon, given a certain confidence interval. It enables the calculation of market risk of a portfolio for which no historical data exists. It enable one to calculate the net worth of the organization at any particular point of time so that it is possible to focus on long-term risk implication of decisions that have already been taken or that are going to be taken. It is used extensively for measuring the market risk of a portfolio of Assets and / or liabilities.

4) SIMULATION:

Simulation model help to introduce a dynamic element in the analysis of interest rate risk. Gap analysis and duration analysis as stand-alone to 15 for Asset0Liability Management suffer from their in ability to move beyond the static of current interest rate risk exposures. Basically simulation model computer power to provide what it scenarios.

ASSET-LIABILITY MANAGEMENT: STRATEGIES FOR CORRECTING MISMATCH:

The strategies that can be employed for correcting the mismatch in terms of $D(A) > D(L)$ can be either liability or asset driven. Asset driven strategies for correcting the mismatch focus on shortening the duration of the asset portfolio. The commonly employed Asset based financing strategy is securitization. Typically the long-term Asset portfolio like the lease and hire purchase portfolios are securitized: and the resulting proceeds are either redeployed in short term assets or utilized for repaying short-term liabilities. Such strategies can include for instance issue of external equity in the form of additional equity shares or compulsorily convertible preference shares (which can also help in augmenting the tier 1 capital of finance companies), issue of redeemable preference shares, subordinated debt instruments, debentures and accessing long term debt like bank borrowing and term loans. Strategies to be employed for correcting a mismatch in the form of $D(A) < D(L)$ (which will be necessary if interest rates are expected to decline) will be the reverse of the strategies discussed above.

Asset driven strategies focus on lengthening the maturity profile of assets by the deployment of available lendable resources in long-term Assets such as lease and hire purchase. Liability driven strategies focus on shortening the maturity profile of liabilities, which can include, liquidating bank borrowings which are primarily in the form of cash credit (and hence amenable for immediate liquidation), using the prepayment option (if any embedded in the term loans) and the call option, if any embedded in bonds issued by the sahakari bank; and raising short-term borrowings (e.g.: fixed deposits with a tenor of one year) to repay long-term borrowing).

STRUCTURAL LIQUIDITY PROFILE (SLP):

All Assets & liabilities to be reported as per their maturity profile into 8 maturity buckets.

1. 1 to 14 days
2. 15 to 28 days
3. 29 days and up to 2 months
4. Over 3 months and up to 6 months
5. Over 6 months and up to 1 year
6. Over 1 year and up to 3 years
7. Over 3 years and up to 5 years
8. Over 5 years

CHAPTER 3

BANK PROFILE

3.1 History of co-operative banks in india

3.2 Functions of co-operative society

3.3 Objective of the bank

3.4 Vision and mission of the bank

3.5 Bank profile

3.6 Organization structure of the bank

3.7 Branches Of The Bank

3.8 Product And Service Profile:

CHAPTER 3

BANK PROFILE

3.1 HISTORY OF CO-OPERATIVE BANKS IN INDIA :

The term urban co-operative bank though not formally defined refers to primary co-operative banks located in urban and semi-urban areas. These banks till 1996 were allowed to lend money only for non agricultural purposes. This distribution does not hold today. These bank were traditionally centered on communities, localities, work place groups. They essentially small borrowers and business. Today their scope of operations has widened considerably.

The origins of the urban co-operative banking movement in India can be traced to the close of nineteenth century when, inspired by the success of the experiments related to the co-operative movement in Britain and the co-operative credit movement in Germany such societies were set up in India. Co-operative societies are based on the principles of Co-operation, -mutual help, democratic decision making and open membership.Co-operatives represented a new and alternative approach to organization as against proprietary firms, partnership firms and joint stock companies which represent the dominant form of commercial organization.

THE BEGINNING

The first known mutual aid society in India was probably the "Anyonya Sahakari Mandadi" organized in the erstwhile princely state of Baroda in 1889. Under the guidance of vithal laxman also known as Bhausahab Kavthekar. Urban co-operative credit societies in their formative phase came to be organized on a community basis to meet the consumption oriented credit needs of their members. Salary earners societies inculcating habit of thrift and self help played a significant role in popularity the moments. Especially amongst the middle class as well as organized labour. From its origins then to today, the thrust of UCB's historically,

has been to mobilize savings from the middle and low income. Urban groups and poverty and credit to their members many of which belonged to weaker securities.

The co-operative credit society 1904 was amended in 1912 with a view to broad basing it to enable organization of non-credit societies. The Mac lagan committee of 1915 was appointed to review their performance and suggest measures for strengthening them. The committee observed that such institutions were eminently suited to cater to the needs of the lower and middle income strata if society and would inculcate the principal of banking amongst the middle classes. The committee also felt that the urban co-operative credit movement. Ware more viable than agricultural credit societies. The recommendations of the committee went co-operative credit movement in its own right.

URBAN STATE PURVIWE

The constitutional reforms which had to the passing of the government of India Act 1919 transferred the subject of co-operation from government of India to the provincial government. The Govt of Bombay passed the first state co-operative societies movement its size and shape but was a pace setter of co-operative activities and stressed the basic concept of India, self help and mutual aid "order states followed. This marked the beginning of the second phase in the history of co-operative credit institutions.

The first study of urban co-operative banks was taken by RBI in the year 1958-59. The report published in 1961 acknowledged the widespread and financially sound frame work of urban co-operative banks emphasized the need to establish primary urban co-operative bank in new centers and suggested that state Govt lend active support to their development. In 1963 Verde committee recommended that such banks should be organized at all urban centers with a population of 1 lakh or more and not by any single community or caste. The committee the concept of minimum capital requirement and the criteria of population for defining the urban center where UCB's were incorporated.

DUALITY OF CONTROL

However concerns regarding the professionalism of urban co-operative banks gives rise to the view that they should be better regulated large co-operative banks with paid up share capital and reserves Rs 1 lakh were brought under the preview of the banking regulation Act 1949 with effect from 1st March 1966 and within the orbit of the reserve banks supervision. This marked the beginning of an area of duality of control over these banks. Banking related functions were to be governed by state government as per the provisions of respective state Acts in 1968 UCB's were extended the benefits of deposits insurance.

The madhavdas committee 1979 evaluated the role played by urban co-operative banks in greater details and drew a road map for their future role recommending support from RBI and government in the establishment of such banks in backward areas and prescribing viability standards.

A feature of the urban banking movement has been its heterogeneous character and its uneven geographical spread with most banks concentrated in the states of Gujarat, Karnataka, Maharashtra and Tamil nadu. While most banks are unit banks without any branch network, some of the large banks have established their presence in many states when at their behest multi-state banking was allowed in 1985. Some of these banks are also authorized dealers in foreign exchange.

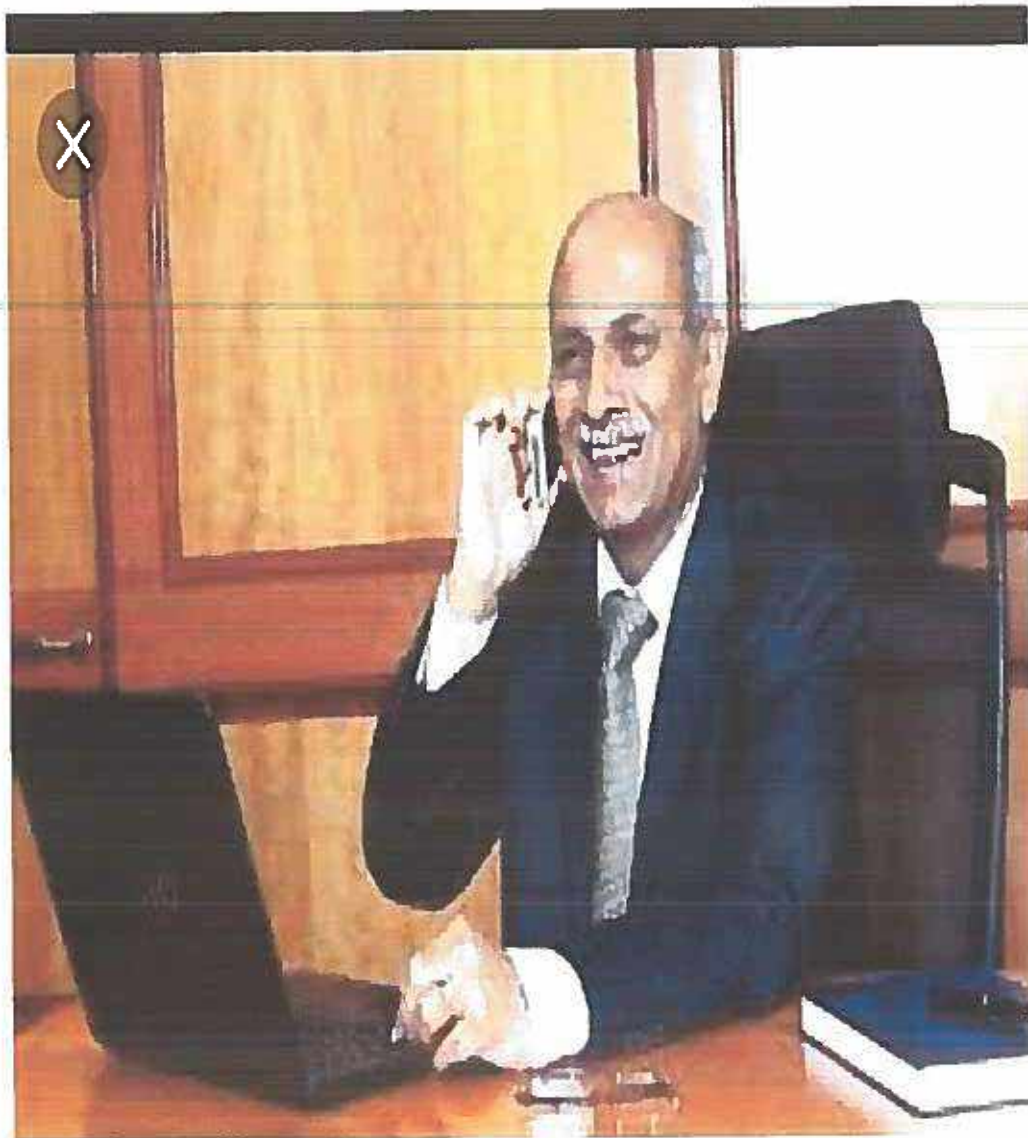
RECENT DEVELOPMENT

Over the years primary co-operative banks have registered a significant growth in number, size and volume of business handled. As on 31st March 2003 there were 2,104 UCB's of which 56 were scheduled banks. About 79 percent of these are located in five states Anadhra Pradesh, Gujarat, Karnataka, Maharashtra and Tamil nadu. Recently the problems faced by a few large UCB's have highlighted some of the difficulties these banks face and policy endeavors are geared to consolidating and strengthening these sector and improvement government.

3.2 FUNCTIONS OF CO-OPERATIVE SOCIETY

- Lending short term, medium, and consumption loans.
- Supervision over loan utilization.
- Recovery of loan.
- Timeliness of sanction of loans to members.
- Adequacy of loans sanctioned.
- Ensuring proper utilization of habit of thrift and savings among members.
- Timely recovery of loans dues.

CHAIRMAN:



Dr. Prabhakar Kore Credit Souhard Sahakari LTD; Ankali

Funder: Dr. Prabhakar B Kore

**A Study on Assets and Liability Management at Dr.Prabhakar Kore Credit
Souhard Sahakari Niyamit, Ankali**

INTRODUCTION

Dr. Prabhakar Kore offered leadership to institute “The Anakli urban co-operative society “with an initial fund of Rs 1.71,059 and membership of 57 people. The Society has a governing body of 7 directors .The co-operative society was inaugurated on 29/09/1998 in the presence and blessing of His Holiness Shri Sidheshwar swamiji.

The prestigious & dynamic, personality,-Dr.Prabhakar Kore, who is the Member of parliament in Rajya Sabha,the chancellor of K,L,E University, Chancellor ,K,L,E,University since 2006; Chairman , K,L,E.Society, Belgaum since 1984; Working President, Belgaum District Task Force on Total Quality Management in Higher Education; Vice-President, All Indian Private Medical and Engineering colleges Association, Bangalore; Director,(1) National Federation of Cooperative Sugar Factories, New Delhi since 1990 and (2) VRL Logistics, 2008; Member, AICTE, New Delhi have been the inspiration, supportive measured guideline and acting as the back bone of the so said Anakli Urban Co-operative Society Ltd., the dream which has come to realistic under the strong and pure Banking base.

The co-operative society was renamed “Dr.Prabhakar Kore Credit Souhaed Sahakari Niyamit, Ankali” as a taken of honour.Its Dr.Prabhakar Kore (M.P) an education and social reformer of the members and the public.

The society offers one day free meals to the patients at KLE society hospital at Belgaum. Various competitions are conducted and prizes are awarded to the winners. On the birthday celebration of Dr. Prabhakar Kore.The bank has been offering financial and humanitarian aid to the poor students and also to flood affected people.

3.3 OBJECTIVE OF THE BANK

1. To extend banking facility in rural areas and semi-urban areas there by encourage rural saving and mobilize those saving for the economical development of the country.
2. To cater the credit needs of the rural areas.
3. To extend financial help for the establishment of ware housing and marketing securities in different parts of the areas.
4. To grant the financial facilities to the small scale industries in the country.
5. To provides remittance facilities to the customers.

3.4 VISION AND MISSION OF THE BANK

1. Emerging as a strong vibrant responsive competitive bank.
2. Serving its constituents and stakeholders as a faithfully and friendly financial Partner.
3. To develop the rural area and make them strong in finance.
4. To extend the banking facility throughout the country especially in rural areas.

3.5 BANK PROFILE



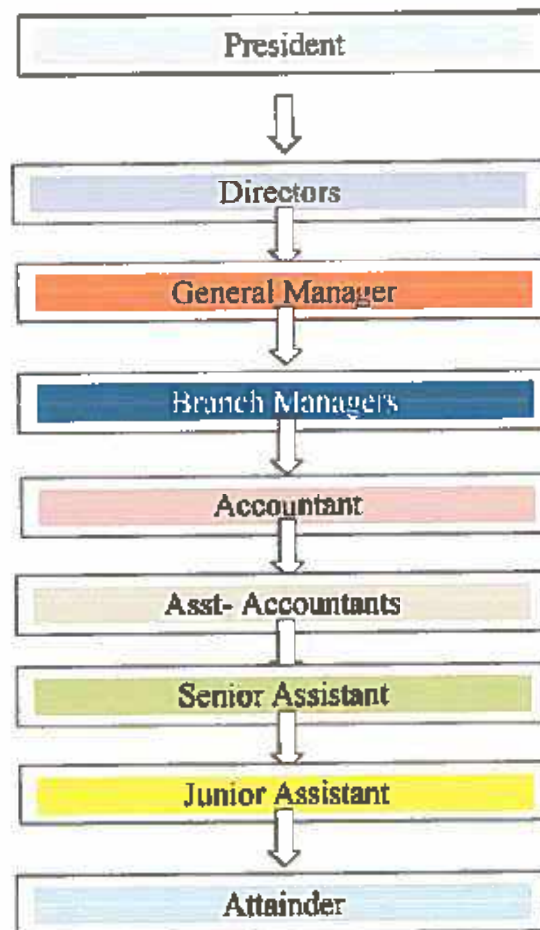
A Study on Assets and Liability Management at Dr.Prabhakar Kore Credit Souhard Sahakari Niyamit,Ankali

Bank Profile:

Name of the bank	Dr.Prabhakar Kore Credit Souhard Sahakari Niyamit, Ankali.
Address	Rajiv Ghandi Road, A/P-Ankali, Tal-Chikodi. Dist- Belgaum.
Telephone No	(08338)254251/ 9972705123
Established on	29 September 1988
Constitution	Co-operative
Facilities	Online banking
Branches	39
Registration No	Sou Act /208/111/2006-07
Founder	Dr. Prabhakar Kore
Website	WWW.dpksouhard.com
Working hours	10:30am to5:30pm 10:30 am to2:30pm Saturday
Audit class	" A" class

3.6 ORGANIZATION STRUCTURE OF THE BANK

ORGANIZATION STRUCTURE



**A Study on Assets and Liability Management at Dr. Prabhakar Kore Credit
Souhard Sahakari Niyamit, Ankali**

BOARD OF MEMBERS:

SL No	NAMES	POSITION
1	Shri. Amit P Kore.	Invite-Director
2	Shri. Mahantesh L Patil.	Chairman
3	Smt. Shobha A Jakate.	Voice-Chairman
4	Shri. Mallikarjun G Kore.	Director
5	Shri.Siddgouda T Magdem.	Director
6	Shri. Annasaheb S Sankeshwari.	Director
7	Shri. Pintu S Hirekurabar.	Director
8	Shri. Mahadev B Pol.	Director
9	Smt. Shailaja S Patil.	Director
10	ShriBasanagouda M Asangi.	Director
11	Shri. Sukumar B Chougale.	Director
12	Shri.Limbaji R Nagarale.	Director
13	Shri. Kadappa S Sangote.	Director
14	Shri. Jyotigouda M Patil.	Director
15	Shri. Sachin V Kutole.	Director
16	Shri. Ganapati J Kamate.	Director
17	Smt. Jayashri P Medar.	Director
18	Smt. Parvati N Dharanayik	Director
19	Shri.Neharu S Chikali.	Director
20	Shri.D.S.Karoshi	General Manager

The following composition of members on the board Dr.Prabhakar Kore Credit Southward Sahakari niyamit ankali.

Niyamit.Ankali.Niyamit.Ankali.

MEMBERSHIP

According to the provision of the by- laws the society shall have the following members

1. Regular Members
2. Associate Members

Any individual can become a member of the society if

- He is an adult.
- He resides within the area of operation of the society.
- He engaged in forming activity
- He is of sound mind
- He is not bankrupt and
- He is to abide by the provisions of by laws of the society.

BENEFITS

A member gets the following benefits by becoming a member of the society.

The benefits are as follows

- A member gets short term loans, medium term loans and consumption loans.
- He gets fertilizers and pesticides.
- He is in a position to get advantages.
- He can get dividend on share capital contributed.

LOSE OF MEMBERSHIP
A member shall lose his membership under the following conditions

- Death of a member.
- Expulsion from the society.
- Leaving the membership.
- Transfer or seizure of share capital.

**A Study on Assets and Liability Management at Dr.Prabhakar Kore Credit
Souhard Sahakari Niyamit, Ankali**

3.7 BRANCHES OF THE BANK

The first branch was started at Chandur on 18/03/1991 in accordance with the vision of Dr.Prabhakar Kore. The second branch of the society is at DKSS in Chikodi on 18/05/1991. The third branch at Kerur on 27/02/1992.

The fourth branch of the society is in Diggewadi on 03/04/1994. Fifth at Tilakwadi in Belgaum on 09/09/2002. Sixth branch is at college road Belgaum on 15/08/2008. Seventh in Gokak on 05/04/2011 Bedikyal, Ankali (Head office), Yadur and yadrav.

SI NO	BRANCH S	DATE OF STARTING	PHONE NO	ADDRESS
1	Ankali	29/09/1988	Phone:08338 254251/7259027103	Rajiv Ghandi Road, A/P-Ankali, Tal-Chikodi.
2	Chandur	18/03/1991	Phone:08338- 258592/7259027104	Main Road. A/P-Chandur. Tal- Chikodi.
3	DSF	27/02/1992	Phone:08338	Ganga Sugars marketers complex,

**A Study on Assets and Liability Management at Dr.Prabhakar Kore Credit
Souhard Sahakari Niyamit,Ankali**

			276875/7259027106	Tal-Chikodi.
4	Kerur	18/05/1991	Phone:08338 286863/7259027105	Ankali Road. Kerur. Tal-Chikodi
5	Diggewadi	04/03/1999	Phone:08331- 228251/7259027107	Ankali-Chinchali Road, Diggewadi. Tal- Raibag.
6	Athani	11/12/2009	Phone:08289- 252251/7259027111	Manikchand Rathod buiding Main Road Athani.
7	Belguam	09/09/2002	Phone:0831- 2465251/725902710 8	K L E Herwadkar Building,1 st railway gate,talakwadi, Belguam.
8	Nippani	31/05/2012	Mobile No: 7259027115	Bagewadi building Ashok nagar, Nippani.
9	Shivashakt i Sugar site Yadrav	05/12/2011	Mobile No- 7259027113	Shivashakt sugars Ltd site Yadrav,Tal-Raibag.
10	Chikodi	31/07/2009	Phone:08338-	Charamurthi matt comlex,Basav

**A Study on Assets and Liability Management at Dr.Prabhakar Kore Credit
Souhard Sahakari Niyamit,Ankali**

			273151	circle, chikodi,
11	Chinchali	12/04/2012	Mobile No:7259027114	Karakhai building Raibag- Kudachi road, Chinchali, Tal- Raibag.
12	Harugeri	24/11/2012	Mobile No:7259027116	Santosh Sadalage building Gokak, Athani road Harugeri, Tal-Raibag.
13	Bailhongal	21/12/2013	Mobile No:7259025795	Belguam road OPP-Bus stand, Tal-Bailhongal.
14	Examba	23/01/2014	Mobile No: 7259025796	Kamate building, near channama circle, Tal-Chikodi.
15	Sadalaga	09/07/2014	Mobile No:7259025797	Pradhani complex, OPP-new bus stand, Tal-Chikodi.
16	M,K,Huba li	22/11/2014	Mobile No:7259025798	I,N,Patil building. P,B road.near bus stand, Tal-Bailhongal.
17	Rajaji nagar Bangalore	01/02/2015	Mobile No:7022033501	Kle society's Nijalingappa college campus.2 nd block Rajajinagar, Bangaluru.

**A Study on Assets and Liability Management at Dr.Prabhakar Kore Credit
Souhard Sahakari Niyamit,Ankali**

18	Gokak	17/02/2011	Phone:08332- 225251/7259027112	Vikram angadi building, bus stand road, Gokak.
19	Yadur	22/04/2015	Mobile No:7022033503	Soundatte building,in front of Government high school Yadur.
20	Mahalinga pur	04/07/2015	Mobile No:7022033504	Basaveshwar circle, APMC road, matagar building.
21	.Haveri	04/07/2015	Mobile No:7899781341	P,C Kolli hights, near Shivashakti palace, vidya nagar west P,B road.
22	Gataga	21/08/2015	Mobile No:7899781342	Taj hotel building, near bus stop, Nippani - Inchalkaranji road.
23	Kagwad	06/01/2016	Mobile No:7899781343	Sagar khot building, vijaypur road, kagwad.
24	Ainapur	06/01/2016	Mobile No:7899781344	P, K, P, S Building, bus-stand road, Ainapur.
25	Bannatti	06/01/2016	Mobile No:7899781345	Tammaniyappa road, rajmahendra complex, in front of V, R, L office.

**A Study on Assets and Liability Management at Dr Prabhakar Kore Credit
Sahard Sahakari Niyamit, Ankali**

26	Vadaganv Belagavi	15/06/2016	Mobile No:7338451768	Renuka nivas building, yallur main road, vadaganv.
27	Mudhol	29/03/2017	Mobile No:7338451767	Old raghavendra theatre, shaha building, near new Town council ,mudhol.
28	Dharwad	29/03/2017	Mobile No:7338451769	R,L,S Composite, P, U College campus.
29	Belgaum	15/08/2008	Mobile No:7259027109	Adarsh palace, belgaum.
30	Belgaum	09/03/2015	Mobile No:7022033502	Hanjyavar building, back side of Hindalaga Ganapati temple, Belgaum.
31	Terdal	04/10/2018	Mobile No:7337882614	Tavan ganga building, Near Yallamma temple.
32	Bagalkot	05/10/2018	Mobile No:7337882615	In front of Shree. B.I college, 1 st floor Athani marriage hall complex vidyagiri.

**A Study on Assets and Liability Management at Dr.Prabhakar Kore Credit
Souhard Sahakari Niyamit,Ankali**

33	Shirguppi	08/02/2019	Mobile No:9606987752	Basav circle,Jugul road,Chougala building.
34	Kankanwa di	08/02/2019	Mobile No:7337882616	B.B Mudalagi building, 1 st floor, Mahalingpur road.
35	Jamakhan di	27/06/2017	Mobile No:7624987208	Manik plaza,in front of P,B high school,bus stand road.
36	Davangere	14/12/2017	Mobile No:7624987210	Aradhya house 385 K.B extension 2 nd cross.
37	Ranebenn ur	14/12/2017	Mobile No:7624987212	In front of Channamallikarjun towar, K.I.B P.B road.
38	Sankeshw ar	13/05/2018	Mobile No:7337882613	Nadafh complex,in front of bus stand.
39	Kormanga l	25/11/2017	Mobile No:7624987211	No:58/1 L.V complex,2 nd floor,7 th block, 80 feet road.

Source Bank Report

3.8 Product and Service Profile:

Products:- All types of accounts and Deposits

Loans-

- ❖ Surety loans
- ❖ Vehicle loans
- ❖ Gold loans
- ❖ Cash credit loans
- ❖ Medium term loans
- ❖ Irrigation loan
- ❖ Salary loan

Accounts -

- ❖ Saving Account
- ❖ Current Account
- ❖ Recurring Account

Deposits-

- ❖ Fixed Deposit
- ❖ Bhagyajyoti Deposit
- ❖ Call Deposit
- ❖ Recurring Deposit
- ❖ Saving Bank Deposit
- ❖ Balasanjeevini Child Life Deposit
- ❖ Current Deposit

LOANS

1. Surety loan:-

Sahakari lends the personnel loans on guarantors up to Rs 50000/ to Rs 100000/ under the restricted rules of the sahakari for the tenure of 12 months to 24 months which help to meet all your financial needs effectively. Personnel loan offer for the farmers, self-help group of women's, Agriculturists, industrialists, self-employed business, salary based employees etc...

2. Vehicle Loan:-

Sahakari offers great vehicle loan deals with up to 100% finance as per the quotation. Whether it is a new or second hand vehicle with an attractive interest rates and flexible repayment returns.

- ¾ amount with competitive interest rate and lower processing.
- Vehicle of all brands are financed under hypothecation.
- 60% loan landed on the valuation of the second hand vehicle.
- Tenure up to 60 months.
- Distribution of loan is as per the sahakari rules.

3. Gold Loan :-

Sahakari offers safe, secure and easy gold loan for all types of people. Quick and spot sanction, easy with one page documentation.

- Special interest rate @1% per month customers.
- Lowest monthly outflow.
- For the purpose of fulfill the emergency needs of borrowers.
- Limitation of loan is depends upon the value of gold
- Salary certificate by drawing officers of their respective

4. Cash credit Loan:-

This loan can be offered by a businessman, as a sahakari bank or a firm where the amount to be credited or debited as per the business need with competitive and attractive interest rates as per the sahakari rules.

- Quarterly interest and installment 14%.
- Yearly interest and installment 16.5%.

5. Medium Term Loan:-

Sahakari provides quick and appraised loan with speedy approvals. Residential and commercial properties accepted as collateral.

- Sahakari quarterly interest and installment 14.5%.
- Sahakari yearly interest and installment 16.5%.

6. Irrigation Loan:-

A loan useful for the farmers they can offer for the pipeline from river, for buying agricultural equipments etc., at comparative and lower rate of interest.

- Quarterly interest and installment 14%.
- Yearly interest rates and installment 15%.

7. Pigmy Loan:-

Eligibility- He should be member of the bank and he should be permanent employee in government institution. Surety- There must be two sureties to the loan and they must be members of the bank.

Limit of loan-80% on borrower's deposit. Interest- According to RBI. Document required- salary by drawing officers of their respective.

➤ ACCOUNTS AND DEPOSITS:

- **Savings A/C :**

A complete benefit through saving for all your day to day needs through our savings deposit account by earning interest @4% per annum which will be credited yearly as per sahakari rule.



Benefits

- Everyday solution for farmers.
- The account that understand your unique requirements.

- **Recurring A/C:**

RD is the loan term investment.

- An investment as small as Rs.100 (and in multiples of Rs.10 thereafter or as range as Rs. 1 lakh per month.
- A minimum tenure of 12 months up to maximum tenure of 5 years.
- For a much smaller investment per month get interest rates equal to that of regular fixed deposit
- Grace Day's facility is 5 days. If the investment is paid within 5 days of the investment due date, the customer will not be charged any penalty.
- **Current A/C :**



It is an account which is opened by the businessmen, companies and institutions for collecting their cheques and making payment through bank, this account is opened with a minimum amount of Rs.500. IN A CURRENT ACCOUNT, A CUSTOMER CAN DEPOSIT ANY AMOUNT OF MONEY ANY NUMBER OF TIMES. He can also withdrawal any amount as many times as he wants, as long as he has funds to his credit.

FEATURES:

- No restriction on number of withdrawal.
- Bank charges are paid by customer to bank.
- Payment through cheque / card.
- No interest paid to customer.
- It is a running and active account.

Current account can be opened by:

- An individual who has attained maturity.
- Two or more individuals in their joint names.
- Sole proprietorship concerns.
- Partnership concerns.
- Hindu undivided family.
- Limited companies.

Eligibility:

Current account can be opened by businessmen / proprietorship / partnership firms / public or private companies to be operated by authorized signatories.

Required Documents

- Duly filling in account opening form with valid residential proof
- Registration deed
- Partnership Deed
- Memorandum of association as the case may be

- **Fixed Deposits:-**

Sahakari offers a both safety and higher interest for your amount invested in our fixed deposit scheme where it varies as per periods as shown below.



- Easy investment with high returns
- Great rates, flexibility and security in one offering higher rate of interest of 0.5% on fixed deposit for senior citizen

- **Balasanjeevini Deposit:-**

This scheme for children's.



- **Basic Features**

Child's deposit is dream builder flexi child plan is an ideal for those having children between the ages of 0 month to 21 years. It contains innovative features a perfect combination of safety first with optimum return which helps loyalty addition and also for support for education. And the deposit term ranges between 0-10 years. So this is the child future.

❖ **List of Document**

- Identify of guardian
- Minor declaration to be signed by the guardian
- Guardian photo and signature
- Only natural guardian as low are accepted otherwise guardian should be a personnel appointed by the court of law
- Two minor or 2 guardians are not allowed in the minor account
- Required child document
- Birth registration certificate
- School identify card with photo and DOB mentioned.

• **Bhagyajyoti Deposit:-**

A lump sum account from amount Rs.500 to on limit can be invested in Bhagyajyoti deposit scheme where the face value will become double in return for the period of 7 year.



ATTRACTIVE DEPOSIT SCHEME

Period	% of interest Rate
46 Days To 90 Days	8.00%
91 Days To 179 Days	8.50%
180 Days To below 1 Year	10.00%
1 Year To below 2 year	10.00%
2 Year ^ above	10.50%
Saving Deposit	4.00%
Recurring Deposit	10.00%
Pigmy Deposit	4.00%

Sources Reports

Note. -05. % extra on the above mentioned rates for all "senior citizens, and societies.

SERVICES:

- **RTGS and NEFT services with axis bank:** - The society/Sahakari give the services of RTGS /NEFT by giving quick services for the surrounding people.
RTGS:-Real Time Gross Settlement
NEFT:-National Electronic Fund Transfer
- **E-stamp services in chikodi branch:-** E-stamping is an electronically generated impression on the paper to be-note the payment of stamp duty were central record keeping agency will entitled to agency to agree % commission on the amount of stamp duty collected by the authorized collection centers as may be specified terms of the terms of the agreement

A Study on Assets and Liability Management at Dr. Prabhakar Kore Credit Souhard Sahakari Niyamit, Ankali

- Gold loans @on 12% interest rate.203
- **26 years satisfactory and computerizes service:-** Dr. Prabhakar Kore Credit Souhard Sahakari is the 23 years satisfactory and giving computerized services to customers. It is also following strong and pure banking.
- **In head office there is a safe deposit locker services with reasonable rate:-** Safe deposit locker service to customers for reasonable rate of interest.
- **Axis Bank at par cheques available in very affordable price:-** Dr. Prabhakar Kore Credit Souhard Sahakari At par cheque should be connected with axis bank in very affordable price.
- **AREA OF OPERATION:-**
 1. Sahakari operates all over Karnataka.
 2. It's having only 20 more branches.
 3. Main operation is collection deposits & provides a loan facility to the customers.

BUSINESS PRACTICES:-

1. Finance

- Preparing daily Cash & bank a/c statement
- Maintaining expenses register
- Monthly preparation of balance sheet, profit & loss a/c
- Bank and branch reconciliation statement preparation
- Verifying salary statement
- Fund arrangement for loans & advances
- Mobilization of fund
 - Investments
 - Bank a/c
 - Cash a/c
- Maintaining bank Assets register

2. Marketing

Canvassing through advertisement. Canvassing on various deposit schemes which of higher rates and varied loans under invest rate of interest through branch manager. Manager is the big role in marketing operation, he'll be deciding. Here no sales manager as well as broker manager should be decide final decision.

3. Human Resources

- Recruitment order by selecting through interview
- Allotment of branches to the candidates
- Executing the pay register/ salary payment by considering the leave, advance, loan deduction, tax payment, insurance, PF etc
- HRA execute the lease deeds which are on rental basis.

Current Status:-

The sahakari is in the highest profitable level during the year. The sahakari has expanded the work haw opening the branches of our sahakari. The sahakari opened 15 branches during this year. The sahakri has reached highest goal of collecting deposits for during this year.

The sahakari has executed its giving the loan for pipeline or irrigation loan, power cart loans for members, vehicle loans by giving the 255 of vehicle up will today

The sahakari ha enrolled social services by giving prizes for the winners in painting or deft completion of all the higher & primary school children participated.

The sahakari is great role by giving service, as issuing train ticket, bus, mobile, western money transfer etc. The sahakari has established its significant role is "Customization by quick & fast / online service. The

**A Study on Assets and Liability Management at Dr.Prabhakar Kore Credit
Sahard Sahakari Niyamit,Ankall**

sahakari is performing well in current situation and providing different services to the customers.

Future Plans:-

- Opening new branches.
- Exploiting e-stamping facility to all branches
- Providing RTC (Right of Tenant Certificate) to the formers through sahakari.
- Increasing the deposits & loans facilities.
- Making core banking facility.
- ATM facilities at SSL Soundatti and DKSSK sing chikodi for the purpose of salary.

3.9 SWOT Analyses:-

Strength and weakness are internal, opportunities and threats are external.

❖ **STRENGTH**

- The bank main strength is strong & pure banking
- Very simple and efficient Management
- Both the combination of work i.e. man and machinery
- The bank is modifying the work in online computer
- The sahakari provides a lowest rate to the customer
- The sahakri provides various services to the customer.

**A Study on Assets and Liability Management at Dr.Prabhakar Kore Credit
Souhard Sahakari Niyamit,Ankali**

❖ **WEAKNESS**

- The sahakari not provide a core banking facility to the customer
- Too much formalities to be made to be take loan are repay them or in keeping deposits.
- ATM Facilities

❖ **OPPORTUNITIES**

- Bringing new schemes to public people
- Well maintained value for the business
- Establish new branches in specified areas.

❖ **THREATS**

- Over Draft facility to customers.
- Increasing number of competitors

CHAPTER-4

DATA ANALYSIS AND INTERPRETATION

4.1 Shows Financial Risks

4.2 Shows Bad Debts

4.3 Shows Deposits to loan ratio

4.4 Shows Liquidity And Profitability Ratios

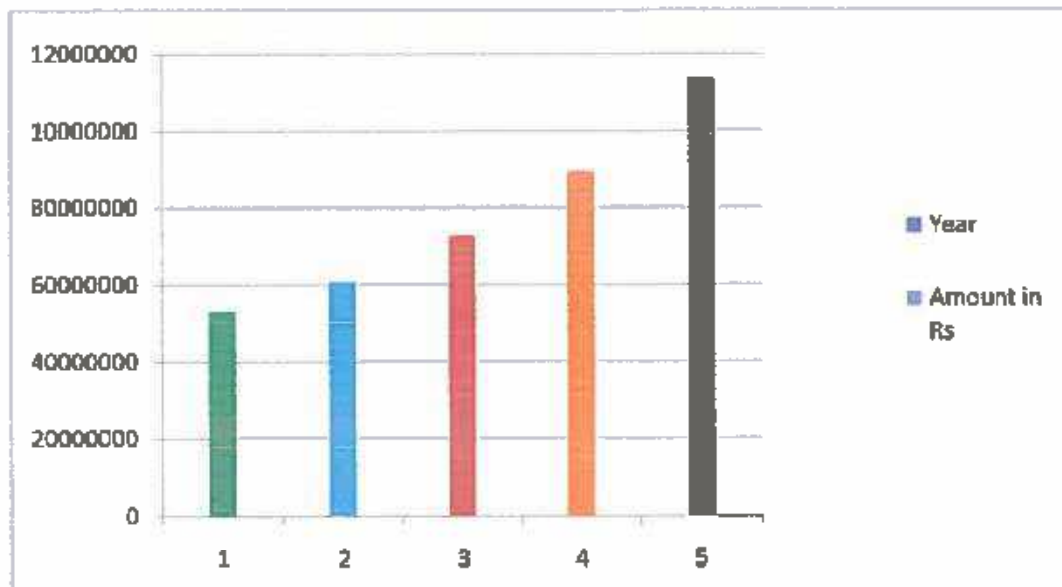
4.5 Shows Net operating Ratio

4.6 Shows Current Ratio

TABLE NO 4.2 Shows Bad Debts :

SL.NO	Year	Amount in Rs	Percentage%
1	2014-15	53198630	14
2	2015-16	60810298	15
3	2016-17	72846426	19
4	2017-18	89638806	23
5	2018-19	113521980	29

(Source:Annual Reports)



In the above table it indicates that bad debt is increasing in trend. Bad debt is 2014-2015 is 14%, 2015-2016 is 15%, 2016-2017 is 19%, 2017-2018 is 23%, & 2018-2019 is 29%. This figure shows an increasing because of facing high risk towards bad debts. It shows bad debts are a high negative risk in the Sahakari Bank so, when bad debts are high that time the bank should provide a low financial assistance to the customers.

**A Study on Assets and Liability Management at Dr.Prabhakar Kore Credit
Souhard Sahakari Niyamit, Ankali**

FINANCIAL POSITION OF SAHAKARI BANK

Table No : 4.3 Shows Comparative balance sheet as on 31st march (2014-2015 to 2018-2019)

Particular	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Assets; Fixed Asaets					
Land & Building	5362863	4826576	4343919	67962286	62218565
Furniture & Fixtures	11078491	13854999	16954843	23970927	28949256
Investment	932543441	776455345	1069940653	1504265425	2024535992
Current Assets					
Loans & Advances	1250263222	2385682836	3388195864	3558170178	4885523711.6
Share	85000	85000	85000	85000	85000
Other receivables	1509770	1595450	1757316.26	1959152.12	2053978.70
Cash in hand	2948932	4812040	5713588	6379255	19304217
Bank balance	225344264	639645675	435020020.79	1019250150	1288657394.38
Total Assets	2429127983	3826957921	4922011204.05	6182042373.12	8311328114.68
Liabilities;					
Share Capital	15216520	17689500	19759300	20857500	21873400
Reserves & other fund	110590348	124115389	148520317.88	182777302.57	228972413.03
Sundry Liabilities	114460593	186539188	322418415.93	400783185.23	630990376.23
Statutory & Other deposits	2178708301	3480019065	4405818982.55	5542161606.86	7368345529.70
Profit & Loss a/c	10152221	18594779	25501187.69	35462778.46	61146395.72
Total liabilities	2429127983	3826957921	4922011204.05	6182042373.12	8311328114.68

Sources: Annual Reports

**INTERPRETATION OF COMPARATIVE BALANCE SHEET (2014-2015 TO
2018-2019)**

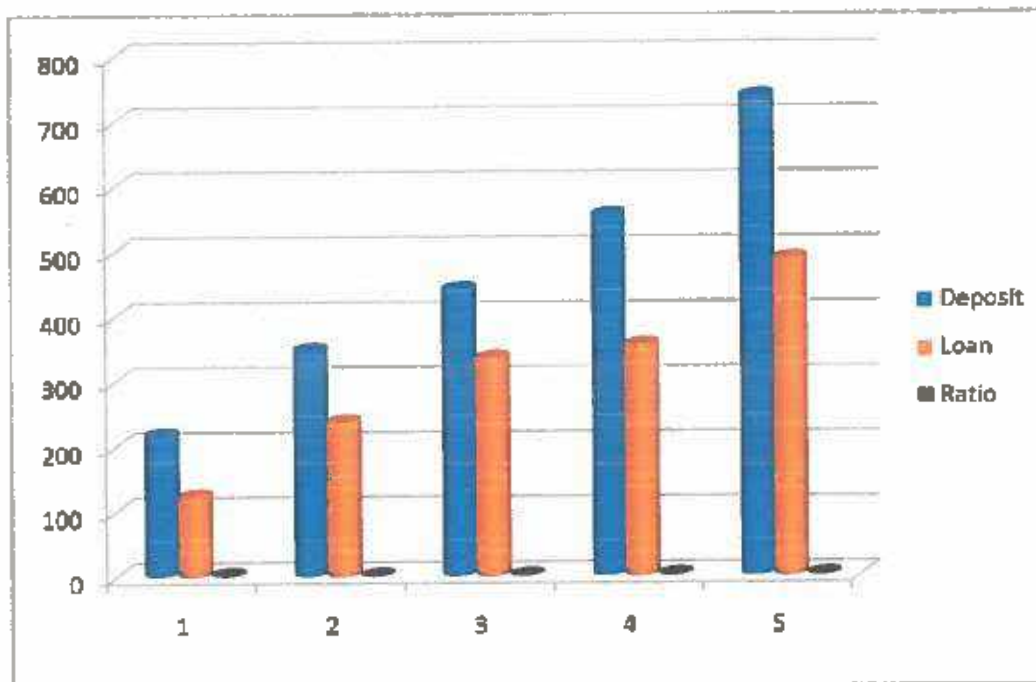
The above table No 4.3 shows the financial position of the sahakari bank from 2014-2015 to 2018-2019. Cash balance increased from Rs.2940932 to Rs.19304217. Bank balance increased from Rs.225344264 to Rs.1288657394.38. And also Land & Building increased from Rs.5362863 to Rs.62218565. Furniture and Fixtures increased from Rs.11078491 to Rs.28949256. And Investments increased from Rs.932543441 to Rs.2024535992. Loans and advances increased from Rs.1250263222 to Rs.4885523711.6. Other receivables increased from Rs.1509770 to Rs.2053978.70. And also Share capital of Dr. Prabhakar Kore Credit Souhard Sahakari Ltd, Ankali increased from Rs.15216520 to Rs.21873400. Reserve and other funds increased Rs.110590348 to Rs.228972413.03. Sundry Liabilities increased from Rs.114460593 to Rs.630990376.23. And Statutory and other deposits increased from Rs.2178708301 to Rs.7368345529.70. And also Profit and Loss a/c increased from Rs.10152221 to Rs.61146395.72. So the overall 5 years balance sheets shows increasing consequences in all years.

Liquidity and Profitability Ratios :

TABLE NO-4.4 Shows Deposits to loan ratio:

SL.NO	Year	Deposit	Loan	IN CRS
				Ratio
1	2014-15	217.87	123.83	2
2	2015-16	348.00	237.49	1
3	2016-17	440.58	335.49	1
4	2017-18	554.21	355.17	2
5	2018-19	736.83	487.69	2

(Sources : Annual Reports)



The table 4.4 reveals that , sahakari bank's main operation is collecting deposits & providing loan facilities to the customers. The above diagram shows high collecting deposits & providing medium type of loans to the customers. It shows the performing level of the sahakari bank. Here, when deposits increases then also loans are increases in the subsequent years.

CHAPTER-5
FINDINGS, SUGGESTIONS AND CONCLUSIONS

5.1 Findings

5.2 Suggestions

5.3 Conclusion

CHAPTER-5

FINDINGS , SUGGESTIONS AND CONCLUSION

5.1 Findings

1. The non performing assets of the bank were increased in all the years.
 - Bank incurring non performing assets consequently in all year. In the year 2014-2015 the 10.88%, 2015-2016 is 11.47%, 2016-2017 is 17.65%, 2017-2018 is 24.71%, and 2018-2019 is 35.29% where as increased to non performing assets is 2014-2015 to 2018-2019.non performing assets increased negative sign for the Sahakari Bank. It shows the sahakari bank facing a high risk towards non performing assets.
- Bad-debt of bank is increasing from year to year. Bad-debt is 2014-2015 is 14%,2015-2016 is 15%, 2016-2017 is 19%, 2017-2018 is 23%, and 2018-2019 is 29%.This figure shows an increasing because of facing the high risk towards bad debt.
- The bank lower the current ratio in the year 2014-2015, in which the ratio are above high ie 0.82 in the year 2015-16.i.e The standard ratio . The sahakari banks current ratio are above the standard ie 0.64 in 2014-2015, and 0.82 in 2015-2016, 0.81 in 2016-2017, 0.77 in 2017-2018, and 0.77 in 2018-2019.The current Assets are lower than the current liabilities.
 - In 2014-2015 the profit has increased to Rs 1015221 and in 2018-2019 it has increased to Rs 61146395.72.
 - The total profit is showing an increasing trend. This is good for the bank.
 - The total liabilities were Rs 2429127983 during the year 2014-2015.They were Rs 8311328114.68 in the year 2018-2019.
 - The total bad-debt showing an increasing trend. This is not good for the bank.
 - Overall performance of sahakari bank is good.
 - The bank is providing many services to the customers.

5.2 Suggestions

- They need to recover loans and advances in time to maintain NPA performance level in Sahakari Bank.
- During loan providing, Sahakari Bank should look surety of the customer.
- Bank need to adhere to standard ratio & need to maintain the standard current ratio like 2;1.
- Bank should go for adopting new technology. Such as ATM, Online banking etc.
- Bank should maintain good relationship with it's customers.
- Bank employee should visit customer home and remind about there loans.
- He should not be debarred under any law.

5.3 Conclusion

A study on “Assets & Liability Management” At Dr.Prabhakar Kore Credit Souhard Sahakari Ltd., Ankali has been a great experience. It has helped me to understand the working of an organization to a great extent. This has also been an excellent learning process with respect to interaction with different people from various department. The kind of practical exposure it has rendered me is exceptional. The study has leaded me to understand the various strategies relating to finance.

The Sahakari bank was extremely helpful in providing all requisite information. The head of the various departments were always accessible to gather the information from them. The fact and figures required were told without any hesitations.

Overall it was great way of learning about the organization’s functioning and the way of developing interaction skill, which will definitely be a guidance for my future.

Dr.Prabhakar Kore Credit Souhard Sahakari Ltd ., Ankali has a good financial condition.

Recommendation:

- Arranging motivational programs to employee.
- Providing canteen facilities to their worker.
- Opening new branches in rural areas.
- The bank providing a new technical service to customer.

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❖ **Websites :**

- www.Shodaganga.com
- www.wikipedia.com
- www.dpkSouhard.com

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			Kerure building	300465	
			Diggewadi building	1124810	
			Adarsh central palace, Belgaum	48913816	
			Head office	10163075	
			Head office building construction	36200	
			FURNITURE, FIXTURES, DEAD STOCK, AND OTHER PROPERTY		28949256
			BRANCH ADJUSTEMENT A/C		286174440 2.86
			Head office deposits A/C		
TOTAL		11173072517.5 4	TOTAL		111730725 17.54

**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON PERFORMANCE OF LOANS AND ADVANCES"
AT
SHRI D.T.PATIL CO-OPERATIVE BANK LTD., CHIKODI**

**Submitted to
RANI CHANNAMMA UNIVERSITY, BELAGAVI**



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

**Miss. Pratibha R Lainadar
M.COM-IV SEMESTER
REGISTER NO: MC191608**

**UNDER THE GUIDANCE OF
SHRI. S. M. BHOSAGE**

**K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,**

CHIKODI-591201

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that **Miss. Pradbha R Lainadar** has satisfactorily completed the Project Report Entitled **"A Study on Performance of Loans and Advances"** At **Shri D.T.Patil Co-operative Bank Ltd. Chikodi** for the partial fulfilment of Degree in **Master of Commerce** in **Rani Channamma University, Belagavi** during the academic year **2020-2021**.

SHRI. S. M. BHOSAGE

PROJECT GUIDE

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ಶ್ರೀ ಡಿ. ಡಿ. ಪಾಟೀಲ ಕೋ-ಆಪರೇಟಿವ್ ಬ್ಯಾಂಕ್ ಲಿ., ಚಿಕ್ಕೋಡಿ

ಶ್ರೀ ಡಿ. ಡಿ. ಪಾಟೀಲ ಕೋ-ಆಪರೇಟಿವ್ ಬ್ಯಾಂಕ್ ಲಿ., ಚಿಕ್ಕೋಡಿ

Ref. No. _____

Date : 8 / 09 / 2021

CERTIFICATE

This is to certify that **Miss. Pratibha R Lainadar** Student of **M.COM IV Sem** in **K.L.F. Society's Basavaprabhu Kore Arts and Commerce College Chikodi Dist: Belagavi** had completed "**Performance of Loans and Advances**" of "**Shri. D .T. Patil Co-op. Bank Ltd., Chikodi**" from **25-06-2021 to 25-08-2021**.

During her study, she has been provided with the necessary information.

We wish her every success in her future endeavors.

Shri D. T. Patil Co-op Bank Ltd. CHIKODI

A. Mark
Managing Director

DECLARATION

I declare that the project report entitled "**A Study on Performance of Loans and Advances**" At **Shri D.T. Patil Co-operative Bank Ltd., Chikodi** is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "**Master of Commerce**" as prescribed by the **Rani Channamma University, Belagavi** for the academic year **2020-21**.

It has been prepared under the guidance and supervision of **Shri. S. M. Bhosage**, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 21/09/2021

Place: Chikodi

Miss. Pratibha R Lainadar

Register No: MC191608

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

I sincerely express my deep sense of gratitude and appreciation to Internal Guide **Shri. S. M. Bhosage**, for his careful and valuable guidance, never ending patience and constant encouragement throughout the project.

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I express my sincere gratitude to **Shri A S Masti**, Manager, **Shri D.T.Patil Co-operative Bank**, Chikodi for providing me an opportunity to do a project in their organization.

At the outset, I would like to thank all the teaching faculty of PG Department of Commerce and Management for their valuable suggestions during project work.

My thanks are also to library staff for their cooperation during the course of project work and I am also thankful to Printers for their skillful printing of this project.

Finally I owe my deep sense of gratitude to my parents, friends and relatives for their constant encouragement and support.

Miss. Pratibha R Lainadar

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CHAPTER - 1
INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

1.2 REVIEW OF LITERATURE

1.3 STATEMENT OF PROBLEM

1.4 NEED FOR THE STUDY

1.5 OBJECTIVE OF THE STUDY

1.6 SCOPE OF THE STUDY

1.7 RESEARCH METHODOLOGY

1.8 LIMITATION OF STUDY

1.9 SCHAPTER SCHEME

CHAPTER- I

INTRODUCTION AND RESEACH DESIGN

1.1 INTRODUCTION :

Loans and advances are the most important aspect of any banking organization. Loan is a type of debt. Like all debt instruments, a loan entails the redistribution of financial assets over time. Advances is a term that describes a secured loan made to a member. Advances are offered at fixed or floating rates with specific maturities or with embedded options for early redemption. Finance is an essential for every business enterprise to carry out its activities because finance is one of the basic requirement of all economic activities. The word 'bank' is derived from the Italian word, "Bank" the French word, "Basque" the Latin word, "banc" which means a bench or desk used for changing currency and lending money.

A BANK is an institution which deals with money and credit in other words bank is an institution accepting money as deposits for lending besides the accepting the deposits and lending money bank possess the character of an agent because of its various agency services since all the banking functions are carried on with the aim of making profit, it is regarded as a commercial institution.

A loan entails the Redistribution of financial assets over time. The borrower initially receives an amount of money from the lender, which they pay back, usually but not always in regular installment, to the lender. This service is generally provided a cost, referred to as interest on the debt.

Finance is also the science and art of determining if the funds of an organization are being used properly. Through financial analysis, companies and the business can take decision and corrective actions towards the sources of income and expenses and investments that need to be made in order to stay competitive.

Finance is the set of activities dealing with the management of fund. More specifically, it is the decision of collection and use of funds. It is a branch of economic and finance management.

Finance is the blood of business. It flows in mostly form scale of goods and services. It flows out for meeting various types of expenditure. The activating element in any business which may be on industrial or commercial undertaking is the finance. Business finance has been defined as those activities which have to do with provision and management of fund for the satisfactory conduct of business. Business finance is defined as that business activity which is concerned with the acquisition and conservation of capital fund in meeting the financial needs and overall objective of business enterprises so we can say business finance is mainly developed in three objectives.

Firstly to obtain and adequate supply of capital for the needs of the business. Secondly to conserve and increase capital through management. Thirdly to make profit from the use of funds. This is an overall of a business enterprise. Before industrial revolution, finance was not much importance. The methods of production was simple.

1.2 REVIEW OF LITERATURE:

1. **KSHITIJ DESHMUKH (2015):** Analyzed the performance cooperative banks involved in local development and progress of financial position of middle class people. Cooperative banks play very important role in the financial system. The cooperative banks in India from an integral part of our money market today.

2. **SUMEET GIRAM (2014) :** The cooperative banks by its vast numbers and membership along with its local appeal have become an important sector in the area of banking and finance sector. RBI inspection and periodical government audit of cooperative bank did not show any worth recording changes in the non professional attitude of the board of director.

3. **S. MAYILVANAN AND E. SAUNDAVARJAN (2013) :** The customer service in co-operative banks comparatively better because local employees are recruited business. The well qualified staff should be selected. And they should be trained. The bank should use the latest technology for survive in the future competition.

A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd. Chikodi

4. SOVELIYA USHAL (2013) : It is the study that helps to know the lending practices of the co-operative bank and measure the efficiency of co-operative banks. To know the lending policies.

5. RAJIV KUMAR AND JASMINDEEP KAUR (2013) : Banks are backbone of the Indian Financial System co-operative bank has been playing a crucial role in the development of rural economy, the study focuses on the loans and advances of the co-operative bank.

6. R. RENUKA AND C. ELAMATHI (2013) : The performance of the bank has been evaluated in terms of loans distributed in year wise and membership, share capital, total advances, total overdue, present recovery etc. progress relating to revival of liberal co-operative bank.

1.3 STATEMENT OF THE PROBLEM :

There is no project found on the performance of loans and advances of D.T.Patil cooperative Bank, Limited Chikodi. The most important problem faced by co-operative banks that rating of loans.

This topic selected to analyzes the performance of “ Loans and Advances ” in D.T.Patil Co-operative Bank Limited, Chikodi”. The study is conducted to represents the concept of loans and advances and critically analyze them. Finally provide conclusion relating to performance of loans and advances.

1.4 NEED FOR THE STUDY :

Loans and Advances are the most important aspect of any banking organization. This study mainly concentrated on the lending practices pattern and influences in the organization performance. It also helps to know the objective and goals as well as it help to ascertain people’s response on bank lending. The study taken on Performance of loans and advances in D.T.Patil Co-operative Bank Chikodi. This study shows us the procedure that are taken place for the purpose of providing loans to customers or borrowers and also with the respect to the study of the whole organization and the process followed in that organization.

1.5 OBJECTIVES OF THE STUDY:

1. To study the concept of loans and advances.
2. To study different types of loans given by the bank.
3. To know period of repayment for various loans provided by the D.T.Patil Co-operative Bank Limited Chikodi.
4. To know the overall performance of Loans and Advances.
5. To suggest measures for better performance.

1.6 SCOPE OF THE STUDY :

This project covers a study on Performance of loans and advances. The study also makes a micro focus in all the major functional areas of the bank. The various types of loans are studied by analyzing the financial statement of the banks. This study is limited to only D.T.Patil Co-operative Bank, Limited Chikodi covering the data from 2017-18 to 2019-20.

1.7 RESEARCH METHODOLOGY:

The present study mainly based on the primary and secondary data i.e. annual reports of the bank for the respective years from 2018 to 2020. The necessary data is collected through informal discussion with the managing director and with the members of the banks.

Tools of data collection are divided into two parts i.e.

1. Primary data :

The data is being collected by the help and guidance of Shri A S Masti who is the manager of D.T.Patil Co-operative Bank Ltd Chikodi. The conversation helped to have an idea about the bank, its functions and other aspects of the Bank.

Sources of Primary data:

- Observation

- Discussion

2. Secondary Data :

Secondary data which includes the annual reports of the bank for the past years helped to study the financial aspects of the Banks. This data shows about gain or loss in the financial statement of the bank. This data helps to collect relevant information in the different field of bank.

The secondary data also includes the data collected from other sources mentioned below.

- 1) Annual reports and magazines of D.T.Patil Co-operative bank.
- 2) The part of required data has also been collected through browsing.
- 3) Books
- 4) Reference materials

1.8 LIMITATIONS OF THE STUDY:

1. Due to strict confidential policy of the bank the accounts departments provided only screened information.
2. Accuracy of the data provided cannot be guaranteed which does not give a clear idea about the actual functioning of the bank.
3. Due to busy schedule of manager, the company's financial statement obtains secondary data.
4. Time is also constraint.
5. The present data study is confined only for period of five years from 2016 to 2020.

1.9 CHAPTER SCHEME:

CHAPTER-1 : INTRODUCTION TO RESEARCH DESIGN

The chapter gives detail introduction of loans and advances, review of literature, statement of problem, need for the study, objectives of study, scope and research methodology and limitations of the study.

CHAPTER-2 : CONCEPTUAL FRAMEWORK

In this chapter viewed on various concepts related to the study which are, introduction of loans and advances and its meaning, types of loans, advantages and disadvantages of loans.

CHAPTER-3 : BANK PROFILE

In this chapter deals with the bank profile which is include the profile of bank, history of co-operative bank, principles of co-operative bank, characteristics of co-operative bank, types of co-operative bank, address of the co-operative bank, progress report of the co-operative bank and board of directors, staff members, organization structure and list of departments.

CHAPTER-4 : DATA ANALYSIS AND INTERPRETATION

This chapter gives details regarding the analysis and interpretation of data.

CHAPTER-5 : FINDINGS, SUGGESTIONS AND CONCLUSION

This chapter concluded the project report it comprises of the findings, conclusion draw from above analysis based on the data collected and also included suggestions.

CHAPTER - 2

CONCEPTUAL FRAMEWORK

2.1 MEANING OF LOAN

2.2 TYPES OF LOANS

2.3 CLASSIFICATION OF LOANS

2.4 PRINCIPLES OF LENDING

2.5 TYPES OR FORMS OF ADVANCES

2.6 PROCEDURES FOR GRANTING LOANS

CHAPTER-2

CONCEPTUAL FRAMEWORK

2.1 MEANING :

The term loans refers to the amount borrowed by one person from another. The amount is in the nature of loan and refers to the sum of paid to the borrower. Thus, from the borrowers point of view it borrowing and from the point of view of bank it is lending. Loan may be regarded as CREDIT granted where the money is disbursed and its recovery is made on later date. It is the a debt for the borrower. While granting loans, credit is given for a definite purpose and for a determined period. Interest is charged on the loan at agreed rate and intervals of payment. A loan is financial arrangement under which an advance is granted by the bank to a borrower on a separate account called the " Loan account ". When a loan is sanctioned, it is paid to the borrower in cash or by transferring the amount of loan to the credit of borrower's account.

The history of loans began... it is likely that people have been practicing lending and borrowing for as long there has been a concept of ownership. The history of loans and advances can be documented at least several thousand years back forms of lending were evident in ancient Greek and Roman times of course. It is however important to realize that lending started much earlier than many people would imagine and has its origin in much older times.

Advances on other hand, is a credit facility granted by the bank. Banks grant advances largely or short term purposes. Such as purchase of goods traded in and meeting other short term trading liabilities. There is a sense of debt in loan, whereas an advance is a facility being availed of by the borrower. However, like loans, advances are also to be repaid. Thus a credit facility repayable within one year may be known as advances. However, loans and advances granted by commercial banks are highly beneficial to individuals, firms, companies and industrial concerns. The growth and diversification of business activities effected to a large extent through bank financing. Loans and advances granted by bank helps in meeting short and long term financial needs of business enterprises.

Advances is a term that described a secured loan made to a member. Advances are offered at fixed or floating rates with specific maturities or with embedded options for early redemption. There are different types of loans fetch a different rate of interest and have different securities against them.

DEFINITION:

According to Oxford Dictionary, Loan means " Thing lent especially sum of money to be returned with or without interest and, Advances means lend or pay before hand. It either is money lent, by way of overdraft upon a current account or by cash credit or loan, is a separate account upon a promissory note.

ROLE OF BANKS IN THE BUSINESS WORLD BY WAY OF LOANS AND ADVANCES AS FOLLOWS :

1. Loans and advances can be arranged from banks in keeping with the flexibility in business operations. Traders may borrow money for a day today financial needs availing of facility of cash credit, bank overdraft and discounting of bills. The amount raised as loan may be repaid within a short period suit the convenience of the borrower. The business may be run efficiently with borrowed funds from banks for financing its working capital requirement.
2. Loans and advances are utilized for making payments of current liabilities, wages and salaries of employees, and also the tax liability of the business.
3. Loans and advances from banks are found to be economical for traders and businessman. Bank charge a reasonable rate of interest on such loans and advances. For loans from money lenders, the rate of interest charged is very high. The interest charged by commercial banks is regulated by the RBI.
4. Banks generally do not interfere with the use, management and control of the borrowed money but it takes care to ensure that the money lent is used for business purposes.
5. Banks loans and advances are found to be convenient as far as its repayment is concerned. This facilitates of planning for future and timely repayment loans. Otherwise business activities would have come to a halt.

6. Loans and advances by bank generally carry element of secrecy with it. Banks are duty-bound to maintain secrecy of their transaction with customers. This enhance people faith in the banking system.

1.2 TYPES OF LOANS :

The loans can be broadly classified as follows-

1. Short term loan as demand loan term loan means it is granted for a short period of a year or less than one year.
2. Long term loan : Long term loans are two types.
 - a. Medium term loan being repayable in 1 to 3 years.
 - b. Long term loan is being repayable in above 3 to 5 years.

A loan is granted either against collateral securities. Or against the personal security of the borrowers. In the case of a loan, interest is charged on the whole amount of the borrower at different intervals. But the rate of interest charged on a loan is slightly lower than that charged on overdraft, cash credit. Generally a banker prefers to make an advance in the form of a loan for two reasons.

- 1) He can collect interest on the entire amount of the loan sanctioned.
- 2) A loan involves very little accounting work as granting and the repayment of the loan are generally done in the lump sum. But the borrower does not prefer that type of advances. As he is required to pay interest on the full amount of the loan sanctioned to him irrespective of the amount actually withdrawn by him.

2.3 LOANS AND ADVANCES CLASSIFIED INTO TWO CATEGORIES :

1. Secured loan :

Secured loan and advances means a " Loan or advances made on the security of assets. The market value of which is not at any time less than the amount of such loan or advances".

Or A secured loan is a loan in which the borrower pledges some assets as collateral for the loan, which then becomes a secured debt owed to the creditor who gives the loan.

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These are the loans granted by the bankers or society by obtaining security equal or more than the loan amount. In other words, a secured loan is the one security may be in the form of shares, debentures, LIC policies, goods, fixed deposits receipts etc.

Advantages of secured loan :

- Take possession of security
- Validity of title
- Marketability
- Stability of price
- Durability
- Easy ascertainment of value
- Easy transfer of title
- Margin
- Approved securities
- Lower cost of storage and supervision

2. Unsecured loan or advances :

An unsecured loan or advances means a " Loan or advances not so secured. A partly covered loan or advance is partly covered by the security of an assets. The market value of such securities being less than the amount that has been lend or outstanding at any time. And does not required any type of collateral".

Examples for unsecured loans include personal loans, student loans and credit cards.

These are the loans granted without any security or on personal security of the borrower. Unsecured loans are often more expensive and less flexible than secured loans, but suitable if you want a short term loan (one to five years).

Advantages of unsecured loan:

- unsecured loans can be obtain without collateral.
- This loan is involved time factor.
- This loan is suits the various financial needs of its borrowers.
- In unsecured loan cannot create any legal charges.

- In unsecured loan personal liability come first.

2.4 PRINCIPLES OF LENDING :

When a banker is approached for loan he has to keep his eyes and ears wide open. Apart from appraisal of individual loan proposal, there are some general principles, which should guide him determine whether a proposed loan is desirable, irrespective of whether or not securities is offered. It has been stressed throughout a banker does not lend only because the advance will be secured many other consideration influence his decision. Following are some of the principles of the loans and advances.

1. Safety :

For a banker, the celebrated principle in holding assets is "safety first" nothing is more important to him than the preservation of the principles some advanced. In fact by safety is meant the ability of the borrower to repay the principle and the interest their own according to terms and conditions provided in the loan agreement.

2. Liquidity :

The next principle of the bank lending is that the advances should be liquid. The assets should be readily into cash without much loss of the value, which temporary advances granted to finance some purchase of stock, raw materials etc.

3. Diversification of risk :

It is another important principle of the sound lending is that they should hold loan assets of diversified character. So as to reduce the degree of credit risk, It should be one of the banker's loans to advances relatively moderate sums to many customers rather than large sums to few customers. Loans are also tied to be diversified with respect to maturity, security and type of the borrower.

4. Profitability :

It is one of the important principle of lending. A significant matter for consideration is the remunerative of the advances i.e., the yield which the particulars advance is going to give to the banker. The rate of interest to be charged has to be commensurate with the risk involved in loan. The object of

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the profitability has to moderate by safety and liquidity of funds and than by national policies as lay down by the government and the central bank.

5. Purpose oriented :

Normally the bank should not finance unproductive, consumption loans, else extended short term credit for movement of goods and other productive purposes. The banks are generally expected to make available ways and means of accommodation working capital advantages and not to finance fixed asset formation just as the disbursement of the repayment of the loan is made in one lump sum.

Benefits to the lenders :

- The lenders of the loan gets the desired rate of interest on the amount they have borrowed.
- The lender can plan his investment and can earn good return on the investment to be utilized in the future and can build a good reputation in the market.

Benefits to the borrower :

- The advantages with loans is that you can design your repayment period as well as monthly installments according to your financial capacity. A secured business loan comes at lower interest rates when compared with other business loans. As these loans are taken against collateral, any default in repayment can put the commercial property at risk.
- Interest rate offered on secured business loan is variable and easily affordable. Such opportunities are provided entrepreneurs to encourage them and ultimately enhance the economy in the region. By promising business or industries, local government can even eradicate unemployment and improve overall standard of living.

Drawbacks of loan :

1. Inflexibility :

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Every time a loan is required, it is to be negotiated with the banker. To avoid it, borrower may borrow in excess of their exact requirement to provide for any contingency.

2. Abuse of funds :

Banks have no control over the use of funds borrowed by the customers. However, banks insist on hypothecation of the assets purchased with loan amount.

3. Indistinct period :

Though the loans are for fixed period but in practice all over, i.e., they are renewed frequently.

4. Complexity for documents :

Loan documentation is more comprehensive as compared to each credit system.

2.5 TYPES OR FORMS OF ADVANCES

- Loan
- Cash credit
- Overdraft
- Bills purchases and discount

2.6 RESPONSIBILITY AND DUTIES OF GRANTOR:

There are some responsibilities and duties of grantors that they should follow at the time of granting they are loans as follows

- ❖ The grantor is equally responsible for the loans to which he becomes grantor.
- ❖ Before signing as the grantor, member should ensure payment capacity and credit worthiness of the grantee.
- ❖ If the loan becomes overdue then along with the grantee even the grantor is equally liable for legal action. As far loan repayment is concerned the grantor should monitor and watch the status of the loan. Co-operation in this regard helps the bank to provide better service.

Members should know –

- ❖ Any member without the prior permission of the sahakari remains absent for 3 consecutive AGM's are liable for disqualification of the membership and may lose their membership.
- ❖ Every member should have minimum transaction with Basel Committee on Banking Supervision.
- ❖ Members who do not receive the dividend within 3 years, the amount will be transferred to reserve fund and any query in this regard will not be entertained.
- ❖ In case of any changes in the address, members should intimate in writing to the office for the proper payment of dividend. Any problem arising due to the impress address BSCS will not be responsible.
- ❖ Nomination facility is provided to all the services. All members should are to avail this facility to avoid the legal complications.
- ❖ As per KSC & KSS Act the member of the one cooperative bank cannot become the member of another cooperative bank engaged in same trade of business.

The various types of loans given by the bank

- Mortgage loan
- Salary secured loan
- Surety loan
- Cash credit loan
- Fixed deposit loan
- Vehicle loan
- Housing loan
- Motor cycle loan
- Plant and machinery loan
- Medium term loan
- BLCC loan
- Pigmy deposits loan

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- NSC loan
- Recurring deposits loan.

CHAPTER - 3

BANK PROFILE

3.1 INDIAN BANKING STRUCTURE

3.2 CO-OPERATIVE BANK OVERVIEW

3.3 HISTORY OF CO-OPERATIVE BANK

3.4 ORIGINS OF CO-OPERATIVE BANK

3.5 MEANING AND DEFINITION OF BANK

3.6 FEATURES OF CO-OPERATIVE BANK

3.7 FUNCTIONS OF CO-OPERATIVE BANK

3.8 LEVELS OF CO-OPERATIVE BANK

3.9 TYPES OF CO-OPERATIVE BANK

3.10 INTRODUCTION OF D.T.PATIL CO-OPERATIVE BANK

3.11 BANKING STRUCTURE

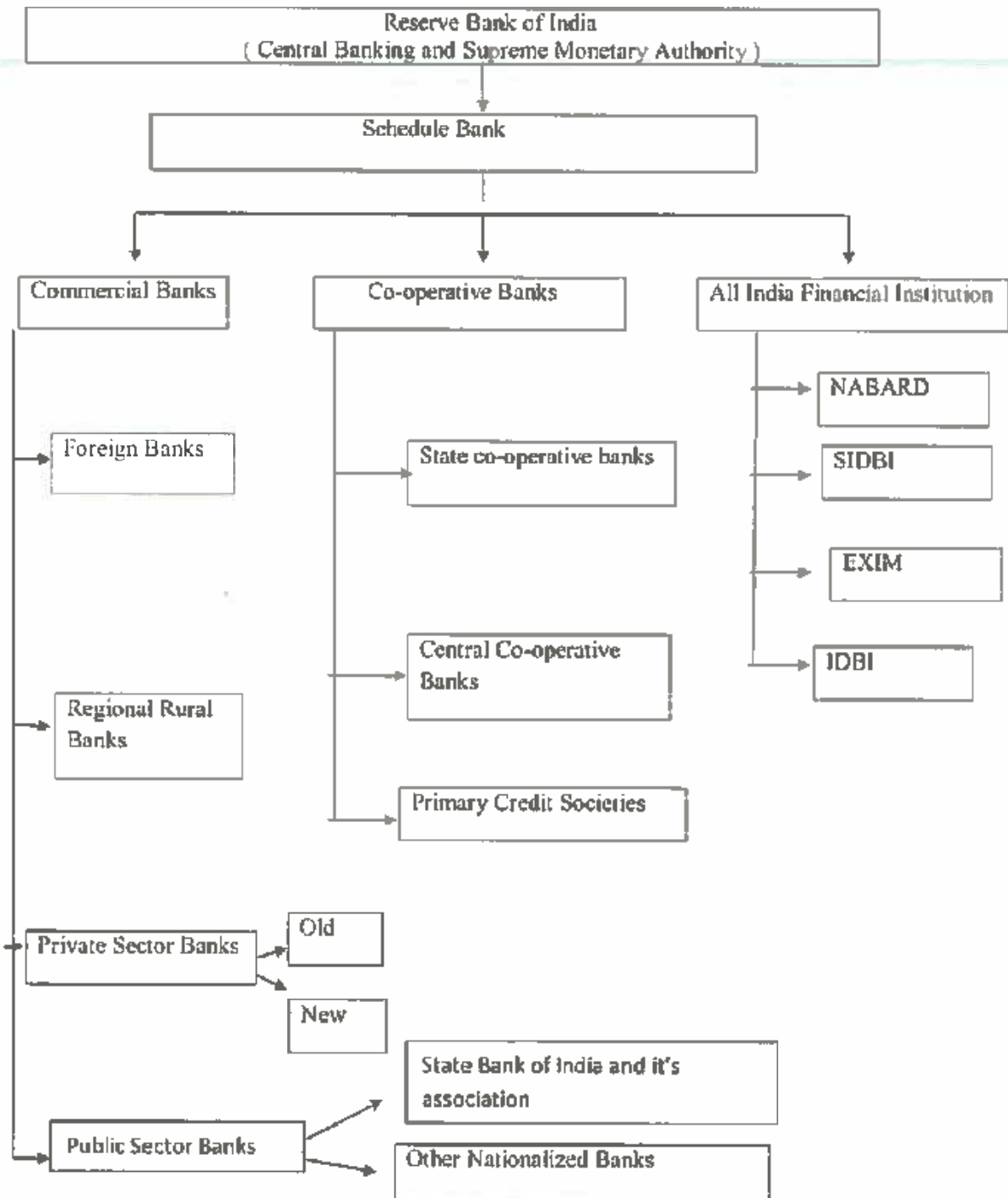
3.12 BRANCH EXPANSION

3.13 INTEREST RATE

CHAPTER-3

BANK PROFILE

3.1 INDIAN BANKING STRUCTURE :



3.2 CO-OPERATIVE BANK OVERVIEW :

Co-operative banking system in India is that recent Punjab and Maharashtra co-operative bank's (PMC Bank) crisis has created chaos among thousands of its depositors. PMC Bank is a Multi-state scheduled urban co-operative bank with its operations in Gujarat, Maharashtra, Goa, Karnataka, Andhra Pradesh, Madhya Pradesh and New Delhi. With a network of 137 branches, it ranks among the top 10 co-operatives banks in the country. Recently due to some under-disclosed bad loans above the ceiling limits, the RBI has imposed lending restrictions on PMCB, at Rs 10,000 per customer for six months. The bank has also been brought under directives which means it will be directly overseen by the RBI for this period. So to understand this scam and its intricacies we are going first to discuss what are co-operatives banks, why are they needed and what reforms are needed to be help prevent such scams and to gain depositor's trust back.

Co-operative banks are managed on the principles of co-operations, self help and mutual help. They function with the rule of " one member, one vote " co-operative banks perform all the main banking functions of deposits, supply of credit and provision of remittance facilities. Co-operative banks provide limited banking products and are functionally specialist in agriculture related products. Co-operatives banks now providing housing loans, vehicle loans, industrial loans etc.

A co-operative banks promote economic activity and provides banking facilities and service to the rural people. This significant role of co-operative banks in the agricultural economy impacts a lesson to commercial banks and dispels from their minds the age old inertia and the gloom of conservatism by shifting emphasis from credit worthiness of the purpose and from tangible security to the character of the business.

Co-operative banks play an integral role part in the implementation of development plans and are the important for the effective functioning of banking system in India.

3.3 HISTORY OF CO-OPERATIVE BANKS IN INDIA

The genesis of the cooperative movement and its implementation in a modern technical sense can be traced after the industrial Revolution in England during the period of 18th and 19th century. The idea of Herman Schulze and Friedrich Wilhelm Raiffeisen during the economic meltdown to provide easy credit to small business and poor sections of the society took shape as cooperative banks of today across the world.

Pre-independence period (prior to 1947)

The Bombay provincial Government was the first to pass its own act which was known as Bombay Provincial Cooperative Societies Act, 1925. Other state governments like Madras, Bengal, Bihar and Punjab followed the Bombay Act and passed their own legislation in the following year.

In 1942, the British Government enacted the Multi-Unit cooperative Societies Act, 1942. The ambit of which covered societies whose operation are extended to more than one state. The Act provided for the regulation of affairs of such society by the provisions of cooperative bank act of the state where the principle society is located.

Post-independence period (after 1947)

After independence, the movement of cooperative banks maintained its pace even after facing several hardships during that phased and continued to be part of the economic development of the country. The first five year plans recognized the importance of the cooperative in the implementation of development plans, particularly targeting the farmers and the weaker section of the society.

In 1954, Government of India appointed a committee called All India Rural Credit Survey Committee to remedy the problem of rural credit and other financial issues of the rural community. It recommended a well defined institutional framework for cooperative organization, particularly for meeting the needs of the rural India. Co-operative banks are promoted to meet the requirements of consumers. They are established not only in the urban areas but also in rural areas. In rural areas these

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banks supply finance to buy consumer goods. They provided short and medium term loans. They provide loans at a lower rate comparatively. They are formed on the co-operative bank principles and as such are more services oriented than profit oriented.

The cooperative banks were expected to substitute such unorganized money market agencies and provide short and long term credit at reasonable rates of interest. It was expected that they would co-ordinate the activities of unorganized and organized segment of Indian money market.

3.4 ORIGIN OF CO-OPERATIVE BANKS IN INDIA

The origins of cooperative banking movement in India can be traced to the close of 19th century when inspired by the success of the experiment related to the cooperative movement in Britain and the cooperative credit movement in Germany. Such societies were set up in India. They are the primary financiers of the agricultural activities, some small scale industries and self employed workers. The Anyonya cooperative bank in India is considered to have been the first cooperative bank in Asia.

In the beginning of the 20th century, availability of credit in India, more particularly in rural areas, was almost absent. Agricultural and related activities were starved of organized, institutional credit. The rural folk had to depend entirely on the money lenders, who lent often at usurious rate of interest.

The co-operative banks arrived in India in the beginning of the 20th century as an official effort to create a new type of institution based on the principles of the cooperative organization and management, suitable for problem peculiar to Indian conditions. These banks were conceived as substitutes for money lenders, to provide timely and adequate short term and long term institutional credit at reasonable rate of interest.

3.5 MEANING AND DEFINITION OF BANK

A bank is a financial institution licensed to receive deposits and make loans. Banks may also provide financial services. Such as wealth management, currency exchange and safe deposits boxes. There are two types of banks that are commercial and retail banks and investment banks.

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A bank is a financial institution that accepts deposits from the public and creates credit. Lending activities can be performed either directly or indirectly through capital market.

Banking business in India is largely governed by the Banking Regulation Act, 1949.

According to section 5(b) of this Act, banking means "the acceptance for the purpose of lending or investment of deposits of money from the public repayable on demand, order or otherwise and withdraw able by cheque, draft, order or otherwise.

MEANING AND DEFINITION OF CO-OPERATIVE BANKS

A co-operative bank, as its name indicates is an institution consisting of a number of individual who join together to pool their surplus savings for the purpose of eliminating the profits of the bankers or money lenders with a view distributing the same amongst the depositors and borrowers.

The Co-operative Banks Act, of 2007 (the Act) defines a cooperative bank as a cooperative registered as a cooperative bank in terms of the Act whose members-

1. Are of similar occupation or profession or who are employed by a common employer or who are employed with in the same business district; or
2. Have common membership in an association or organization, including a business, religious, social, cooperative, labour or educational group ; or
3. Reside within the same defined community or geographical area.

In other words of HENRY WOLFF " co-operative banking is an agency which is in a position to deal with the small means on his own terms accepting the security he has and without drawing loan the protection of the rich "

DIVINE defines " A mutual bank formed composed and governed by working people themselves for encouraging regular savings and generating miniature loans on easy terms of interest and repayments "

According to Devine . "A cooperative Bank is a mutual society incorporated, organized and trained by the appropriate staff to encourage regular savings and allow micro-loans with easy interest and payment terms".

3.6 FEATURES OF COOPERATIVES BANKS

- 1) Cooperative banks are organized and managed on the principle of co-operation, self-help and mutual help. They function with the rule of "one member, one vote". Function on "no profit, no loss" basis.
- 2) Cooperative banks, as a principle, do not pursue the goal of profit maximization.
- 3) Cooperative banks performs all the main banking functions of deposits mobilization, supply of credit and provision of remittance facilities. Cooperative banks provide limited banking products and are functionally specialists in agriculture related products. However, cooperative banks now providing housing loans also.
- 4) Cooperative banks do banking business mainly in the agriculture and rural sector.
- 5) Cooperative banks are perhaps the first government sponsored, government-supported. And government subsidized financial agency in India. They get financial and other help from the Reserve Bank of India, NABARD, Central government and state government.
- 6) Cooperative banks belongs to the money market as well as to the capital market.
- 7) Primary agricultural credit societies provide short term and medium term loans.
- 8) Cooperative banks are financial intermediaries only partially. The sources of their funds are –
 - a. Central and state government
 - b. The Reserve Bank of India and NABARD,
 - c. Other co-operative institutions,
 - d. Ownership funds and
 - e. Deposits or debenture issues
- 9) It is interesting to note that intra-sectoral flows of funds are much greater in cooperative banking than in commercial banking; inter –bank deposits, borrowings and credit from a significant part of assets and liabilities of cooperative banks. This means that intra-sectoral competition is absent and intra-sectoral integration is high for cooperative bank.

- 10) Cooperative banks are subject to CRR and liquidity requirement as other schedule and non- scheduled banks are. However, their requirements are less than commercial banks.
- 11) Since, 1966 the lending and deposits rate of commercial banks have been directly regulated by the Reserve Bank of India.

The cooperative banking is federal in character with three tie, linkage between state, district and village level institutions. At the state of level, we have development banks.

The lower ties are the members and the shareholders of the immediate higher ties. Besides, there are urban co-operative banks (UCBs) or the primary co-operative banks (PCBs) which are outside this federal structure.

Though the federal is in nature the system integrated vertically on the basis of functional responsibilities of various components of the system. The SCBs, CCBs and PACs form the short term and medium term credit structure and it is the same in all states.

The primary co-operative banks at the village level form the base of the co-operative banking. Although they are expected to be multipurpose societies, they mostly deal in credit unlike the short term and medium term credit structure.

The PACs at the village form the base of the co-operative banking. Although they are expected to be multipurpose societies, they mostly deal with in credit. The arrangement for the provision of the long term are not uniform in all the states however a majority states have a federal set up for this purpose also. These states have SLDBs at the states level affiliate to primary land development banks at the district and taluk levels. In other states the operational units below the SLDBs. And it obtain funds by issuing ordinary debentures and special development debentures.

The SCBs co-ordinates and regulate the working of CCBs. They act as custodian of surplus of funds of the CCBs and supplement them by attracting deposits and by obtaining loans from the RBI. The CCBs mobilize resource in districts to finance their members and they also channelized funds from the SCB to primary credit societies.

Characteristics of co-operative banks :

- **Self – improvement**

The categorized how they found more self improvement of cooperation and common standard of cooperation. They work for people who participate in the “Partial vote”.

- **Financing capability**

The cooperative bank will be finalize its principle saving financing capability for the supply of in store assembly for purchases from credit and purchasing offices.

- **Monetary benefits**

Co-operative banks mainly preserve the monetary benefits of their activities in the Agricola business sector.

- **Require liquidity**

Co-operative banks may also consent to the need to require liquidity requirements for mandatory liquidity ratios (SLR) and mandatory plans other than cash reserve (CRR).

- **Democratic management**

Co-operative banks are managed on democratic lines. The bank is managed by the group known as the “Board of Directors”. The members of the Board of Directors are the elected representatives of the bank. Each members has a single vote, irrespective of the numbers of shares held.

- **State control**

To protect the interest of members, co-operative banks are placed under state control through registration. While getting registered, a bank has to submit details about the members and the business it is to undertake. It is also maintain books of accounts, which are to be audited by the government auditors.

- **Service motive**

Co-operative are not formed to maximize profit like other forms of business organization. The main purpose of a co-operative bank is to provide services to its members.

- Cooperative banks have a foreign exchange market and a capital industry.

- Cooperative banks may need to assist expeditious legislation, which is constantly supported for delivery.

3.7 FUNCTION OF CO-OPERATIVE BANKS

- It provides financial assistance to people with small means and protects them from the clutches of money lenders and provides loans and other services at a higher rate at the expense of the needy.
- It supervises and guides affiliated societies.
- Rural financing- It provides financing to rural sectors like cattle farming, crop farming, hatching etc. at comparatively lower rates.
- Urban financing- It provides financing for small scale industries, personal finance, home finance etc.
- It mobilizes funds from its members and provides interest on the invested capital.

3.8 LEVELS OF COOPERATIVE BANKS IN INDIA

The co-operative banking in India is divided into short term level and long term level they are as follows-

Short term has three levels

1. A state co-operative bank works at the apex level (i.e., works at the state level).
2. The central co-operative bank works at the intermediate level (i.e., works at district level).
3. Primary co-operative credit society at a base level (i.e., works at village level).

Long term level has two levels

1. State co-operative Agricultural and Rural Development Banks (SCARDBs) at the apex level.
2. Primary co-operative Agriculture and Rural Development Banks (PCARDBs) at the district level or block level

Advantages of co-operative banks

○ **Easy to form**

Registration and legal requirements are comparatively easy compared to traditional banks. It takes a group of ten adults to form a cooperative banks. It needs a base capital of 25 lakhs only as compared to 100 crores of small Finance Banks.

○ **Alternative credit source**

Cooperative system provide easy accessibility to the rural section of the country so as to protect them from the clutches of greedy money lenders. These money lenders exploit the needy by providing credit facilities at higher rates and by manipulating their accounts.

○ **Cheap credit**

It provide cheap credit to rural masses. It provides a higher rate of interest to members for their investment and low lending interest rate.

○ **Encouragement of savings and investment**

It has encouraged the habit of thrift among the masses. Instead of hoarding money or spending unnecessarily, masses tend to invest and save their money.

○ **Advancement in farming**

Providing credit to agriculturists at cheaper rates to buy inputs, warehouse facilities, marketing assistance and other facilities. These banks provide assistance for buying cheap products and services and help them by introducing them to modern technology and better farming methods improve their outputs.

Disadvantages of co-operative banks

- Organizational and financial limitations of cooperative banks greatly reduce their ability to provide adequate credit to the rural population.
- A serious problem of co-operative banks is the overdue loans of co-operative institutions which have been growing steadily for years.
- There have been major regional inequalities in the distribution of loans of cooperative banks. Most of the benefits of cooperative banks are taken by large land owners due to their strong socio-economic status.

3.9 TYPES OF CO-OPERATIVE BANKS

The co-operative banking structure in India is divided into the following 5 categories.

1. Primary co-operative credit society :

- The primary co-operative credit society is an association of borrowers and non-borrowers residing in a particular locality.
- The funds of the society are derived from the share capital and deposits of members and loans from central co-operative bank.
- Borrowing constitutes the most important element of their working capital.
- The borrowings power of the member as well as the society are fixed but may differ from state to state.
- The loans are given to members for the purchase of cattle, fodder, fertilizers and pesticides.

2. Central Co-operative Banks:

These are the federation of the primary credit societies in a district and are of two types:

- a. Those having a membership of primary society only.
- b. Those having a membership of societies as well as individuals.
 - The funds of the banks consists of share capital, deposits, loans and overdrafts from state co-operative banks and joint stock.

**A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd.
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- These banks are provide finance to member societies within the limits of the borrowing capacity of societies.
- They also conduct all the business of a joint stock bank.

3. State Co-operative Banks :

- The state co-operative bank is a federation of a central co-operative bank and act as a watching of the co-operative banking structure in the state.
- It procures funds from share capital, deposits, loans and overdrafts from the Reserve Bank of India.
- The state co-operative banks lend money to central co-operative bank and primary societies and not directly to the farmers.

4. Land Development Bank :

- These are organized in 3 tiers, namely; state, central and primary level with the objective to meet the long term credit requirement of the farmers for development purpose.
- National Bank for Agriculture and Rural Development (NABARD) supervise land development banks.
- The sources of funds for these banks are the debenture subscribed by both central and state government as these banks to do not accepts deposits from the general public.

5. Urban Co-operative Bank :

- It refers to primary co-operative banks located in urban and semi-urban areas.
- Earlier the scope of these banks was restricted, which now has been considerably widened.
- They provide funds and service to small borrowers and small business.

In here, another some different types of co-operative banks that are as follows –

1. Producers co-operative banks:

These are established by the small producers. The members of the banks produced goods in their houses or common place. The raw

materials, tools, money etc. is provided by the bank. The output is collected by the bank and sold in the market at wholesale rate.

2. Consumer's co-operative banks :

These banks are established to remove middleman from the field of trade. These banks are purchase goods at him wholesale price and sell these goods to the members at cheaper price than the market price.

3. Marketing co-operative banks :

These banks formed by the small produces for the promotion of the trade. The two main objective of the banks are, to sell goods the goods at reasonable prices by eliminating middlemen and to make the ready for the product of the member. These banks are formed by the small agriculturist and artisans.

4. Farming Co-operative Banks :

These societies are formed by the small agriculturalist to get then benefits large scale forming. These banks provide help to the farmer to the improve method of cultivations by providing large scale forming tools such as tractors, threshers and harvesters etc.

5. Housing Co-operative Banks :

These banks are formed for the procurement of land for the construction of houses on homogeneous basis. These banks are formed by those members who are intended to construct their own construction of the houses. These also purchases construction material in bulk and provide this material to its member at cheaper rates.

6. Insurance Co-operative Banks :

These banks make contract with insurance companies for the purchase of different insurance policies for its members at lower premium. This bank may take a group insurance policy for its members. The main object of the bank is to minimize the risk of its members.

7. Transport Co-operative Banks :

These banks are formed to provide the service of its members at lower rates welfare bus scheme is an example of this types of banks. A pass handed over the member for travelling on approved routes.

8. Storage Co-operative Banks :

These are formed for the provision of storage facilities to its members for perishable and non-perishable goods at lower rates. These banks also provide grading and distribution services its members.

9. Labour Co-operative Banks :

These banks are formed by unskilled labour for selling their services at reasonable wage rate. This type of banks make a contract with different firm for the provisions of labour to them.

10. Miscellaneous Banks :

Some other important banks, in addition to the major form of banks discussed above are, processing co-operative banks, Fisheries cooperative banks, forestry cooperative banks etc.

11. Credit co-operative Banks :

These cooperative banks are formed for the financial help of the members. These banks provide loans to the members at lower rate of interests.

These are the various types of co-operative banks which are formed to achieve economic objective of the members. Hence, the further study is related to " loans and advances of cooperative bank".

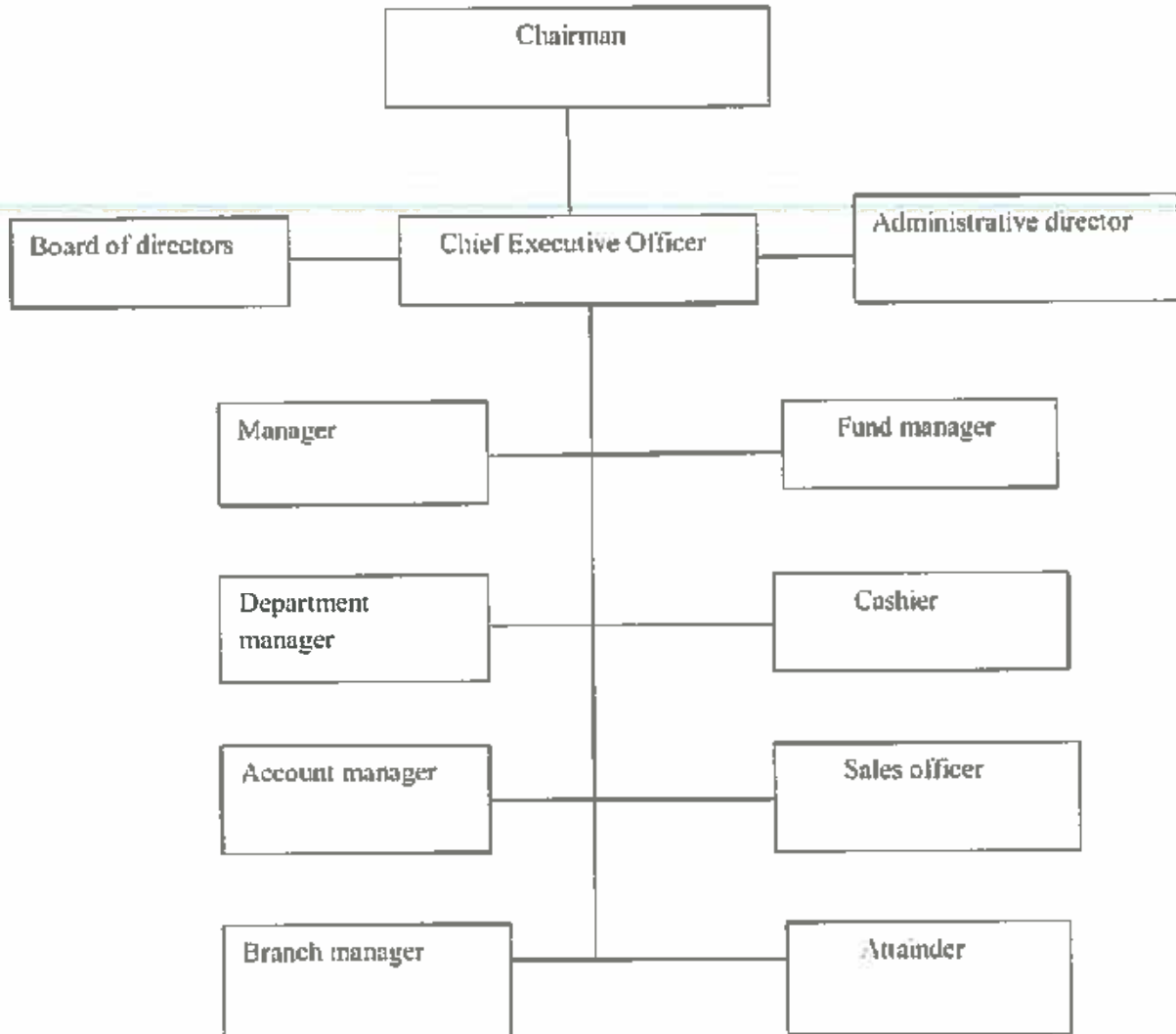
A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd.
Chikodi

3.10 PROFILE OF D.T.PATIL CO-OPERATIVE BANK

CHIKODI

Name of the bank	Shri D.T.Patil Co-operative Bank Ltd., Chikodi.
Address of the bank	Shri D.T.Patil Co-operative Bank Ltd., Head office, market yard, Guruwar path, Chikodi. 591201
Phone no.	(08338) 272249
Sector	Co-operative
Registration no.	RBI License no. ACD/KA 229/P-6-11-1980
Year of establishment	1980
President	Shri. D.T.Patil
Vice president	Shri. M.S.Kaladgimath
Managing Director	Shri. A.S. Masti
Board of Directors	Shri B.S. Kavalapure Shri C.S. Patil Shri R.B. Dambal Shri R. I. Dodamani Shri S. E. Patil Shri S. D. Lagaare Shri R. D. Patil Shri M. V. Biravvagol Shri L. R. Talawar Shri D. L. Halappagol Shri S. M. Yadagude Smt V. J. kavatagimath Smt Laxmi R Vantmutte
Accountant	Shri R C Chipre
Banking law advisor	Shri S S Patil
No. of employments	23
No. of peons	03

3.11 BANKING STRUCTURE



**A Study on Performance of Loans and Advances in D.T. Patil Co-operative Bank Ltd.
Chikodi**

3.12 BRANCH EXPANSION

Sl. NO.	NAME OF THE BRANCH	PLACE	CONTACT NO.
1	Shri D.T. Patil Co-operative Bank Ltd.	Guruwar peth, Chikodi.	(08338) 272249
2	Shri D.T. Patil Co-operative Bank Ltd	Yadgud, tq: Hukkeri.	(08333) 268249
3	Shri D.T. Patil Co-operative Bank Ltd	Gandhi bhavan college road, Belagavi.	(08314) 202249
4	Shri D.T. Patil Co-operative Bank Ltd	Rani channamma circle, ashok nagar, Nippani.	(08338) 222249

A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd.
Chikodi

3.13 INTEREST RATE FOR DIFFERENT KIND OF LOANS

Types of Loan	Interest Rate (%)
Gold loan	10.50
Medium term loan	13
Long term loan	13
Other loans	14

Interest rate for deposits

Deposits	Interest Rate (%)
1.Savings deposit account (as per 03-05-2011)	4.00
2.Fixed deposit account (as per 01-02-2018)	
a. From 46 days to 90 days	5.00
b. From 91 days to 180 days	6.00
c. From 181 days to 364 days	6.50
d. From more than 1 year and less than 2 years	7.50
e. 2 years and above	8.00

And for the senior citizen they can get 0.50% excess interest rate than others.

**A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd.
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**THE FOLLOWING ARE THE DETAILS OF DEBTS BEYOND
MATURITY PERIOD OF LAST 3 YEARS**

(Rs. In Lakhs)

Particulars	2017-2018		2018-2019		2019-2020	
	No. of creditors	Amount	No. of creditors	Amount	No. of creditors	Amount
Less than a year	171	76.24	123	60.53	113	42.71
More than 1 year and less than 2 years	13	4.94	16	18.48	05	21.68
More than 2 years and less 3 years	10	2.62	06	2.48	11	7.43
More than 3 years and less than 5 years	05	1.89	04	1.17	05	1.69
More than 5 years	17	4.90	18	5.84	16	4.90
Total	216	90.59	167	88.50	150	78.41

A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd. Chikodi

Shri D.T. Patil Co-operative Bank Limited Chikodi is a leading Urban Co-operative Bank in Chikodi, District Belgaum of Karnataka, was founded by Shri D.T. Patil in 1980 that has boosted the Co-operative movement in our part of the world, with prime object of encouraging thrift and savings habit among the public and to free the common man from the clutches of private money lenders.

Initially the Bank was known as "The Liberal Co-operative Bank Limited Chikodi". Now it has 3 branches being branch in Yadgud tq: Hukkeri, Branch Gandhi bhavan, Belgaum; Branch Rani Channamma Circle, Nippani.

VISION

To be the most admired Co-operative Bank in Belgaum district, their first main vision is to be expansion of the branches and to serve service across the district.

And it believes that every individual from each start of society needs affordable, relevant and quality banking to fulfill personal aspiration. The vision of the bank constantly strive towards meeting the social needs by providing world-class infrastructure for co-operative banking.

MISSION

Explore and enhance the quality of life of farmers through financial security and support by providing products and services that would be helpful to him in his path of prosperities.

And providing banking services with a smiling face to make their customers smile. Bank will delight the customer with effective interaction. To be the client's best choice through offering an integrated and distinctive bundle of banking services.

To mobilize deposits, disburse loans prudently and invest surplus wisely with the involvement of their committed, dedicated and hardwork.

A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd. Chikodi

GOALS

- To emerge as the best co-operative bank of the country.
- To mobilize deposits of Rs. 100 crores and to increase their loans and advances to 70% and to increase their branch network to 10 branches in the near future.
- Provide financing for investors. Provide security for depositors.
- Achieving high and rapidly increasing growth rates.
- Developing new and innovative investment formulas and banking services that fulfill the needs of all.
- To implement net banking with the permission of RBI.

General growth of the Shri. D.T.Patil Co-operative Bank Ltd. Chikodi

- Branch expansion
- Share capital
- Deposits
- Profit
- Loans and advances
- Total NPA
- Credit to Risk Assets Ratio (CRAR)
- Audit grade
- Working capital

Product and service profile

- Loans and fixed deposits
 - Short-term loan
 - Mid-term loan
 - Long-term loan
 - Farm machinery purchasing loans

Non-agricultural loans

- Surety loan

**A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd.
Chikodi**

- Deposits loans
- Gold and silver loans
- Non-movable assets loan
- Housing loan
- Education loan

Deposits

- Fixed deposits
- Saving deposits
- Recurring deposits
- Pigmy deposits

Conduct of meetings

- ❖ Annual General Meeting – once in year
- ❖ Board Meeting – every month
- ❖ Staff Based Meeting – according to need based, every month

CHAPTER - 4
DATA ANALYSIS AND INTERPRETATION

Table 4.1 Shows Total Loans

Table 4.2 Shows Fixed Deposits

Table 4.3 Shows Recovery and Unrecovery Loans

Table 4.4 Shows Surety Loans

Table 4.5 Shows Cash Credit loans

Table 4.6 Shows Gold Loans

Table 4.7 Shows Medium Term Loans

Table 4.8 Shows Lending Long Term Loans

Table 4.9 Shows Loan On Deposits

Table 4.10 Shows Deposits Cash Credit Loans

Table 4.11 Shows Secured Cash Credit Loans

Table 4.12 Shows Mortgage Loans

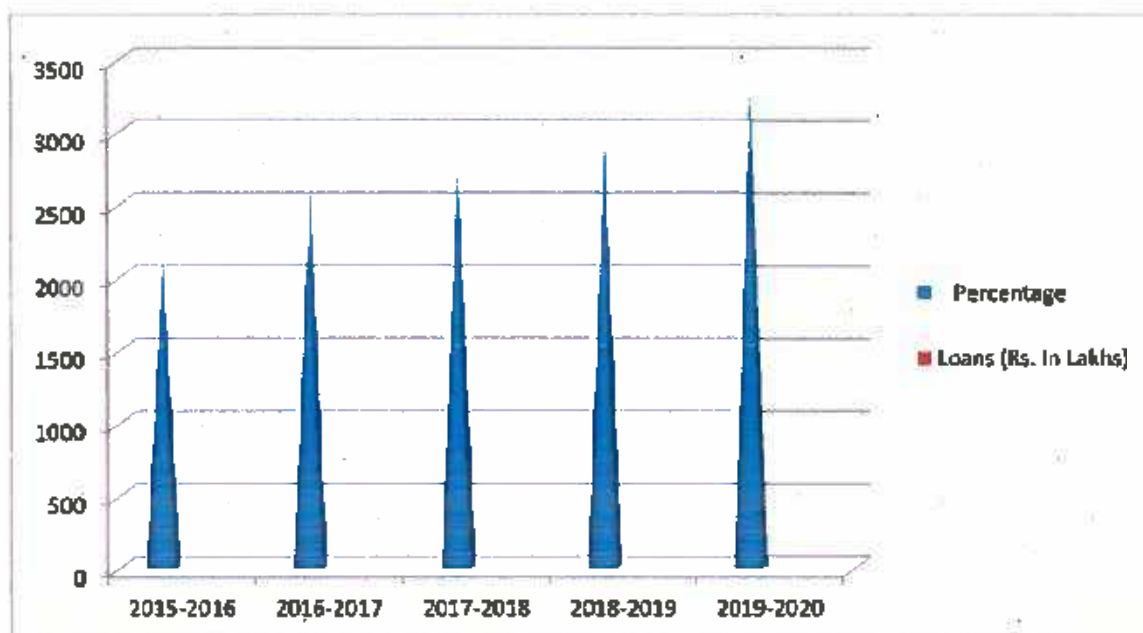
CHAPTER - 4

DATA ANALYSIS AND INTERPRETATION

Table 4.1 Shows Total Loans

Year	Loans (Rs. In Lakhs)
2015-2016	2130.34
2016-2017	2607.79
2017-2018	2759.50
2018-2019	2925.48
2019-2020	3306.93

(Source : Annual Report)



Interpretation :

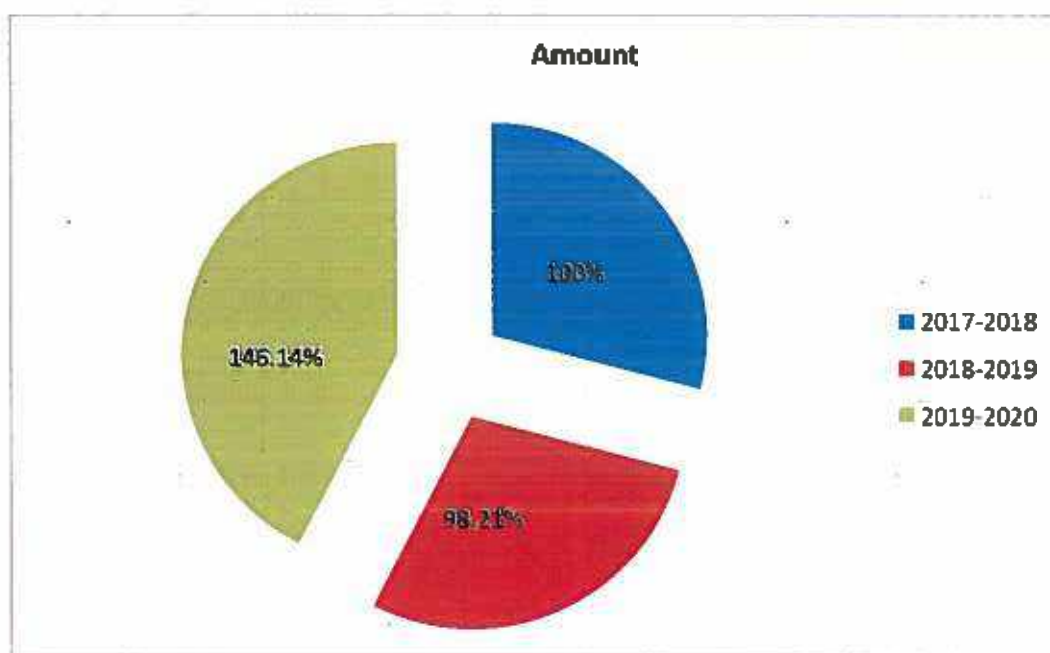
In the above table we find that, there is change in loans and increasing in every year. During the year 2015-2016 the loan was 2130.34 lakhs and 2016-2017 is 2607.79 lakhs, 2017-2018 is 2759.50 lakhs, 2018-19 is 2925.48 lakhs and the loan was 3306.93 lakhs which was increased in the year 2019-2020. It goes on increasing yearly for increasing the standard of living of the rural area people. They lending the loan to the people to run their small scale business, for their transportation business as well as for agriculture development.

A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd, Chikodi

Table 4.2 Shows Fixed Deposits

Years	Amount (Rs. In Crores)	Value (%)
2017-2018	63229.064	100
2018-2019	62099.156	98.21
2019-2020	92402.149	146.14

(Source : Annual report)



Interpretation :

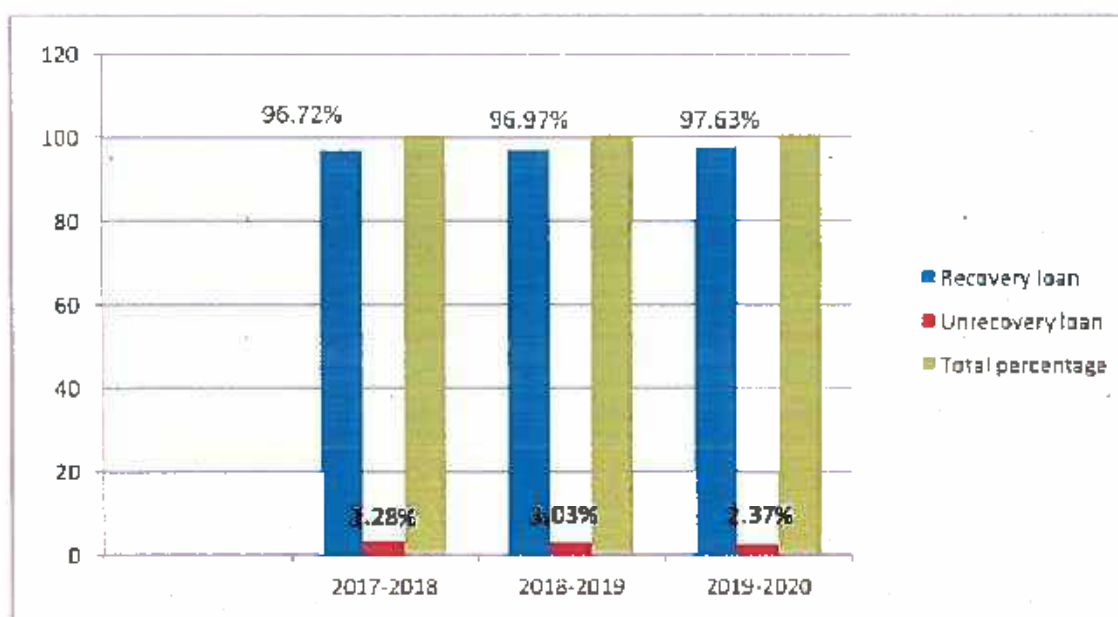
The table shows that the amount received on fixed deposits has fluctuating year by year. From the year 2018-2019, 98.21% and 146.14% in the year 2019-2020 respectively. Recently, means in the year 2019-2020 the amount of fixed deposits is going high.

**A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd.
Chikodi**

Table 4.3 Shows Recovery Loan and Unrecovery Loan

Year	Recovery Loan (%)	Unrecovery Loan (%)	Total Percentage
2017-2018	96.72	3.28	100
2018-2019	96.97	3.03	100
2019-2020	97.63	2.37	100

(Source : Annual report)



Interpretation :

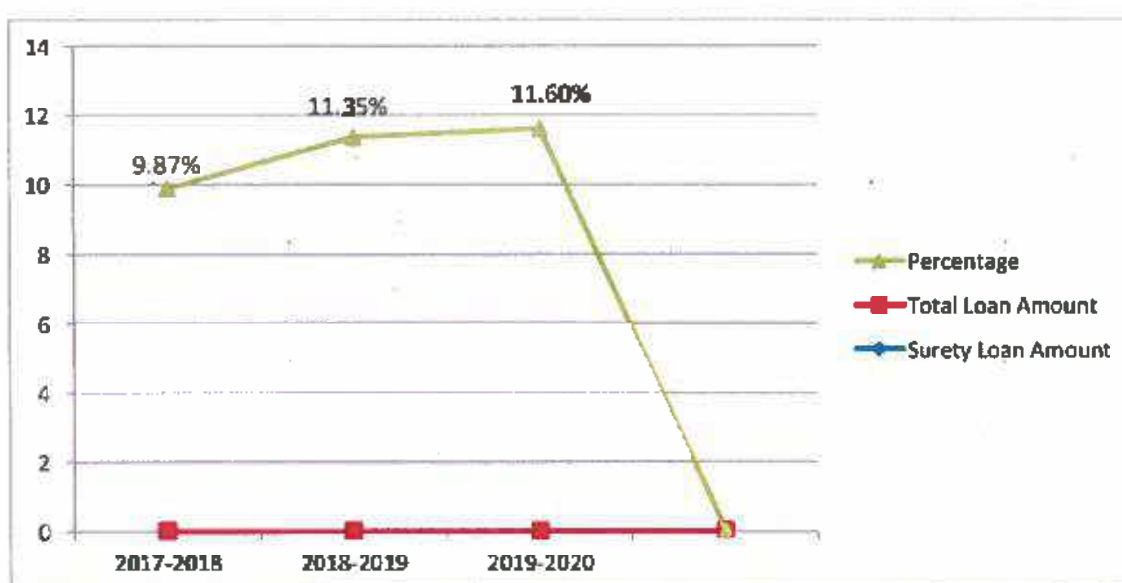
In the table shows that the total percentage of recovery loan was increased year by year. It was 96.72% in the year 2017-2018. And increased to 96.97% in the year 2018-2019. And goes up in the year 2019-2020 to 97.63%. Hence, it shows that performance of the bank that going high and showing good performance year by year.

A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd.
Chikodi

Table 4.4 Shows Surety Loan

Year	Surety Loan	Total Loan Amount	Percentage
2017-2018	2,72,25,922	27,59,49,614.40	9.87
2018-2019	3,32,08,416	29,25,47,767.40	11.35
2019-2020	3,83,69,414	33,06,93,270.28	11.60

(Source : Annual Report)



Interpretation :

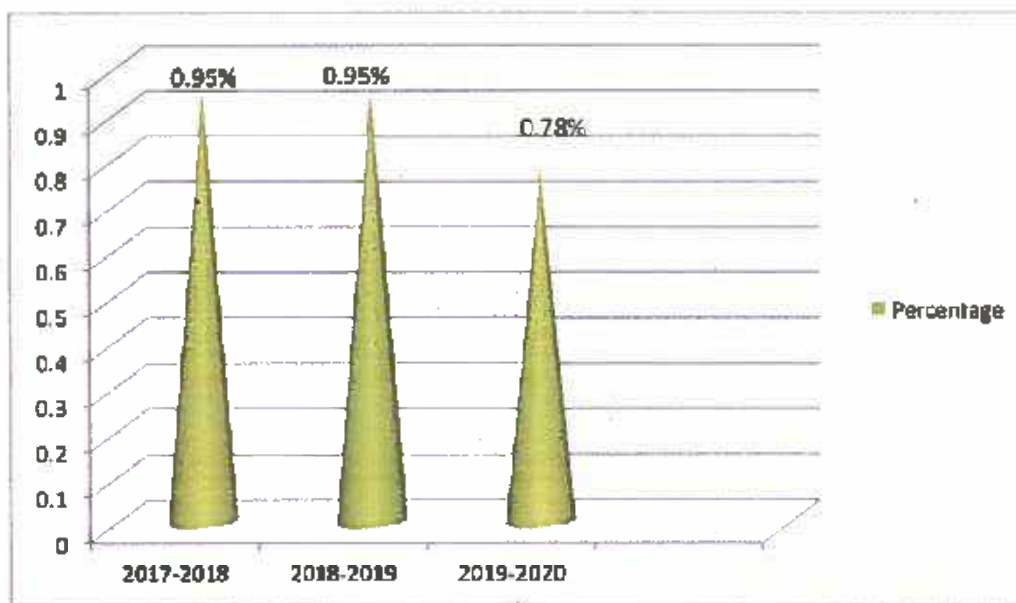
In the year 2017-2018 the percentage of surety loan was 9.87% that increases to 11.35% in the year 2018-2019 and again it increases 0.25% in the year 2019-2020 that is 11.60%. It indicates that the trend will be increasing year by year. The surety loan slowly enhances the trend in yearly.

A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd. Chikodi

Table 4.5 Shows Cash Credit Loan

Year	Cash Credit Loan	Total Loan Amount	Percentage
2017-2018	26,20,663.80	27,59,49,614.40	0.95
2018-2019	27,95,358.20	29,25,47,767.40	0.95
2019-2020	25,84,596	33,06,93,270.28	0.78

(Source : Annual Report)



Interpretation :

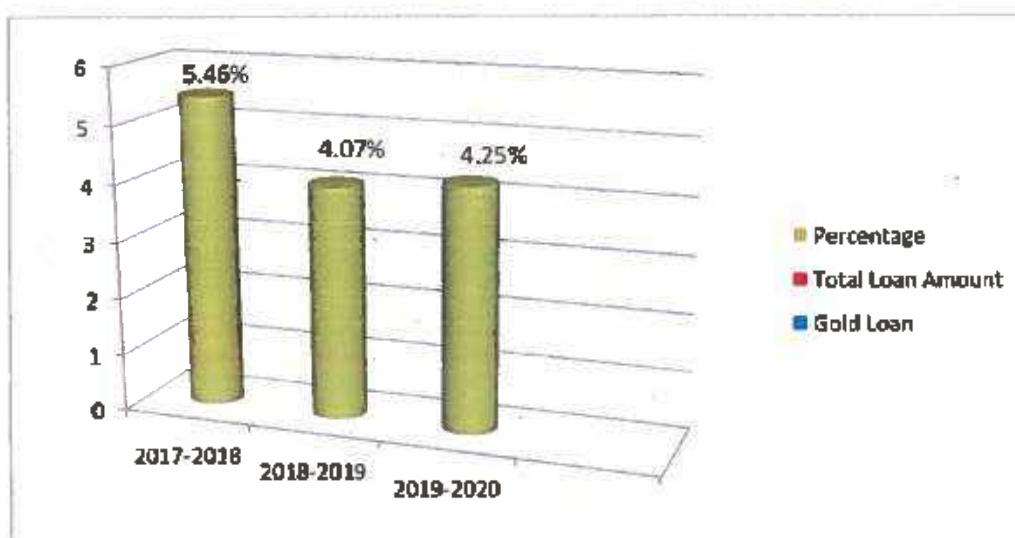
As above chart showing that the total percentage of leading cash credit loan in the year 2017-2018 and 2018-2019 are remaining same that is 0.95%. But in the year 2019-2020 there are fluctuating in the percentage of cash credit that is it decrease the value for 0.78%.

A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd. Chikodi

Table 4.6 Shows Gold Loan

Year	Gold Loan	Total Loan Amount	Percentage
2017-2018	1,50,72,715	27,59,49,614.40	5.46
2018-2019	1,19,19,714	29,25,47,767.40	4.07
2019-2020	1,40,73,599	33,06,93,270.28	4.25

(Source : Annual Report)



Interpretation :

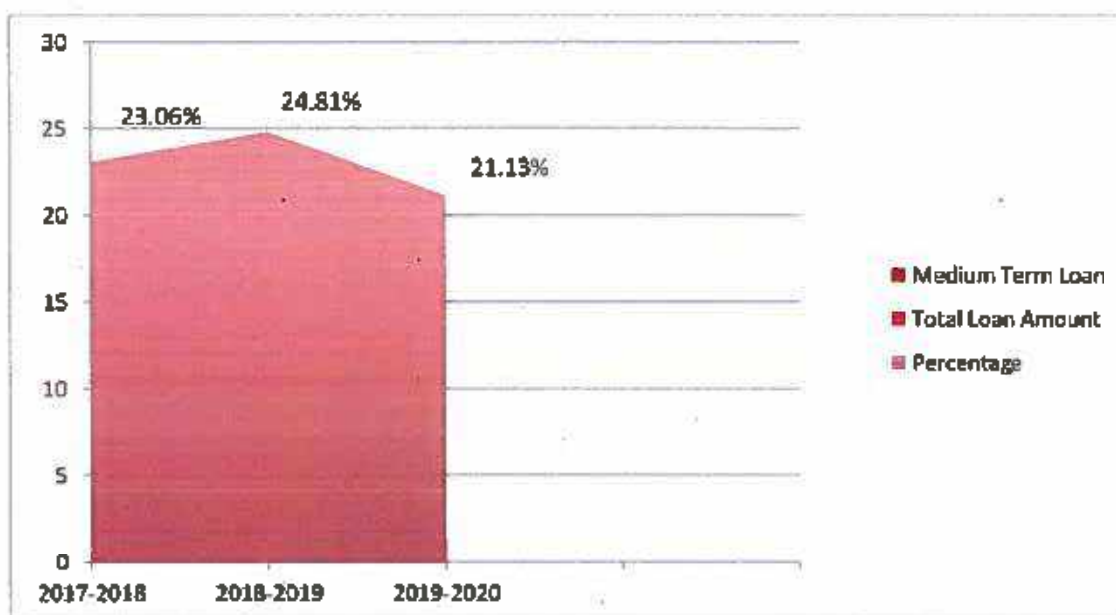
The above table shows that the condition of the gold loan amount over the study of period. The table describe the proportion of the gold loan amount to the total loan amount over the 3 years. The proportion of the gold loan is the total amount was lowest in the year 2018-2019 that is they lend the gold loan 4.07%. compared to the 2017-2018 that is 5.46%. it was again fluctuating in the year 2019-2020.

**A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd.
Chikodi**

Table 4.7 Shows Medium Term Loans

Year	Medium Term Loan	Total Loan Amount	Percentage
2017-2018	6,36,49,884	27,59,49,614.40	23.06
2018-2019	7,25,91,782	29,25,47,767.40	24.81
2019-2020	6,98,90,136	33,06,93,270.28	21.13

(Source : Annual Report)



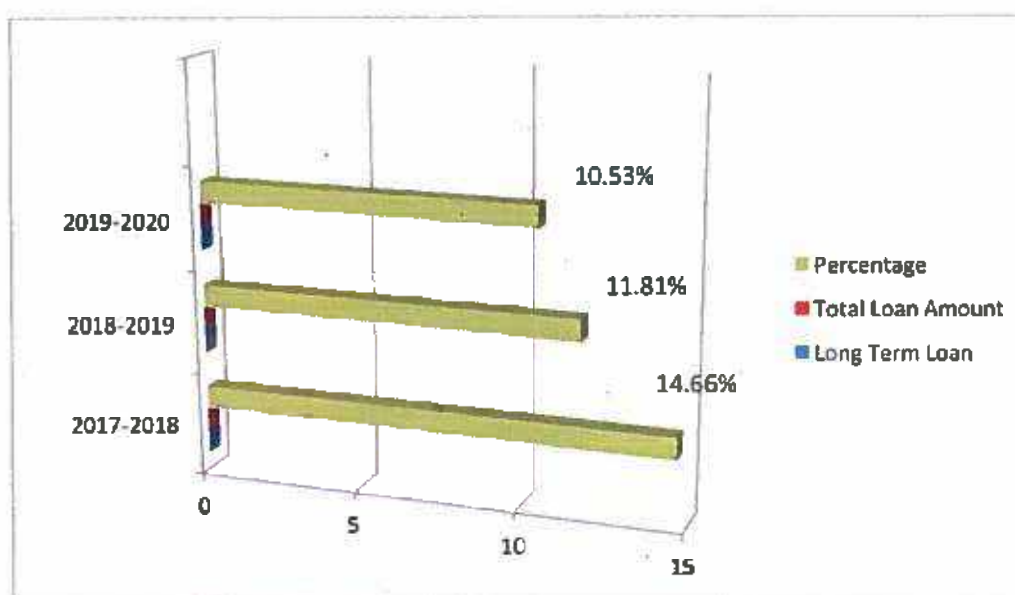
Interpretation :

The above table shows that the proportion of the medium term loan amount to the total amount distributed during the study period. Though the medium term loan given every year has been changing. In the beginning of the study period 2017-2018, 23.16%, and the period 2018-2019 = 24.81% and the previous year 2019-2020 there was 21.13%.

Table 4.8 Shows Lending Long Term Loans

Year	Long Term Loan	Total Loan Amount	Percentage
2017-2018	4,04,54,199	27,59,49,614.40	14.66
2018-2019	3,45,56,409	29,25,47,767.40	11.81
2019-2020	3,48,42,242	33,06,93,270.28	10.53

(Source : Annual Report)



Interpretation :

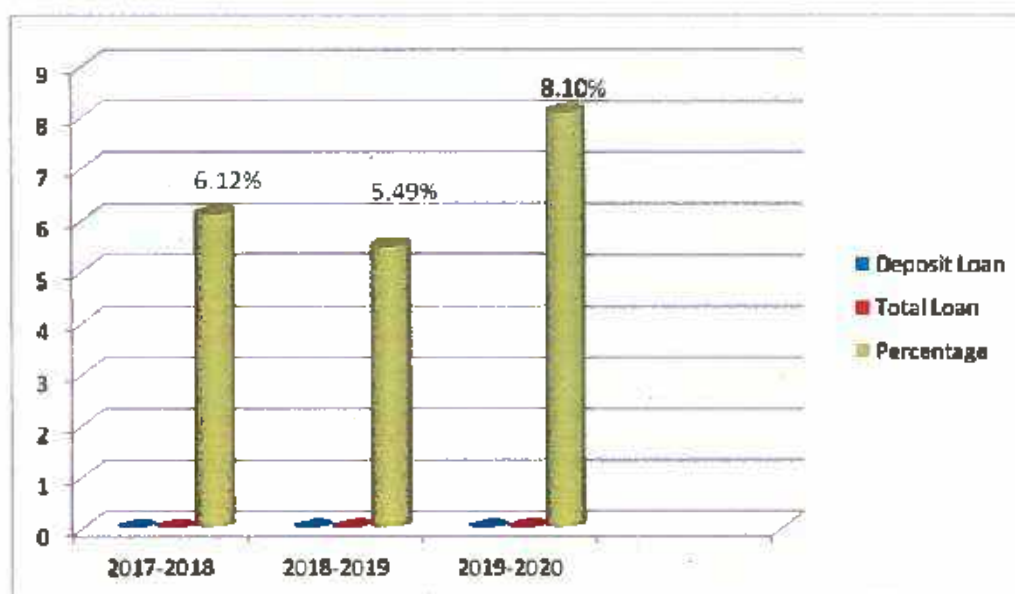
The chart shows that how much loan lending as long term loan. Total long term loan distributed in the year 2017-2018, that's 14.66%, 2018-2019, 11.81% and during the year 2019-2020 that is 10.53%. The lending long term loans by bank is decrease year by year.

A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd. Chikodi

Table 4.9 Shows Total Loan On Deposits

Year	Deposit Loan	Total Loan Amount	Percentage
2017-2018	1,69,03,065	27,59,49,614.40	6.12
2018-2019	1,60,61,609	29,25,47,767.40	5.49
2019-2020	2,67,94,556	33,06,93,270.28	8.10

(Source : Annual Report)



Interpretation :

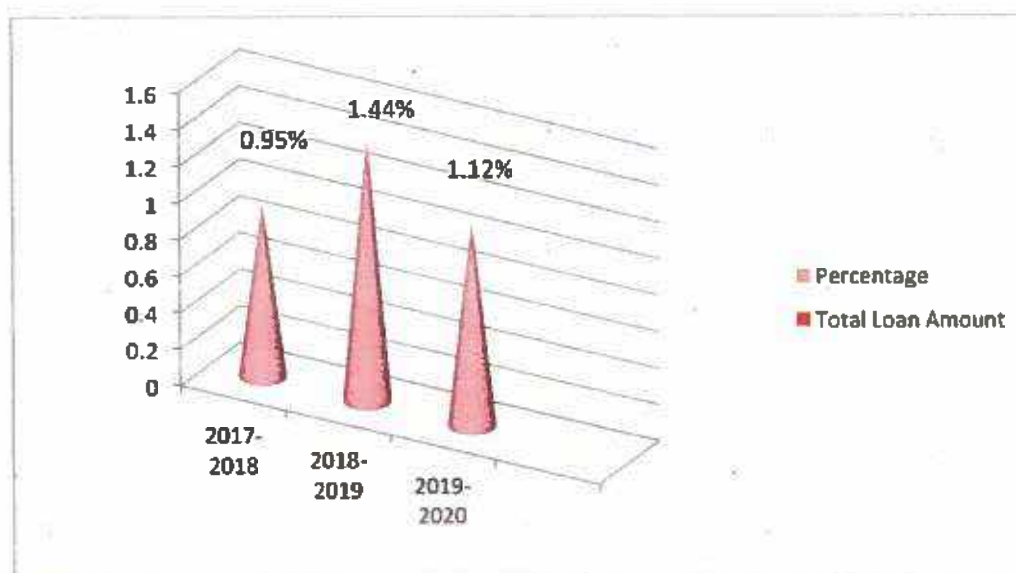
The Table shows us the deposit loan amount. From the table we get the proportion of the deposit loan amount to the total loan amount dispersed for the study period. The deposit loan amount fluctuating year by year. In the year 2017-2018 is 6.12%, 2018-2019 is 5.49% and the year 2019-2020 the percentage of deposit loan is 8.10%.

A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd. Chikodi

Table 4.10 Shows Deposit Cash Credit Loans

Year	Deposit cash credit Loan	Total Loan Amount	Percentage
2017-2018	26,43,126	27,59,49,614.40	0.95
2018-2019	42,25,205	29,25,47,767.40	1.44
2019-2020	37,13,311	33,06,93,270.28	1.12

(Source : Annual Report)



Interpretation :

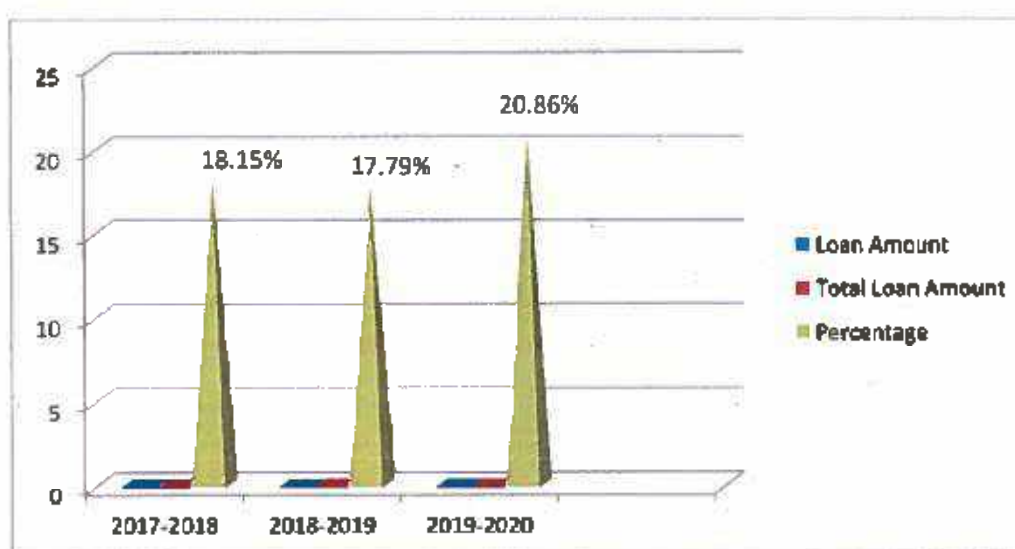
The table shows the deposits c.c. loans amount. The proportion of the deposits cash credit loan has been fluctuating yearly. The proportion was 0.95% in the first year that is 2017-2018. It was increase in the year 2018-2019 that is 1.44% and the year 2019-2020 it reduces by 1.12%.

**A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd.
Chikodi**

Table 4.11 Shows Total Secured Cash Credit Loans

Year	Secured cash credit Loan	Total Loan Amount	Percentage
2017-2018	5,00,96,129	27,59,49,614.40	18.15
2018-2019	5,20,64,353	29,25,47,767.40	17.79
2019-2020	6,89,99,749	33,06,93,270.28	20.86

(Source : Annual Report)



Interpretation :

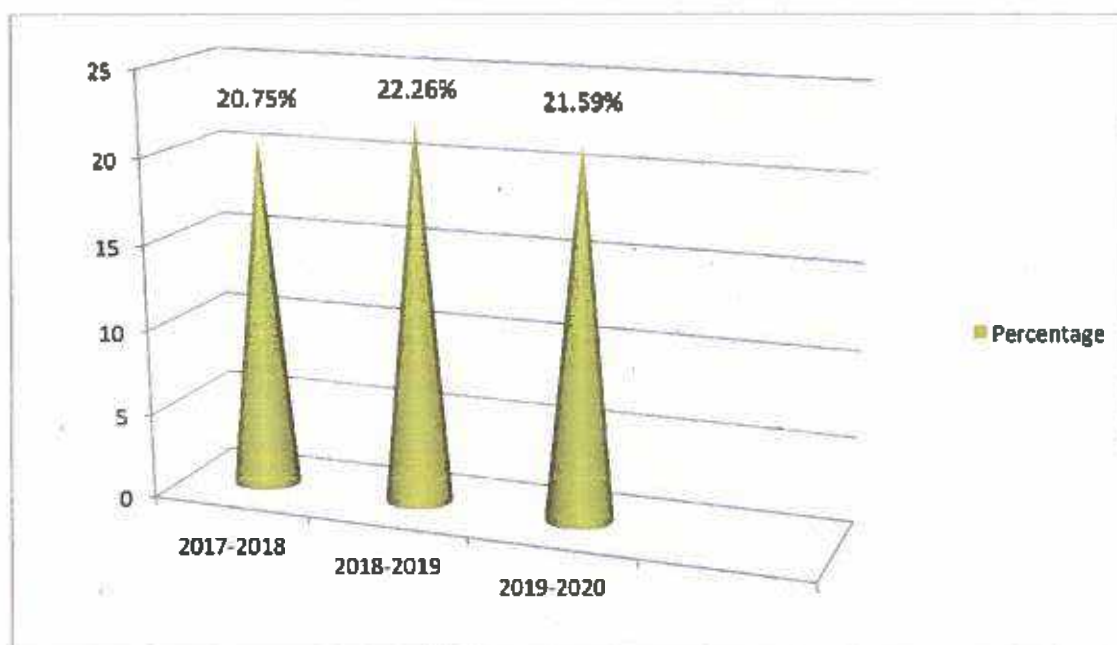
The above table shows in the year 2017-2018 the percentage of cash credit loan was 18.15% and further the percentage of same was decrease 17.79% in the year 2018-2019 and next it continue goes up in the 2019-2020 to 20.86%. so this chart indicates there is a trend uncertainly (fall and raise).

**A Study on Performance of Loans and Advances in D.T.Patil Co-operative Bank Ltd.
Chikodi**

Table 4.12 Shows Mortgage Loans

Year	Mortgage Loan	Total loan amount	Percentage
2017-2018	5,72,83,910.50	27,59,49,614.40	20.75
2018-2019	6,51,24,920.50	29,25,47,767.40	22.26
2019-2020	7,14,25,666.50	33,06,93,270.28	21.59

(Source : Annual Report)



Interpretation :

As the above chart describes that the loan of mortgage is fluctuating year by year. As we can see in the year 2017-2018 the mortgage loan was 20.75%, and in the year 2018-2019, 22.26% and 21.59% in the year 2019-2020. It shows the fluctuation between the given 3 years.

CHAPTER - 5
FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

5.2 SUGGESTIONS

5.3 CONCLUSION

CHAPTER - 5

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS:

1. From the study we can see that the deposit in the year 2017-2018 was Rs.39,69,54,062.71 and it increased to Rs. 48,47,74,767.83 in the year 2019-2020.
2. The total loans and advances in the year 2017-2018 was Rs.27,59,49,614.40 and it has reached to Rs. 33,06,93,270.28 in the year 2019-2020.
3. The bank has plan strategy to provide more and more loans with high degree of security. Which may be inferred from the change in the proportion of surety loan amount to mortgage loans provided during the study period.
4. Cash credit loan have been remains same early 2 years that is 0.95%. and decrease in the year 2019-2020 at 0.78%.
5. The percentage of profit to total income in the year 2015-2016 is 0.5%. it is decreased up to 0.03% in the year 2019-2020.
6. In 2019-2020 the total long term loan lending is decrease as compare to 2017-2018.
7. The medium term loans are fluctuating yearly from 2017-2018 to 2019-2020.

5.2 SUGGESTIONS:

1. The D.T.Patil co-operative bank should establish more branches and provide financial services to the people.
2. The bank should introduce the new schemes to their customers.
3. The procedure for sanctioning loans and advances needs to be customer friendly and not too rigid.
4. Greater awareness among present and potential customers about the benefits of different services offered by the bank.
5. The bank must be adopt new technology and provide awareness about the developing technology to their staff.
6. E-Banking which is found in banks future plans is a good move, which may be initiated earliest.

5.3 CONCLUSION:

Feeling glad to express the gratitude for the D.T.Patil Co-operative Bank Ltd. Chikodi not only for providing information about bank but also the way they response to the customer regarding the banking business services. This bank concerned for the growth of rural economy in true spirit by providing required amount of credit facilities to the farm community, rural artisans, small and medium business units.

The loan and advanced to the needy borrowers is increasing year to year during study period which indicates greater benefit to the members, farmers and young youth aspiring for new business. The amount of deposits also increasing trend from year to year. Which reflects the confidence and trust of the public on the management of the bank and efficiency of the staff members. The amount of profit earned is found increasing from year to year.

However, I feel that the staff members needs to be updated with new technology of banking business, which facilitates the management in introducing new business services to the present and potential customers.

And to conduct a project work a great experience at "D.T.Patil Co-operative Bank Limited, Chikodi". I really come to know what are the procedures and formalities required to take loans and advances even the problem faced while recovery of such loan taken.

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www.bankbazaar.com

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PG DEPARTMENT OF COMMERCE AND MANAGEMENT**



**A PROJECT REPORT ENTITLED
"A STUDY ON COMPARATIVE ANALYSIS OF SELECTED LIFE
INSURANCE COMPANIES IN INDIA "**

**Submitted to
RANI CHANNAMMA UNIVERSITY, BELAGAVI**



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

**SUBMITTED BY
Mr. PRAVEEN HAWALDAR
M.COM-IV SEMESTER
REGISTER NO: MC191609**

**UNDER THE GUIDANCE OF
SHRI. S. M. BHOSAGE**

K.L.E. SOCIETY'S
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CERTIFICATE

This is to certify that Mr. **PRAVEEN HAWALDAR** has satisfactorily completed the Project Report Entitled “**A Study On Comparative Analysis Of Selected Life Insurance Companies in India**” for the partial fulfillment of Degree in **Master of Commerce** in Rani Channamma University, Belagavi during the academic year **2020-2021**.

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PROJECT GUIDE

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DECLARATION

I declare that the project report entitled "A Study On Comparative Analysis Of Selected Life Insurance Companies in India" is a record of independent research work carried out by me and submitted in partial fulfillment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of **Shri. S. M. Bhosage**, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 17/09/2021

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Mr. PRAVEEN HAWALDAR

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Chapter-I

Introduction And Research Design

- 1.1) Introduction
 - 1.2) Review of literature
 - 1.3) Statement of the problem
 - 1.4) Objectives of the study
 - 1.5) Scope of the study
 - 1.6) Research methodology
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CHAPTER: 1**INTRODUCTION AND RESEARCH DESIGN****1.1 INTRODUCTION**

The financial service industry has made significant changes after liberalization and globalization. Among all, insurance sector is also one of the important sectors in India. The Private and Public Players in insurance industry in India as insurance companies are mushrooming after liberalization. Further, increase in the foreign direct investment from 26% to 49% shows that insurance business will grow in India but facing tough competition from rest of the world and specifically the Asian countries. Hence, there is a chance that there may be some difference observed in between the private and public insurance firms. With the entry of private players, the competition is becoming intense. In order to satisfy the customers, There is competition between the public and private companies to implement new creations and innovative product characteristics to attract customers. Hence it is intended, through this study, to make an comparative analysis between private and public companies to understand the differences that lies in terms of demand conditions, competition, product innovations, delivery and distribution systems, use of technology, wide range of products, innovative bundling of insurance with other financial services, aggressive marketing, and better customer care. and regulation. Apart from it, in-depth analysis of the performance of insurance business in India is done with reference to various performance parameters. This paper is organized as follows. Section 2 discusses the overview of the past studies on insurance business. Section 3 outlines insurance industry in India and the SWOT analysis of the industry. In Section 4, describes the research methodology. In Section 5, describes the content analysis of Private and Public Players in insurance industry in India and outlines the comparison between the two based on various indicators. In this section, the paper also shows the results of performance of insurance companies in India. Finally, Section 6 concludes the paper as well as outlines the scope of future work that could possibly arise from the gaps observed in this paper

1.2 REVIEW OF LITERATURE

Simona Laura Dragos (2014), in the research article, "Life and non-life insurance demand: the different effects of influence factors in emerging countries from Europe and Asia", Economic Research. Many previous researches have shown that Urbanisation, incomes and their distributions, and the population degree of education are relevant factors for the development of insurance sector in any nation

Sonal Nena (2013), in her study-"Performance Evaluation of Life Insurance Corporation (LIC) of India" has tried to analyse growth and performance of LIC. She analysed the major source of income (Premium Earned) of the LIC, as well as the significant heads of expenses of LIC to measure the performance .This study has proved that LIC has been success in terms of creating value for its policyholders. The performance evaluation also showed consistent increase in its business. During the study period there was no major change in the performance of the LIC. So it was finally concluded that performance remained unchanged and LIC has maintained the market value of their products

❖ **Sonika Chaudhary, Priti Kiran (2011)**, in their paper "Life Insurance Industry in India - Current Scenario" discussed that life insurance in India's trend from the year 2005-06 to 2010- 2011. During the study period this sector moved upwards from the factors like number of offices, number of agents, new business policies, premium income etc. Further, many new products like ULIPs, pension plans etc. and riders were provided by the life insurers to suit the requirements of various customers.

Harpreet Singh & Preeti Singh(2011), in their research, "An Empirical Analysis Of Insurance Industry In India" have analysed the overall performance of Life Insurance Industry of India between pre- and post economic reform era and also measure the current status, volume of competitions , challenges faced by the Life Insurance Corporation of India and

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lastly to measure the effectiveness of investment strategy of LIC over the period 1980 to 2009.

- ❖ **. Nagaraja Rao, K. (2010)**, in his article "Challenges in Designing Need Based Products in Life Insurance for Inclusive Growth in India", analyses the challenges faced by the insurers in designing need-based products in insurance for inclusive growth, and concludes that the policies of life insurance companies are still not rural-centric, catering to the specific needs of the people. With a view to popularizing life insurance, he recommends that the consumers need to study the rural market, analyse the specific needs of each segment and design innovative products, to suit the requests of the people to the objective of inclusive growth.

- ❖ **B. Muthukrishnan, (2013)** accessed health insurance sector in India has been done. There is very less penetration of health insurance. Only 3% of the population has got some what health insurance. Unfortunately health insurance is purchased only to save income tax. The reason behind this is very poor level of awareness about health insurance products.

- ❖ **B. S. Bodla, (2012)** studied ICICI Prudential Life Insurance Company is a leading life insurance company in private sector. A study of this company has been done. Quality service is the key for growth of any insurance company. Studied the quality of service is accessed through following parameters. 1) Reliability 2) Responsiveness

- ❖ **B. Charumathi, (2012)** reviewed the various factors which are affecting the profitability of life insurance companies in India have been studied and discussed. Indian life insurance industry has been ranked 9th largest market among 156 countries and 5th fastest growing life insurance industry in the world.

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- ❖ **D.Rajasekar, (2014)** The SWOT analysis i.e. strengths, weakness, opportunities and threats for bancassurance has been studied. Bancassurance is a distribution model for insurance products. World bancassurance is a combination of bank insurance. Bank is a vehicle which selling different types of financial products like loans, PPF, Money Transfer, Share & debentures, deposits, etc.

- ❖ **G. Karunanithi, (2012)** took overall review of performance and marketing strategies of LIC of India. Before Privatization LIC has monopoly over the sector. But after privatization now there 24 insurance companies in life insurance market. It has eroded LIC share to 71% of the market. LIC was not able to tap all the market and more than 80% of the population of India does not have any insurance cover.

1.3 STATEMENT OF THE PROBLEM

The particular topic is chosen because the comparative analysis of life insurance companies in India ,the analyzing different types of premium collected and income generated from the investment the study is conducted to evaluate the performance of life insurance companies.

1.4 OBJECTIVES OF THE STUDY

1. To make a comparative analysis of LIC with other selected life insurance companies in India
2. To analyze the growth of selected life insurance companies
3. To study the present status of selected life insurance Companies

1.5 SCOPE OF THE STUDY

Since independence, Indian Life Insurance Industry has gone through radical changes. From a state owned monopoly in the form of Life Insurance Corporation of India, it has now become multi-player competitive one. India's huge population and large untapped market offer big opportunities for the life insurance industry. The objective of the study is to compare the performance of public and private life insurance companies in life insurance industries in India for the period 2014-5 to 2018-19

1.6 RESEARCH METHODOLOGY

The research article is based upon descriptive as well as exploratory research. Secondary sources of data collection have been adopted for the study. The relevant and required data are collected from the text books, national and international articles, as well as annual reports of LIC.

Tools of data collection:

The tools for the data collection divided into two parts

- Primary data

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Primary data is a type of data that is collected by researchers directly from main sources through interviews, surveys

Secondary data

It is the data which has already been collected some one or an organization for some other purpose or research study. The data for my study has been collected from various sources.

- Books
- Journals
- News papers
- Magazines

1.7 LIMITATIONS OF THE STUDY

1. Information is collected from only secondary sources
2. The project period of only 2 months because of corona pandemic situation
3. The study is considered only five years data

1.8 CHAPTER SCHEME

Unit-1 INTRODUCTION AND RESEARCH DESIGN

This Chapter includes Of The Introduction, Review Of Literature, Statement Of The Problem, Objectives Of The Study, Scope Of The Study , Research Methodology and Limitations Of The Study

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Unit-2 THEROTICAL FRAMEWORK

This chapter consists history, concept, meaning definition, classification of incentives. Types of financial incentives and their implications. Importance of financial incentives. Advantages and limitations of financial incentives.

UNIT-3 INSURANCE COMPANIES PROFIL

It gives profile of the insurance company where the project is conducted it also explains about incentives of the company

Unit-4 DATA ANALYSIS AND INTERPRETATION

This chapter consists of the analysis and interpretation of the study based on the findings.

Unit-5 FINDINGS, SUGGESTION AND CONCLUSION

This chapter gives a review of the finding of the study from the analysis of the finding chapter and suggestions are given based on the findings and overall conclusions of the study.

Chapter -2

THEROTICAL FRAMEWORK

- 2.1 Introduction of Insurance Firms**
 - 2.2 History of Insurance**
 - 2.3 Different Types of Insurance**
 - 2.4 Insurance Industry In India**
 - 2.5 Name of Insurance Company**
 - 2.6 Features of Insurance**
-

Chapter-2

THEORETICAL FRAMEWORK

2.1 INTRODUCTION OF INSURANCE FIRMS

Life insurance is a financial tool that can help individuals accomplish a variety of financial goals. The most common use of life insurance is to provide for dependent family members in case of premature death. Life insurance can also be used to fund certain goals, such as a child or grandchild's future college expenses. As an estate planning tool, life insurance can help pay federal and state death taxes as well as estate settlement costs. The ultimate gift can be given using life insurance by transferring wealth between generations and making charitable bequests.

In order to properly utilize this powerful tool to help an individual reach his/her financial goals, it is important to understand the methods for determining how much insurance is appropriate in a given situation, as well as the various types of policies and riders available. This paper is designed to offer insight into how to calculate an individual's insurance need, discuss the different types of insurance, and identify how each type of insurance can best help an individual accomplish particular goals or objectives. This paper is not intended to provide advice, but rather general education. Investors should consult with a qualified tax, legal, and insurance professional before purchasing any insurance products.

2.2 HISTORY OF INSURANCE

In India, insurance has a deep-rooted history. It finds mention in the writings of Manu (*Manusmriti*), Yagnavalkya (*Dharmasastra*) and Kautilya (*Arthashastra*). The writings talk in terms of pooling of resources that could be re-distributed in times of calamities such as fire, floods, epidemics and famine. This was probably a pre-cursor to modern day insurance. Ancient Indian history has preserved the earliest traces of

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insurance in the form of marine trade loans and carriers' contracts. Insurance in India has evolved over time heavily drawing from other countries, England in particular.

1818 saw the advent of life insurance business in India with the establishment of the Oriental Life Insurance Company in Calcutta. This Company however failed in 1834. In 1829, the Madras Equitable had begun transacting life insurance business in the Madras Presidency. 1870 saw the enactment of the British Insurance Act and in the last three decades of the nineteenth century, the Bombay Mutual (1871), Oriental (1874) and Empire of India (1897) were started in the Bombay Residency. This era, however, was dominated by foreign insurance offices which did good business in India, namely Albert Life Assurance, Royal Insurance, Liverpool and London Globe Insurance and the Indian offices were up for hard competition from the foreign companies.

In 1914, the Government of India started publishing returns of Insurance Companies in India. The Indian Life Assurance Companies Act, 1912 was the first statutory measure to regulate life business. In 1928, the Indian Insurance Companies Act was enacted to enable the Government to collect statistical information about both life and non-life business transacted in India by Indian and foreign insurers including provident insurance societies. In 1938, with a view to protecting the interest of the Insurance public, the earlier legislation was consolidated and amended by the Insurance Act, 1938 with comprehensive provisions for effective control over the activities of insurers.

2.3 DIFFERENT TYPES OF INSURANCE

age the smart phone screen, which is one of the most important parts of such devices, your insurance plan will pay for the repair expenses.

Theft or Robbery of Smartphone - Nothing is worse than buying In life, unplanned expenses are a bitter truth. Even when you think that you are financially secure, a sudden or unforeseen expenditure can significantly hamper this security. Depending on the extent of the emergency, such instances may also leave you debt-ridden.

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While you cannot plan ahead for contingencies arising from such incidents, insurance policies offer a semblance of support to minimise financial liability from unforeseen occurrences.

There is a wide range of insurance policies, each aimed at safeguarding certain aspects of your health or assets.

Broadly, there are 8 types of insurance, namely:

- Life Insurance
- Motor insurance
- Health insurance
- Travel insurance
- Property insurance
- Mobile insurance
- Cycle insurance
- Bite-size insurance

Simply knowing the various insurance policies does not help. Instead, you must know how each of these plans work.

Without adequate knowledge about each of them, you may not be able to protect your finances, as well as the financial well-being of your family members. Read on to learn all you need to know about the various insurance policies.

Life Insurance

Life Insurance refers to a policy or cover whereby the policyholder can ensure financial freedom for his/her family members after death. Suppose you are the sole earning member in your family, supporting your spouse and children.

In such an event, your death would financially devastate the whole family. Life insurance policies ensure that such a thing does not happen by providing financial assistance to your family in the event of your passing.

Types of Life Insurance Policies

There are primarily seven different types of insurance policies when it comes to life insurance. These are:

Term Plan - The death benefit from a term plan is only available for a specified period, for instance, 40 years from the date of policy purchase.

Endowment Plan - Endowment plans are life insurance policies where a portion of your premiums go toward the death benefit, while the remaining is invested by the insurance provider. Maturity benefits, death benefit and periodic bonuses are some types of assistance from endowment policies.

Unit Linked Insurance Plans or ULIPs - Similar to endowment plans, a part of your insurance premiums go toward mutual fund investments, while the remaining goes toward the death benefit.

Whole Life Insurance - As the name suggests, such policies offer life cover for the whole life of an individual, instead of a specified term. Some insurers may restrict the whole life insurance tenure to 100 years.

Child's Plan - Investment cum insurance policy, which provides financial aid for your children throughout their lives. The death benefit is available as a lump-sum payment after the death of parents.

Money-Back - Such policies pay a certain percentage of the plan's sum assured after regular intervals. This is known as survival benefit.

Retirement Plan - Also known as pension plans, these policies are a fusion of investment and insurance. A portion of the premiums goes toward creating a retirement corpus for the policyholder. This is available as a lump-sum or monthly payment after the policyholder retires.

Benefits of Life Insurance

If you possess a life insurance plan, you can enjoy the following advantages from the policy.

Tax Benefits - If you pay life insurance premiums, you are eligible for tax benefits in India, under Section 80(C) and 10(10D) of the Income Tax Act. Thus, you can save a substantial sum of money as taxes by opting for a life insurance plan.

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Encourages Saving Habit - Since you need to pay policy premiums, buying such an insurance policy promotes the habit of saving money.

Secures Family's Financial Future - The policy ensures your family's financial independence is maintained even after your demise.

Helps Plan Your Retirement - Certain life insurance policies also act as investment options. For instance, pension plans offer a lump-sum payout as soon as you retire, helping you to fund your retirement.

Now that you know all about life insurance policies read on to understand the various facets of other general insurance policies.

2. Motor Insurance

Motor insurance refers to policies that offer financial assistance in the event of accidents involving your car or bike. Motor insurance can be availed for three categories of motorised vehicles, including:

- Car Insurance - Personally owned four-wheeler vehicles are covered under such a policy.
- Two-wheeler Insurance - Personally owned two-wheeler vehicles, including bikes and scooters, are covered under these plans.
- Commercial Vehicle Insurance - If you own a vehicle that is used commercially, you need to avail insurance for the same. These policies ensure that your business automobiles stay in the best of shapes, reducing losses significantly.

3. Health Insurance

Health insurance refers to a type of general insurance, which provides financial assistance to policyholders when they are admitted to hospitals for treatment. Additionally, some plans also cover the cost of treatment undertaken at home, prior to a hospitalization or after discharge from the same.

With the rising medical inflation in India, buying health insurance has become a necessity. However, before proceeding with your purchase, consider the various types of health insurance plans available in India.

4. Travel Insurance

When talking about the different types of insurance policies, one must not forget to learn more about travel insurance plans. Such policies ensure the financial safety of a

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traveller during a trip. Therefore, when compared to other insurance policies, travel insurance is a short-term cover.

Depending on the provider you choose, travel insurance may offer financial aid at various times, such as during loss of baggage, trip cancellation and much more. Here is a look at some of the different types of travel insurance plans available in the country:

5. Property Insurance

Any building or immovable structure can be insured through property insurance plans. This can be either your residence or commercial space. If any damage befalls such a property, you can claim financial assistance from the insurance provider. Keep in mind that such a plan also financially safeguards the content inside the property.

6. Mobile Insurance

Owing to the rising price of mobile phones and their several applications today, it has become imperative to insure the device. Mobile insurance allows you to reclaim money that you spend on repairing your phone in the event of accidental damage.

Further, you can also claim the same in case of phone theft, making it easier to replace the handset with a new phone.

Benefits of Mobile Insurance

Mobile insurance policies are extremely beneficial, especially for those who own a premium smart phone.



2.4 INSURANCE INDUSTRY IN INDIA

The insurance industry of India has 57 insurance companies 24 are in the life insurance business, while 34 are non-life insurers. Among the life insurers, Life Insurance Corporation (LIC) is the sole public sector company. There are six public sector insurers in the non-life insurance segment. In addition to these, there is a sole national re-insurer, namely General Insurance Corporation of India (GIC Re). Other stakeholders in the Indian Insurance market include agents (individual and corporate), brokers, surveyors and third-party administrators servicing health insurance claims.

2.5 NAME OF INSURANCE COMPANY

- Agriculture Insurance Company of India Ltd.
- National Insurance Company New India Assurance comp. Ltd.
- The Oriental Insurance Company United India Insurance Comp. Ltd.
- 123 Bharati AXA Insurance Company
- Bajaj Allianz General Insurance Company
- Cholamandalam MS General Insurance Company
- Future Generali Insurance Company
- HDFC ERGO Insurance Company
- ICICI Lombard IFFCO Tokio Liberty Videocon General Insurance Co Ltd

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- L&T Insurance Company
 - Magma HDI Insurance Company
 - Raheja QBE Insurance Company
 - Reliance General Insurance
 - Royal Sundaram Alliance General Insurance
 - Shriram Insurance Company
 - SBI General Insurance Company
-

2.6 FEATURES OF INSURANCE

1. Sharing of Risk

Insurance is a device to share the financial losses which might befall an individual or his family on the happening of a specified event.

The event may be the death of a breadwinner to the family in the case of life insurance, marine-perils in marine insurance, fire in fire insurance, and other certain events in general insurance, e.g., theft in burglary insurance, accident in motor insurance, etc. The loss arising from these events, if insured, are shared by all the insured in the form of a premium.

2. Co-operative Device

The most important feature of every insurance plan is the cooperation of a large number of persons who, in effect, agree to share the financial loss arising due to a particular risk that is insured.

Such a group of persons may be brought together voluntarily or through publicity or solicitation of the agents.

An insurer would be unable to compensate for all the losses from his own capital. So, by insuring or underwriting a large number of persons, he can pay the amount of loss.

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Like all cooperative devices, there is no compulsion here on anybody to purchase the insurance policy.

3. Value of Risk

The risk is evaluated before insuring to charge the share of an insured, herein called, consideration or premium. There are several methods of evaluation of risks.

If there is an expectation of more loss, a higher premium may be charged. So, the probability of loss is calculated at the time of insurance.

4. Payment at Contingency

The payment is made at a certain contingency insured. If the contingency occurs, payment is made.

Since the life insurance contract is a contract of certainty, because the contingency, the death, or the expiry of the term will certainly occur, the payment is certain. The contingency is the fire or the marine perils, etc., may or may not occur in other insurance contracts.

So, if the contingency occurs, payment is made. Otherwise, no amount is given to the policy-holder. Similarly, in certain policies, payment is not certain due to the uncertainty of a particular contingency within a particular period.

For example, in term insurance, payment is made only when the assured death occurs within the specified term, maybe one or two years.

Similarly, in Pure Endowment, payment is made only at the survival of the insured at the expiry of the period.

5. Payment of Fortuitous Losses

Another characteristic of insurance is the payment of fortuitous losses. A fortuitous loss is unforeseen and unexpected and occurs as a result of chance. In other words, the loss must be accidental.

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The law of large numbers is based on the assumption that losses are accidental and occur randomly.

For example, a person may slip on an icy sidewalk and break a leg. The loss would be fortuitous. Insurance policies do not cover intentional issues.

6. Amount of Payment

The amount of payment depends on the value of loss due to the particular insured risk provided insurance is there up to that amount. In life insurance, the purpose is not to make good the financial loss suffered. The insurer promises to pay a fixed sum on the happening of an event.

If the event or the contingency takes place, the payment does not fail due if the policy is valid and in force at the time of the event, like property insurance, the dependents will not be required to prove the occurring of loss and the amount of loss.

It is immaterial in life insurance what was the amount of loss was at the time of contingency. But in the property and general insurances, the amount of loss and the happening of loss is required to be proved.

7. A large number of Insured Persons

To spread the loss immediately, smoothly, and cheaply, a large number of persons should be insured. The co-operation of a small number of persons may also be insurance, but it will be limited to the smaller area.

The cost of insurance for each member may be higher.

So, it may be unmarketable. Therefore, to make the insurance cheaper, it is essential to ensure many persons or property because the lessor would be the cost of insurance, so the lower would be premium.

In past years, tariff associations or mutual fire insurance associations were found to share the loss at a cheaper rate. To function successfully, the insurance should be joined by a large number of persons.

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Insurance is a form of risk management primarily used to hedge against the risk of potential financial loss. Again insurance is defined as the equitable transfers of the risk of a poten

General Benefits Regarding Health Insurance

- 1- **Certainty:**-In case the insured person or policy holder faces any bodily injury due to an accident or any kind of illness due to disease. Then health insurance provides certainty of payment of expenses on hospitalization up to the amount as sum insured.
- 2- **Risk Bearing:**-As in common one cannot predict future and so as uncertain risk about health.
- 3- **Financial Aid:**-In health insurance a short amount is saved as a premium in company. In case there is no claim for regular 10 years then company provides bonus at specific rate and it provides financial aid.
- 4- **Tax Relief:**-As in life insurance policies tax relief is provided under section 80 D of income tax act 1961 as specified limits in income tax act.

Health Insurance Sector in India

Health insurance can be defined in very narrow sense where individual or group purchases in advance health coverage by paying a fee called "premium". But it can be also defined broadly by including all financing arrangements where consumers can avoid or reduce their expenditures at time of use of services. The health insurance existing in India covers a very wide spectrum of arrangements and hence the latter-broader interpretation of health Insurance is more appropriate. Health insurance is very well established in many countries. But in India it is a new concept except for the organized sector employees. In India only about 2 percent of total health expenditure is funded by public/social health insurance while 18 percent is funded by government budget. In many other low and middle income countries contribution of social health insurance is much higher.

Source: IRDA Report (2015-16)

we seen that Health insurance policies holder in India is very less as compared to other countries, because people doesn't aware about term and condition regarding health insurance policies. In present health insurance is very important for us, because medical facilities were

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very costly and some time when we suffers from long term acute diseases than we can't afford the medical facilities.

There are different types of health insurance schemes:

Different Types of Health Insurance Schemes

Government Schemes	Private Schemes
Rashtriya Swasthya Bima Yojana	Apollo Munich Optima Restore
Employment State Insurance Scheme	Star Family Health Optima
Central Government Health Scheme	Max Bupa Health Companion Individual
Aam Aadmi Bima Yojana	Universal Sampo Health Insurance
Janashree Bima Yojana	Cigna TTK Pro health Plus
Ayushman Bharat Yojana (Latest)	Royal Sundaram Life line Supreme

Private Insurance takes care of each little aspect of your health related emergencies. Government Insurance on the other hand takes care of less costly expenses & the rest to be paid one's own expenses.

Ayushman Bharat

Ayushman Bharat is National Health Protection Scheme, started in India 25-sep-2018 will cover over 10 crore poor and vulnerable families (approximately 50 crore beneficiaries) providing coverage up to 5 lakh rupees per family every year for secondary and tertiary care hospitalization. Ayushman Bharat National Health Protection Mission will subsume the on-going centrally sponsored schemes Rashtriya Swasthya Bima Yojana (RSBY) and the Senior Citizen Health Insurance Scheme (SCHIS) at the national level to manage, an Ayushman Bharat National Health Protection Mission Agency (AB-NHPMA) would be put in place. States/UTs would

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be advised to implement the scheme by a dedicated entity called State Health Agency (SHA).

Role of Third Party Administrator

A TPA is a service organisation under contract from an insurance company to administer its health insurance policies by providing a banquet of services to policyholders. A TPA performs the role of a services integrator- a triangle between the insurer, the insured and the healthcare provider. The range of TPA services include enrolment and benefits management, claims management, provide network management, medical management and customer service management for the health insurance policyholders of an insurancecompany. But pertinent issues relating to their operations as well as health insurance has been thrown up with respect to insurer, health care providers and TPA's.

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insurance business was nationalized by takeover of 243 insurance companies in the year 1956. Insurance Industry has opened in 2001 and after 10 years of this, IRDA have allowed general insurance companies to take part in M&A activities. The reason for such step taken by IRDA was the 24 companies were making huge losses which were affecting the interest of policy holders. Insurers were having huge losses because of lack of capital. This limited availability of capital is because of FDI limit up to 26%. In current scenario, the Insurance Act allows M&As only in the life insurance business. The law states that the parties involved in M&A transaction should ensure that the policyholders of the transferor entity are transferred in such a way that their existing policies are continued to be serviced by the transferee entity on terms and conditions no less favorable than those existing before the merger. M&A activity in Indian insurance sector became visible from January 2013 and later grew. As companies look to take advantage of opportunities in India, where the newly elected government has eased the restrictions for investors, For Insurance, there are a number of important ways that high growth markets are expected to influence the M&A environment this year.

Insurance companies are experts at managing risks by goal towards growth. However, they do that cautiously to avoid the hidden dangers. Joint ventures are often considered better gateway to enter new markets, gain experience expand distribution, or share risks and investment requirements. Especially in markets where foreign ownership is restricted such as India or China, JVs are often the main or only market entry model. So, Most of Indian insurance firms are in involved in joint ventures, stake sell with exit intensions. Table VIII shows the list of M&A deals done in Insurance sector in India. The reasons for many players to exit from Insurance are many which are discussed below:

- Long gestation period: Insurance companies need to spend at least 8-10 years in a investing in a company to become profitable. In short period of time, it is difficult to make profits. Therefore, companies take steps to sell their business units as exit strategy. This happens particularly among the foreign partners when they find that there is no FDI incentive or no major reward to stay invested if they are not cash-rich.

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- Valuation issues and disagreement with partners: In the life insurance sector, some foreign companies operating in the financial services sector and having presence in India through joint venture agreements in insurance have been planning to exit.

6) Private and Public Players in insurance industry in India

Insurance Education

A number of institutions provide specialist education for the insurance industry, these include; National Insurance Academy, Pune, specialized in teaching, conducting research and providing consulting services in the insurance sector. Institute of Insurance and Risk Management, Hyderabad, offers Postgraduate diploma in Life, General Insurance, Risk Management and Actuarial Sciences. Amity School of Insurance Banking and Actuarial science (ASIBAS) offers MBA programs in Insurance, Insurance and Banking, and M.Sc. /B.Sc. actuarial sciences to a Post Graduate Diploma in Actuarial Sciences. Pondicherry University is offering mba in insurance management. Birla Institute of Management Technology offers a PGDM-IBM program in insurance business management. Life Office Management Association (LOMA), USA is BIMTECH's educational partner and BIMTECH is an approved centre for LOMA examination. The Chartered Insurance Institute (CII), UK has accorded recognition (by way of credits) to the BIMTECH PGDM-IBM program. NLU, Jodhpur, offers a two year MBA and one year MS (for engineering graduates) program in insurance.

Lack of insurance awareness has proved to be one of the hurdles in penetration of insurance across the country. This analysis is done by making content analysis of the website of insurance companies and also looking at their annual reports. This is done to see the initiatives taken by individual companies to increase awareness about the insurance industry and the products

UNIT 3

INSURANCE COMPANIES PROFILE

3.1 LIC Profile

3.2 History

3.3 Nationalization In 1956

3.4 IPO

3.5 Structure

3.6 LIC Contribution To The Five Year Plans Over The Years

3.7 OPARETION

3.9 Employees and agents

3.10 Agency Strength

CHAPTER- 3

INSURANCE COMPANIES PROFLE

3.1 Lic Profile



3.2 HISTORY

Founding organization]

The Oriental Life Insurance Company, the first company in India offering life insurance coverage, was established in Kolkata in 1818. Its primary target market was the Europeans based in India, and it charged Indians hefty premiums. Surendranath Tagore had founded Hindustan Insurance Society, which later became Life Insurance Corporation. Check Special Policy Of LIC.

The Bombay Mutual Life Assurance Society, formed in 1870, was the first native insurance provider. Other insurance companies established in the pre-independence era included

- Postal Life Insurance (PLI) was introduced on 1 February 1884
- Bharat Insurance Company (1896)
- United India (1906)
- National Indian (1906)
- National Insurance (1906)
- Co-operative Assurance (1906)
- Hindustan Co-operatives (1907)
- The New India Assurance Co Ltd (1919)
- Indian Mercantile
- General Assurance
- Swadeshi Life (later Bombay Life)
- Sahyadri Insurance (Merged into LIC, 1986)

The first 150 years were marked mostly by turbulent economic conditions. It witnessed India's First War of Independence, adverse effects of the World War I and World War II on the economy of India, and in between them the period of worldwide economic crises triggered by the Great depression. The first half of the 20th century saw a heightened struggle for India's independence. The aggregate effect of these events led to a high rate of and liquidation of life insurance companies in

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India. This had adversely affected the faith of the general in the utility of obtaining life cover.

3.3 Nationalization in 1956

In 1955, parliamentarian Feroze Gandhi raised the matter of insurance fraud by owners of private insurance agencies. In the ensuing investigations, one of India's wealthiest businessmen, Sachin Devkekar, owner of the *Times of India* newspaper, was sent to prison for two years.

The Parliament of India passed the Life Insurance of India Act on 19 June 1956 creating the Life Insurance Corporation of India, which started operating in September of that year. It consolidated the business of 245 private life insurers and other entities offering life insurance services; this consisted of 154 life insurance companies, 16 foreign companies and 75 provident companies. The nationalization of the life insurance business in India was a result of the Industrial Policy Resolution of 1956, which had created a policy framework for extending state control over at least 17 sectors of the economy, including life insurance

3.4 IPO

Finance Minister Nirmala Sitharaman announced a proposal to conduct an initial public offering for LIC in the 2021 Union Budget. The IPO is expected to be held in FY22. The Government of India will remain the majority shareholder after the public listing. Ten percent of shares are proposed to be allotted to existing LIC policyholders. In year 2021, government of India had proposed to significantly enhance the authorised capital of Life Insurance Corporation of India (LIC), to INR 250bn (\$3.4bn) to facilitate its public listing scheduled for the next fiscal year which will begin on 1 April.

3.5 STRUCTURE

The LIC's executive board consists of Chairman, currently M R Kumar, and Managing Directors, Vipin Anand, T. C. Suseel Kumar, Mukesh Kumar Gupta and Raj Kumar

The Central Office of LIC is based out of Mumbai which sits The Chairman, all four Managing Directors, and all Executive Directors (Department Heads). LIC has a total of 8 Zonal Offices namely Delhi, Chennai, Mumbai, Hyderabad, Kanpur, Kolkata, Bhopal & Patna

3.6 LIC's Contribution to the five year plans over the years

Plan	Year	Investment
2	1956-1961	₹184 Cr
3	1961-1966	₹285 Cr
4	1969-1974	₹1,530 Cr
5	1974-1979	₹2,942 Cr
6	1980-1985	₹7,140 Cr
7	1985-1990	₹12,969 Cr
8	1992-1997	₹56,097 Cr
9	1997-2002	₹1,70,929 Cr

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10	2002-2007	₹3,94,779 Cr
11	2007-2012	₹7,04,720 Cr
12	2012-2017	₹14,23,055 Cr
13	2017-2022	₹28,01,483 Cr

3.7 LIBERALISATION FOST

In August 2000, the Indian Government embarked on a program to liberalise the insurance sector and opened it up for the private sector. LIC emerged as a beneficiary from this process with robust performance, albeit on a base substantially higher than the private sector.

In 2013, the first year premium compound annual growth rate (CAGR) was 24.53% while total life premium CAGR was 19.28% matching the growth of the life insurance industry and outperforming general economic growth.

3.8 OPARETION

Today LIC functions with 2048 fully computerized branch offices, 8 zonal offices, around 113 divisional offices, 2,048 branches and 1408 satellite offices and the Central Office, it also has 73 customer zones and 25 metro-area service hubs located in different cities and towns of India. It also has a network of 1,537,064 individual agents, 342 Corporate Agents, 109 Referral Agents, 114 Brokers and 42 Banks for soliciting life insurance business from the public.

The LIC has 22 departments each headed by an Executive Director namely Marketing, Bank assurance (B&AC), Corporate Communication, Personnel, CRM, Direct Marketing, E&OS, F&A, IT/BPR, Inspection, Investment, SBU/Estates, Investment Operations, P&GS, Actuarial, Chairman Sectt, F&A, Micro Insurance, RTI, HRD, Engineering, and Vigilance.

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The LIC has 8 Zonal Offices headed by a Zonal Manager(I/C) (Executive Director Cadre) who is one of the key decision-makers of the corporation after the Board

North Zone	New Delhi
Central Zone	Bhopal
East Zone	Kolkata
West Zone	Mumbai
South Zone	Chennai
East Central Zone	Patna
North Central Zone	Kanpur
South Central Zone	Hyderabad

The LIC follows a horizontal line of command & vertical line of command, while each department is headed by an Executive Director, the Zonal offices are headed by a Zonal Manager who oversees all the departments & divisions of the Zone – making him de facto CEO of the Zone. The zonal departmental heads are Regional Managers. Divisions are headed by Sr. Divisional Manager(I/C) who oversees all the departments & branches of the division. There are 3 layers of Horizontal Management namely Senior Divisional Manager(I/C), Zonal Manager(I/C) & the Chairman/MD. There are also 3 layers of vertical management namely Managers of Divisions, Regional Managers of Zonal Office & the Executive Directors of Central office. Horizontal Management is considered key managers of the corporation.

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The Cadre list & Possible designations of Class 1 officers (Increasing order)

Cadre/Rank Name	Posting Designations
Chairman	Chairman
Managing Director	Managing Director
Zonal Manager(Special)	Zonal Manager(I/C), Executive Director, CEO of Subsidiary
Zonal Manager(Ordinary)(3 Year Cadre)	Regional Manager, Chief, Director, CEO of Subsidiary
Sr Divisional Manager	Deputy Zonal Manager, SDM(I/C), Principal, Faculty Member, Regional Manager, Secretary
Divisional Manager	Chief Manager, DM, Secretary, Dy Secretary, Marketing Manager, Principal, Faculty Member
Assistant Divisional Manager	Sr. Branch Manager (I/C), Sr. Branch Manager(Sales), Manager(Admin), Manager, Dy Secretary, Faculty Member
Administrative Officer	Branch Manager(I/C), BM(SALES), AO
Assistant Administrative	ABM(Sales), AAO, PA, Deputy Manager,

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Officer	
---------	--

Now LIC also has the 1899 branches of IDBI bank at its disposal thus it can carry out its insurance business through these branches of the bank.

3.9 Employees and agents

As on 31 March 2020, LIC had 1,14,498 employees, out of which 25,602 were women.

Category of employees	Total Number	No. of Women
Class-I Officers	32,433	7202
Class-II Development Officers	24,388	1,458
Class III/IV employees	57,677	16,942
Total	1,14,498	25,602

3.10 Agency strength

The total number of agents on roll is 12,08,826 (of which 10,80,809 were active agents) as of March 2020 as against 11,79,229 as of March 2019

i. Rewarding career

You will help people realize their dreams by fulfilling their financial goals. The difference you make to their lives is more rewarding and satisfying than you could ever imagine.

2. A Successful Team

By joining us, you will be a part of the country's finest team of life insurance Agents. In the year 2015, we contributed 4021 members to the Million Dollar Round Table: a global forum that salutes the world's most successful Insurance Agents.

3. Attractive

We offer one of the best remuneration systems in the industry that not only takes care of your current earnings, but also guarantees an earnings for the future. What's more, you can set your own income targets with a potential to earn as much as you want for the rest of your life

4. Independence

As an Agent, you will be a true entrepreneur. You have the freedom to be your own boss: work for yourself, choose your own clients and make your own money. All of this, without your having to make any initial capital investment

5. World-Class Training

We provide you with the best-in-class training systems, since that is what differentiates LIC Agent from the rest. Even if you don't have previous experience in selling, our multi-dimensional training programme conducted by our qualified in-house training personnel, will make you a specialist in life insurance sales.

6. Commitment To Career Agency System

Our commitment to the Career Agency System means that, we support you and your efforts not just today, but at every stage of your business. We believe in encouraging our Agents to strive towards the highest levels of success, throughout their careers. In fact, depending on your performance, we also offer a management career option with the company

7. Infrastructure Support

We have invested in creating a state-of-the-art infrastructure at each of our Branch Offices. You will have access to the necessary tools, technology and people support that will enable you to build a profitable long-term business

8. Full Range Of Products And Services

You can offer your customers over 50 product combinations of our unique Products and Riders, to help them meet all their financial goals. In order to give you a greater competitive edge, we are also continuously working on newer and more innovative products.

9. Sales And Marketing Support

We support our Agents with innovative sales and marketing tools. The Sales, Promotions and Marketing collaterals that we provide will help you take your business to new heights.

10. Financial Strength

LIC offers you and your customer unmatched financial strength and solidity.

HDFC

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The Insurance Regulatory and Development Authority (IRDA) was constituted in 1999 as an autonomous body to regulate and develop the insurance industry. The IRDA opened up the market in August 2000 with the invitation for application for registrations. HDFC Life was established in 2000 becoming the first private sector life insurance company in India.

By 2001, the company had its 100th customer, strengthened its employee force to 100 and had settled its first claim. HDFC Life launched its first TV advertising campaign 'Sar Utha Ke Jiyo' in 2005. In 2006, a study conducted by the Brand Equity – Economic Times had put HDFC Life at 29th rank in the most trusted Indian Brands amongst the Top 50 Service Brands of 2010.

The Insurance Regulatory and Development Authority (IRDA) gave accreditation to HDFC Life for 149 training centers housed in its branches to cater to the mandatory training required to be given as well as for other sales training requirements in 2009.

In 2012, it is the first private life insurance company to bring back pension plans under the new regulatory regime, with the launch of two pension plans – HDFC Life Pension Super Plus and HDFC Life Single Premium Pension Super, operating the pension fund business under the National Pension System and is the second largest private pension fund management company in India in terms of assets under management and subscribers in Fiscal 2017. The company turned profitable in fiscal 2012 posting annual profit of Rs 271 crore and in December 2013 it declared a maiden dividend for its shareholders and in 2014 the company's Assets Under Management (AUM) crossed Rs 50000 crore mark.

In the year 2016, Standard Life Mauritius increases its stake in the HDFC Life from 26% to 35% and in Fiscal 2016 the latter establishes the first international subsidiary in the UAE, HDFC International to operate the reinsurance business which signs reinsurance treaties for two distinct lines of individual life business and enters into arrangements to offer reinsurance services for group and credit life schemes and expects the pension and reinsurance business to help them diversify its sources of revenue and profitability in future years.

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By 2017, it was country's third-largest private sector life insurance company with 16.5 percent share of total private sector premiums for the Financial Year 2017 and fourth largest in the life insurance industry based on premium earned and had 66,372 individual agents across India, comprising 6.8 percent of total private agents in the Indian life insurance industry and entered into 125 banking tie-ups including HDFC Bank giving it access to a huge branch network.

Till 2019, the insurance firm had insured 21.6 million lives in both individual and group segments, and has one of the highest margins in the business, with 24.3 per cent in 1st half of financial year 2019 and is regarded as one of the most consistent life insurance firms delivering efficient returns on operating Earning Value (EV) of 20 per cent for the last three consecutive financial years.

Associated Companies

HDFC Life's associated companies include HDFC Ltd, HDFC Bank, HDFC International Life and Re Company Limited, HDFC Pension HDFC MF, HDFC Sales, HDFC Ergo, HDB Financial Services (HDBFS), HDFC Securities, HDFC RED, HDFC Ventures Trustee Company, GRUH Finance, HDFC Trustee Company, HDFC Developers, HDFC Property Ventures, HDFC Investments, Credit Information Bureau (India) Ltd.

HDFC Life's products include Protection, Pension, Savings, Investment, Health along with Children and Women plans. The company also provides an option of customizing the plans, by adding optional benefits called riders, at an additional price. The Company has categorized its product portfolio covering five principal segments across the individual and group categories namely participating, non-participating protection term, non-participating protection health, other non participating and unit-linked insurance products. The company currently has 37 retail and 11 group products, along with 6 optional rider benefits (as on 24 March 2020).

- Protection Plans – insurance plans that provide protection and financial stability to the family in case of any unforeseen events.
- Click2Protect life is their online term plan.

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- Launched CSC Suraksha to be sold exclusive through the Common Services Centre network.
- Click2Invest is their online ULIP investment plan.
- Health Plan – offers financial security to meet health related contingencies.
- Savings & Investment plans – These plans help in investment to achieve financial goals.
- Retirement plans – financial security for life post retirement.
- Women's plans – plans catering to different financial needs of women.
- Children's plans – plans meant to secure children's future.
- Rural & social Plans – meant specifically for rural customers.
- Click2Retire completed their Click2 portfolio.
- ULIP Investment with more funds.

Key people

The MD & CEO of the company is Vibha Padalkar, Executive Director is Suresh Badami, Chief Financial Officer is Niraj Shah, Chief Operating Officer is Parvez Mulla, Chief Actuary is Srinivasan Parthasarathy, Chief Investment Officer is Prasun Gajri, Group Head - Distribution Strategy & Alliances is Pankaj Gupta & Vibhash Naik heads HR, Admin and L&D.

HDFC Life is one of India's leading private life insurance company, among the 24 players in India and the first private insurance player to be licensed in year 2000. It offers a range of individual and group insurance solutions and is a joint venture between Housing Development Finance Corporation Limited (HDFC), and Standard Life PLC, the leading provider of financial services in the United Kingdom. As on 2016, HDFC Life has employee strength of 15,000 which caters to its 64 lac customer base through a network of 414 branches and spoke locations.

HDFC Life distributes its products through specialized channels which increase its reach to the customers. The channels are Agency, Banc assurance, Group Sales, Direct Sales, Worksite, Loyalty, Online, and Telemarketing.

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68 HDFC Standard Life Insurance Company Ltd. • Individual business comprises of business sourced through our Banc assurance partners, brokers, financial consultants aligned to Agency channel and Direct Sales team.

- Group Sales offers the most comprehensive products for Employer Employee Benefit schemes. Products offered by HDFCSL helps progressive employers who wish to provide the best and most innovative employee benefit solutions to their employees.

New Business is the core value chain in any insurance company and it can be quite a complex structure with the increase in products and distribution channels getting added every year. HDFC Life is a growing organization with multiple partner tie ups and increasing customer base. Typically any organization faces challenges when there are multiple hand offs in a process running across departments and geographies. The Turn Around Time (TAT) is one of most important moment of truth at the time of sale not only for the customer but also for the distributors. The dependency on outsource staff for routine activities which are enablers to the process, just adds up to the complexity both on TAT and quality front.

People

The Annualized attrition rate of sales force in Insurance is as high as 100%. Also, ensuring stickiness at the retail distributor level is a challenge. The distribution partners (Banks, MFIs etc.) are have evolved and they expect consistency in support and they need it faster than others. Ensuring knowledge levels and consistency across the sales and distribution team becomes a challenge.

Price

This has close linkage to cost and within the current regulatory regime, it is the most difficult parameter to manage. With cost ratio ranging from 15-30%, it poses a big threat to business continuity. Most organizations have exhausted the conventional means of cost cutting and are in constant search for new measures.

ICICI insurance



ICICI Prudential Life Insurance started its operations in 2001. The life insurance arm was established as a joint venture between ICICI Bank Limited and Prudential Corporation Holdings Limited with assets under management (AUM) of approx. ₹100 crore (US\$14 million).

In 2010, the firm had grown up to ₹50,000 crore (US\$7.0 billion) mark in assets under management (AUM).

In 2015, the firm had crossed ₹1 trillion (US\$14 billion) mark in assets under management (AUM). It became the first insurance company in the industry to benchmark in AUM.

In 2016, ICICI Prudential Life became the first insurance company to be listed in Indian stock market, namely Bombay Stock Exchange and National Stock Exchange. The IPO, where the parent company ICICI Bank Limited offloaded 12.65 per cent of its shares, was termed as biggest in the Indian market since 2010 with its market capitalization of ₹5,000 crore (US\$700 million). Teasek Holdings, Premji Invest and Government of Singapore are other major shareholders of the company.

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In 2017, ICICI Prudential Life was requested to take over Sahara Life's insurance business on request from the regulator IRDA in a motive to resolve the crisis at the Sahara's life insurance arm. The merger was later revoked by Securities Appellate Tribunal.

In 2020, ICICI Prudential Life had crossed ₹2 trillion (US\$28 billion) mark in assets under management (AUM). The total premium income was ₹32,000 core (US\$4.5 billion) of which ₹12,000 core (US\$1.7 billion) was from the new business premium while approx. ₹21,000 core (US\$2.9 billion) was of the renewal premium.

Key people:

- N S Kannan - Managing Director and CEO
- M S Ramachandran - Chairman, Independent Director
- Amit Palta - Chief Distribution Officer
- Judhajit Das - Chief Human Resource Officer
- Satyan Jambunathan - Chief Financial Officer
- Ganessian Soundiram - Chief Technology Officer
- Manish Dubey - Chief Marketing Officer
- Deepak Kinger - Chief Risk & Compliance Officer
- Manish Kumar - Chief Investments Officer

Partnerships:

- In December 2019, the company collaborated with Paytm so that users can get the iProtect Smart plan benefits through it.
- In January 2021, the company collaborated with PhonePe so that users can get term life insurance instantly via the app without any health check-ups and paperwork

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Advertising and marketing companies

- In February 2013, the firm released a brand awareness campaign with a theme of "bande achhe hai". This TV commercial was inspired by a real-life incident that was aired for four weeks. The ad was shot by Amit Sharma of Chrome Pictures with music given by Shantanu Moitra and lyrics written by Swanand Kirkire.
- In March 2018, the firm had collaborated with actress Konkona Sen Sharma to drive awareness about their term plan ICICI Pru iProtect Smart plan that provides a life cover for family's protection and a 34 critical illness cover for self. The ad was showcased on TV, digital, cinema, outdoor media and other mediums
- During COVID-19 time, in the month of November 2020, the firm released a commercial ad to spread awareness of their term plan product ICICI Pru iProtect Smart where customers can get the benefits of both life and health insurance.

Corporate social responsibility (csr) initiatives

- In March 2019, ICICI Prudential Life Insurance geared up for a CSR initiative with a campaign named "Sunu Kya? Body Ka Alarm" (transl. Listen to your body) in association with Times Spotlight. This initiative is urging Indian people to pay attention to their body signs and encourages them to be prepared financially. The company has also partnered with SRL diagnostics for discounted health check-up packages.
- In March 2020, ICICI Prudential Life Insurance partnered with Times of India for conducting the Mission Healthy India Survey 2020 to find out if people were paying attention to the signs their body gives that can help them catch the onset of

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a critical illness early. This awareness initiative from the company urges people to take good care of their health and be financially prepared against any uncertainty. Term life insurance plans provide high cover at affordable price and do not have any maturity value. These plans cover you for a specific term and protect your wife/husband, children or other nominees financially when you are not around.

ICICI Pru iProtect Smart is more than a term plan that protects you and your loved ones. It also has an option to provide health cover against 34 critical illnesses. The claim for this protection is paid on first diagnosis itself without any hospital bills[^]. This plan also has an option to provide accidental death cover up to '2Cr+.

This illustrated brochure helps you in selecting the right policy for you. It also provides comprehensive information about ICICI Pru iProtect Smart, Buying ICICI Pru iProtect Smart online and easy claim process of ICICI Prudential Life.

Introduction BACK 03 Since its launch ICICI Pru iProtect Smart has become our top1 selling plan online. It is one of the first term plans in the industry that offered claim payment on diagnosis of any of 34 Critical Illnesses. Immediately this benefit became popular among consumers with~ 1 in 3 customers opting for this benefit. Not just this, in 2019, in a survey of over 2800 people by Nielsen, our term plan was awarded 'Product of the Year' in the Life Insurance category,

These 7 benefits not just give you and your family more protection but more value. Let's see how: Did you know these 7 things about our Term Plan?

1: It fits in your budget perfectly After paying your monthly rent, light and phone bills, a term life insurance premium can be difficult. ICICI Pru iProtect Smart's affordable premiums' make sure it isn't. Just what your wallet asked for.

2: It gives you longer cover The best time to buy life insurance is now. As buying now will ensure that you get life cover at low premiums and desired term. Our plan has the provision to get you covered till age of 85 and you also have option to get whole life cover till age 99. But it is advisable that you take term life cover for your

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earning years because by then you would have paid off your liabilities and you may not have family dependent on your income.

3: It pays on diagnosis of any of the 34 critical illnesses (optional) Term Life Insurance is for your family's security. But what happens when critical illness strikes and your life hangs in balance? ICICI Pru iProtect Smart offers optional health insurance cover for 34 Critical Illnesses. But here's the best part - It gives claim payout on first diagnosis of any of the covered 34 Critical Illnesses. No Hospital Bills required. Only medical documents confirming diagnosis of critical illness needs to be submitted. **BACK 04 Click here to Buy iProtect Smart online BACK**

4: It gives four pay out options Sometimes you may make lump sum payments, such as for your child's education and sometimes you just need monthly income, say for Home loan EMIs. You can select pay out option as per your requirements when buying the policy.

5: It pays life cover on terminal illness (including AIDS) Terminal illnesses such as AIDS are not only life threatening but can also spell financial ruin. ICICI Pru iProtect Smart helps you give them that last fight by paying your insurance money before death. The terminal illnesses cover in ICICI Pru iprotect Smart now covers AIDS too3

6: It gives you option to add accidental benefit now, or later Road, Train accidents happen all the time. Insurance can't stop them, but it can mitigate the financial effects. ICICI Pru iProtect Smart lets you add accidental cover of your choice during purchase or, even after purchase. For example if you buy life cover of `1crore with accident benefit of `50 Lakh, your nominee will get `1.5 core in case of death due to accident. Maximum accident cover available with this benefit is `2 core.

7: It gives you option to buy this policy online under MWP Act Last thing you want after buying a term plan is insurance money not given to your near ones, like to your wife or children. Your relatives /creditors may wrongfully claim the insurance amount. You have the option to protect it



Mr. Arjun is 25 years old and in his first job. He bought his first two wheeler on credit. He wants to make sure that even if something untoward happens to him, his family is not troubled by the lenders.

He approaches the nearest ICICI Prudential branch and buys ICICI Pru Life Raksha with a Sum Assured of ` 1 lakh and policy term of 5 years. His premium is just ` 831 each year before Goods & Services Tax and Cess (if any).

If he dies anytime during these 5 years, the Nominee will receive ` 1 lakh, which is sufficient to cover the bike loan

1.Free look period:

If you are not satisfied with the policy, you may cancel it by returning the policy document to the Company with reasons within:

† 15 days from the date you received it, if your policy is not purchased through Distance marketing*

† 30 days from the date you received it, if your policy is an electronic policy or if the policy is purchased through Distance marketing*

On cancellation of the policy during the free look period, we will return the premium paid subject to the deduction of:

- a. Stamp duty paid under the policy,
- b. Expenses borne by the Company on medical examination, if any

The policy shall terminate on payment of this amount and all rights, benefits and interests under this policy will stand extinguished.

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*Distance marketing includes every activity of solicitation (including lead generation) and sale of insurance products through the following modes: (i) Voice mode, which includes telephone-calling (ii) Short Messaging service (SMS) (iii) Electronic mode which includes e-mail, internet and interactive television (DTH) (iv) Physical mode which includes direct postal mail and newspaper & magazine inserts and (v) Solicitation through any means of communication other than in person.

1. benefits:

Tax benefits under the policy are subject to conditions u/s 80C of the Tax Income Tax Act 1961. Goods & Services Tax and Cess (if any) will be charged extra as per prevailing rates. The tax laws are subject to amendments from time to time.

2.Suicide clause:

If the Life Assured whether sane or insane, commits suicide within 12 months from the date of commencement of risk of this policy, then the Company will refund the total premiums paid including extra premiums, if any till the date of death and all rights, benefits and interests under this policy will stand extinguished. In the case of a revival as described below, if the Life Assured, whether sane or insane, commits suicide within 12 months from the date of revival of the policy the Company will refund 80% of the total premiums paid, including extra premiums, if any till the date of death, and all rights, benefits and interests under this policy will stand extinguished.

1. Grace period:

A grace period for payment of premium of 15 days after the premium due date applies for monthly premium payment mode and 30 days for other modes of premium payment.

2.Premium discontinuance:

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2.Premium discontinuance:

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If the premium is not paid either on the premium due date or within the grace period, the policy will become a lapsed policy and risk cover will cease. No benefit shall become payable in case of death of the Life Assured while the policy is in lapsed condition.

3 Policy revival:

A policy, which has lapsed for non-payment of premium within the days of grace, may be revived subject to the following conditions.

† The application for revival is made within 5 years from the due date of the first unpaid premium and before the termination date of policy. Revival will be based on the prevailing Board approved underwriting policy.

† The Policyholder furnishes, at his own expense, satisfactory evidence of health of the Life Assured as required by the Company.

† The arrears of premiums together with interest, at such rate as the Company may charge for late payment of premiums are paid. The interest rate applicable in December 2019 is 7.97% p.a. compounded half yearly. The revival of the policy may be on terms different from those applicable to the policy before it lapsed for example, extra mortality premiums or charges may be applicable. The Company reserves the right to refuse to re-instate the policy. The revival will take effect only on its being specifically communicated by the Company to the Policyholder

4. Sum Assured once chosen at the inception of the policy cannot be changed.

5. We will not provide loans under this policy

Nomination Requirements: Nomination in the Policy will be governed by Section 39 of the Insurance Act, 1938, as amended from time to time. For more details on this section, please refer to our website.

A Study on Comparative Analysis of Selected Life Insurance Companies in India

6. Assignment requirements: Assignment in the policy will be governed by Section 38 of the Insurance Act, 1938, as amended from time to time. For more details on this section, please refer to our website.

Section 41: In accordance with Section 41 of the Insurance Act, 1938, no person shall allow or offer to allow, either directly or indirectly, as an inducement to any person to take or renew or continue an insurance in respect of any kind of risk relating to lives or property in India, any rebate of the whole or part of the commission payable or any rebate of the premium shown on the policy, nor shall any person taking out or renewing or continuing a policy accept any rebate, except such rebate as may be allowed in accordance with the published prospectuses or tables of the insurer. Any person making default in complying with the provisions of this section shall be punishable with fine which may extend to ten lakh rupees.

Section 45: In case of fraud or misrepresentation the company can cancel the policy. The company shall pay the surrender value or refund the premiums paid as applicable. This shall be as per Section 45 of the Insurance Act, 1938, as amended from time to time. For more details on this section, please refer to our website.

For further details, please refer to the policy document and the benefit illustration

Immediate Life Annuity options:

1, Single life without Return of Purchase Price:

This option pays you Annuity for life. On death of the Annuitant, policy shall terminate and no further benefits would be payable.

2. Joint life without Return of Purchase Price:

This option pays Annuity for life as long as either of the two Annuitants are alive. On death of both the Annuitants, policy shall terminate and no further benefits would be payable.

A Study on Comparative Analysis of Selected Life Insurance Companies in India

3. Single life with Return of Purchase Price:

This option pays you Annuity for life. On death of the Annuitant, the Purchase Price is paid out to the nominee and thereafter the policy shall terminate and no further benefits would be payable.

Joint life with Return of Purchase Price:

This option pays Annuity for life as long as either of the Annuitants are alive. On death of both the Annuitants, Purchase Price is paid out to the nominee and thereafter the policy shall terminate and no further benefits would be payable.

1. Single Life with Return of Purchase Price at age 80:

This option pays you Annuity for life. The Purchase Price is paid to the Annuitant on attaining 80 years of age or to the nominee on death of the Annuitant whichever is earlier. The annuity payable to the Annuitant after the return of Purchase Price at 80 years of age, would remain unchanged.

Single Life with 50% Return of Purchase Price at Age 80:

This option pays you annuity for life. 50% of Purchase Price is paid to the annuitant on attaining 80 years of age and the remaining 50% to the nominee on death of the annuitant and the policy shall terminate with all benefits. The annuity payable to the Annuitant after the return of 50% of the Purchase Price at 80 years of age, would remain unchanged. In case of death of the annuitant before attaining the age of 80, 100% of the Purchase Price would be paid to the nominee and thereafter the policy shall terminate and no further benefits would be payable.

2. Single Life with Return of Purchase Price from the Age of 76:

This option pays you Annuity for life. In addition, 5% of Purchase Price shall be paid to the Annuitant every year from Age 76 to 95 years as per the annuity payout

A Study on Comparative Analysis of Selected Life Insurance Companies in India

frequency chosen at inception. On death of the Annuitant, the balance Purchase Price is paid to the nominee and thereafter the policy shall terminate and with all benefits. In case the Annuitant dies before attaining the age of 76, the Purchase Price is paid to the nominee and the policy shall terminate. The annuity payable to the Annuitant during and after the period in which Purchase Price is being returned would remain unchanged. Balance Purchase Price is equal to Purchase Price less sum total of the Purchase Price paid by the Company to the Annuitant from age of 76 years till date of death of the Annuitant.

. Single life with return of purchase price on Critical illness (CI) or Permanent Disability due to accident (PD) or Death:

.Death of the annuitant This option pays you annuity for life till first occurrence of the 7 specified CI or PD before the age of 80, or death.

Purchase Price would be payable on the earlier of:

.Occurrence of any of the 7 Specified CI or PD before the annuitant attains age of 80 years

All For life of the annuitant, provided, no benefits on specified CI, PD or death have been claimed Annuity for life Annuitant Before the annuitant attains 80 years of age On occurrence of specified CI or PD Purchase Price Annuitant; The policy terminates after the said payment.

On death Purchase Price Nominee; The policy terminates after the said payment. On or after the annuitant attains 80 years of age On occurrence of specified CI or PD Nil Not applicable On death Purchase Price Nominee; The policy terminates after the said payment. Age of the annuitant Event Benefit payable Recipient of Benefit In case of no occurrence of any of the 7 Specified CI or PD till the annuitant attains age of 80 years, annuity will continue to be paid till the annuitant survives.

CHAPTER 4**DATA ANALYSIS AND INTERPRETATION**

TABLE 4.1 shows Premium Collected On All the Policies Per Annum

TABLE 4.2 shows Income Generated From the Investments (In Corers)

TABLE 4.3 shows Numbers of Branches of The Companies (In Corers)

TABLE 4.4 shows Percentage of Claims Settlement Ratio (In %)

TABLE 4.5 shows Solvency Ratios for Different Companies

TABLE 4.6 shows Market Share for Different Companies (In %)

TABLE 4.7 shows Current Assets Value Of LIC And Other Insurance Company's (In Corers)

TABLE 4.8 shows Current Liabilities Of LIC And Other Insurance Company's (In Corers)

TABLE 4.9 shows Numbers of Policies Issued By the Companies (In Corers)

TABLE: 4.10 shows Fixed Assets Of LIC And Other Insurance Company's (In Corers)

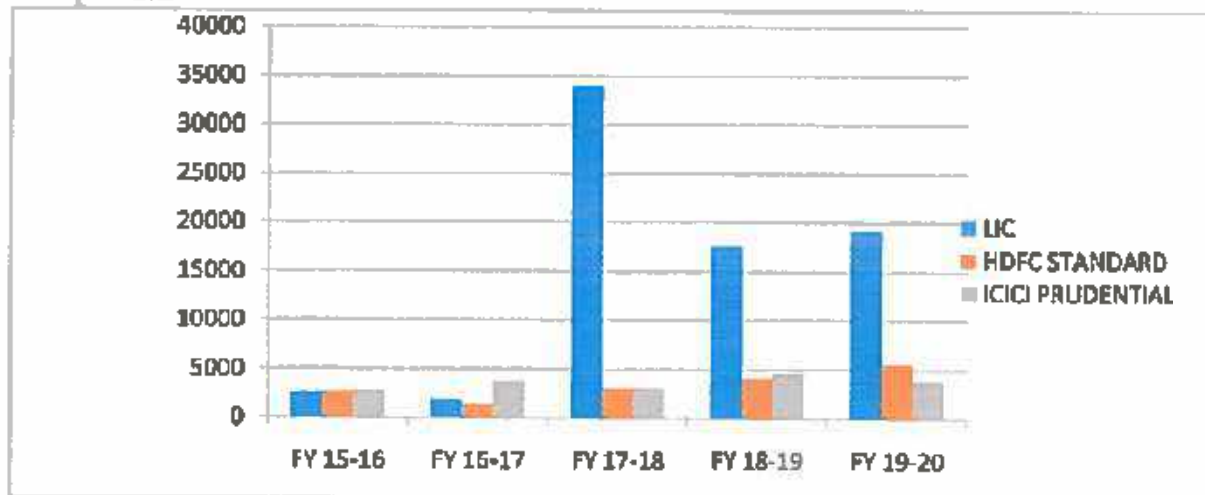
CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

Table 4.1 shows premium collected on all the policies per annum

Insurance Companies	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
LIC	2615.6729	1898.9794	34043.1542	17735.8458	19281.8655
HDFC Standard	2766.9967	1483.0799	3132.5082	4118.9275	5621.6108
ICICI Prudential	2877.9680	3857.7734	3139.6111	4714.7672	3861.0050

Graph 4.1



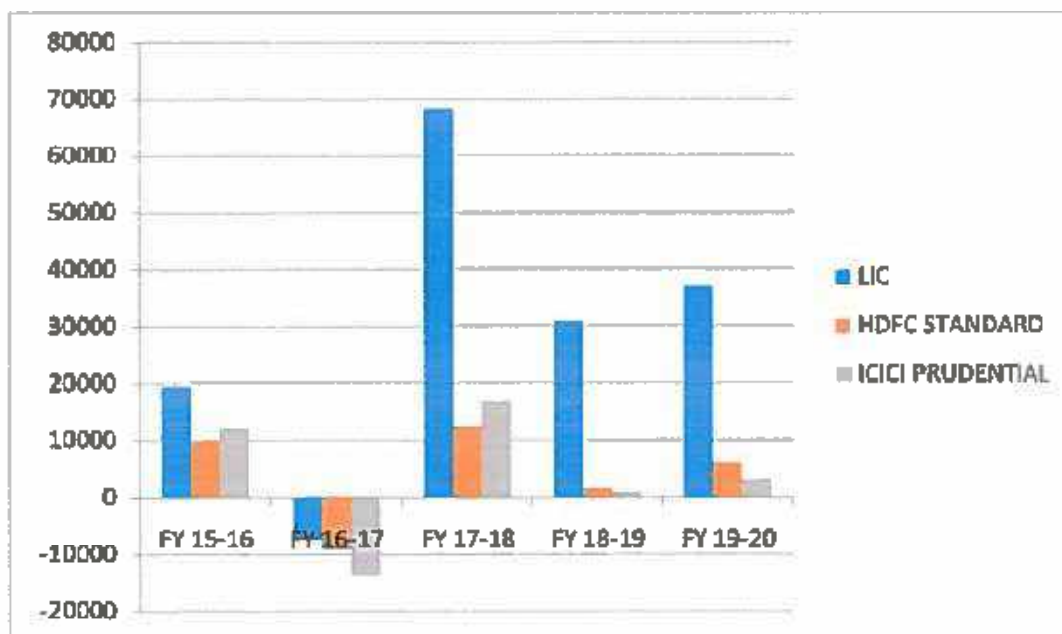
Interpretation

On the basis of the total premium collected on all the policies of these companies, LIC receives the highest premium compared with the others. LIC has more than the premium collected by the other two companies. ICICI has managed to keep its premium at a constant rate

Table 4.2 Shows Income Generated From The Investments (In Crores)

Insurance companies	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
LIC	19525.1562	-7438.7934	68227.8315	30984.5180	37173.2806
HDFC Standard	9799.8189	-9024.1483	12487.9493	1679.6458	6201.4420
ICICI Prudential	12332.9739	13716.3244	16965.0951	1024.3906	3182.8297

Graph 4.2

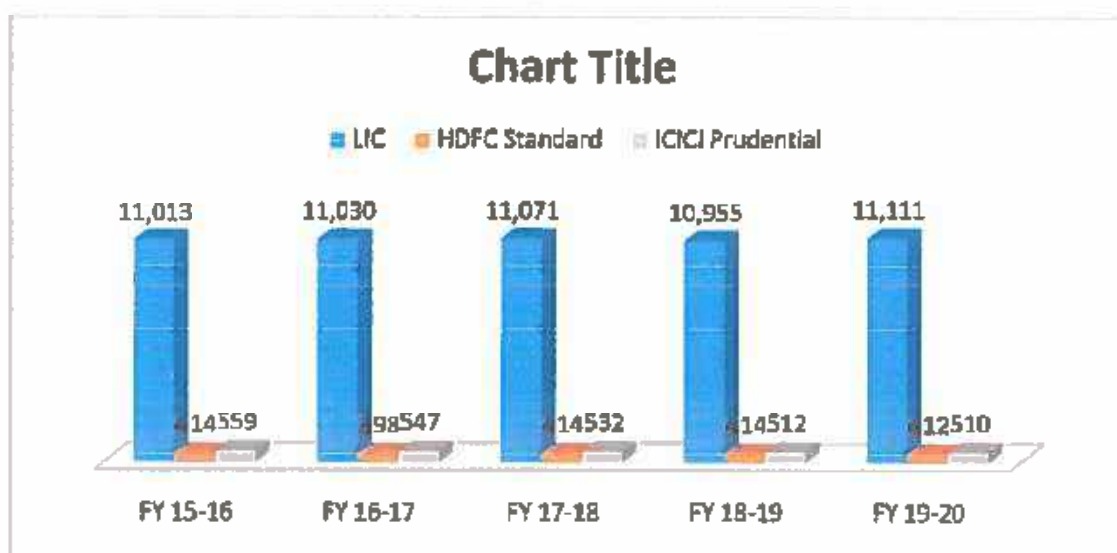


Interpretation:

According to the table above, the result is clear that the total income when compared to private insurance companies is a lot higher for LIC. The total income for LIC is almost all times higher than that of the insurance companies i.e., ICICI prudential and HDFC standard. If we observe the data of last five years it is clear that all the insurance companies have seen a growth in their total income.

TABLE 4.3 Shows Number of branches of the companies (In Crores)

Insurance companies	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
LIC	11,013	11,030	11,071	10,955	11,111
HDFC Standard	414	398	414	414	412
ICICI Prudential	559	547	532	512	510

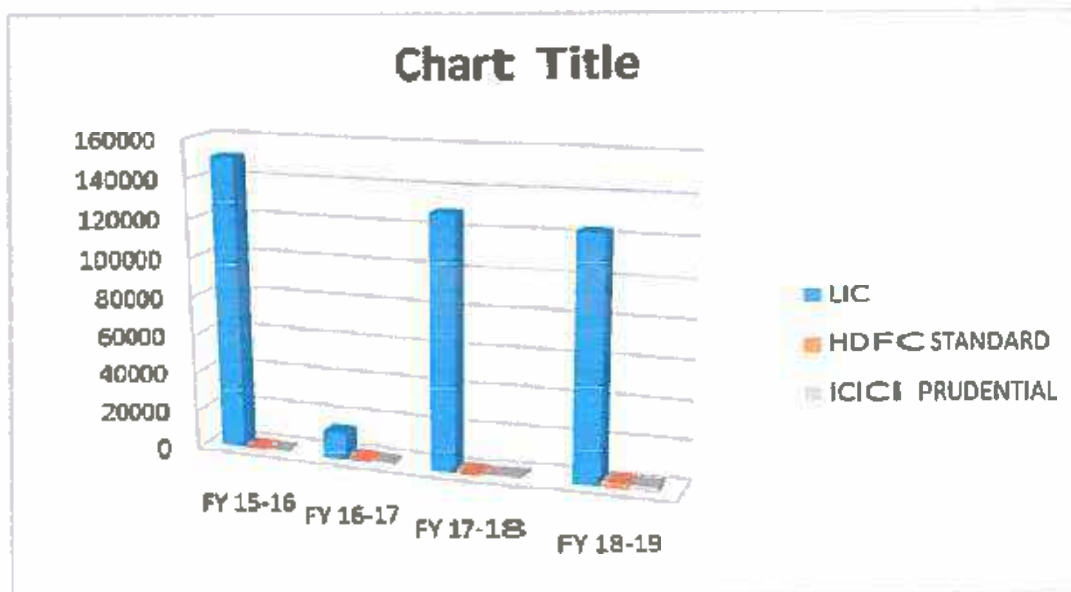
Graph: 4.3**a) Interpretation:**

According to the figure above, the result is clear that the total branches when compared to private insurance companies is a lot higher for LIC. The number of branches for LIC are around 11,000 whereas the number of branches of ICICI prudential are 550 average and HDFC standard are 400 to be average.

Table 4.7 Shows current assets value of LIC and other insurance company's (in crore)

Insurance companies	FY 15-16	FY 16-17	FY 17-18	FY 18-19
LIC	150878.02	13738.02	129430.26	123903.43
HDFC STANDARD	1415.36	1832.3	1927.01	2967.75
ICICI PRUDENTIAL	1175.64	1488.28	1475.29	2862.09

Graph 4.7



Interpretation

The above table shows that current asset value of the private and public life insurance companies. The LIC is having highest value of in current asset.

A Study on Comparative Analysis of Selected Life Insurance Companies in India

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**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON RISK AND RETURN ANALYSIS ON STOCK MARKET"**

**Submitted to
RANI CHANNAMMA UNIVERSITY, BELAGAVI**



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

Miss. Pushpa Bellennavar

M.COM-IV SEMESTER

REGISTER NO: MC191610

UNDER THE GUIDANCE OF

SHRI. V. S. KHOT

**K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that **Miss.Pushpa Belennavar** has satisfactorily completed the Project Report Entitled **"A Study on Risk and Return Analysis on Stock Market"** for the partial fulfillment of Degree in **Master of Commerce** in Rani Channamma University, Belagavi during the academic year **2020-2021**.

SHRI V. S. KHOT

PROJECT GUIDE

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DECLARATION

I declare that the project report entitled "A Study on Risk and Return Analysis on Stock Market" is a record of independent research work carried out by me and submitted in partial fulfillment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. V. S. Khot, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 21/09/2021

Place: Chikodi



Miss. Pushpa Bellennavar

Register No: MC191610

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

I sincerely express my deep sense of gratitude and appreciation to Internal Guide **Shri. V. S. Khot**, for his careful and valuable guidance, never ending patience and constant encouragement throughout the project.

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My thanks are also to library staff for their cooperation during the course of project work and I am also thankful to Printers for their skillful printing of this project.

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Miss. Pushpa Bellennavar

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CHAPTER-1

INTRODUCTION AND RESEARCH DESIGN

- 1.1 Introduction
- 1.2 Review of Literature
- 1.3 Statement of the Problem
- 1.4 Need for the Study

- 1.5 Objectives of the Study
- 1.6 Scope of the Study
- 1.7 Research Methodology
- 1.8 Limitations of the Study
- 1.9 Chapter Scheme

A Study on Risk and Return Analysis on Stock Market

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

This study is based on "Risk and return analysis" of stock market. Under this project we are analysing ups and downs of stock market.

The stock market refers to the collection of markets and exchanges where regular activities of buying, selling and issuance of shares of publicly held companies take place. Most of the trading in the Indian stock market takes place on its two stock exchanges: the Bombay Stock Exchange (BSE) and the National Stock exchange (NSE).

Investment is the employment of funds with the aim of achieving additional income or growth in value. The essential quality of an investment is that it involves 'waiting' for a reward. It involves the commitment of resources which have been saved or put away from current consumption in the hope that some benefits will accrue in future.

This study was to find out the risk, return and relationship among the selected stock of NSE and Nifty. Use appropriate investment strategies for company to make maximum profit.

Further, study outcome also exhibits that the risk of investing in banking sector is low when compared to another sector as it is performing better. Industry showing positive signs of growth with highest nifty index therefore, it is found that investing in PNB stocks is low risky compared to investing in stocks of AXIS bank as it fluctuates less.

A Study on Risk and Return Analysis on Stock Market

1.2 REVIEW OF LITERATURE

a) **Tariq (2017)** The purpose of this paper is to examine the role of value-at risk (Var) in the cross-section of stock returns in the Indian stock market during the period 1999-2014. The paper follows the methodology of Bali and Calico (2004) to investigate the relationship between Var and stock returns.

b) **Prabhakar (2016)** A stock or any other security representing an ownership interest. On a company balance sheet funds contributed by the owners and the retained earnings also referred as equity. In terms of investment strategies an equity is one of the principal assets. In finance the equity as ownership in any asset after all bets associated with the asset are paid off. In Indian stock market has returned about 17% to investors on an average in terms of increase in share prices or capital appreciation annually. Besides that, on an average, stocks have paid 1.5 % dividend annually. Dividend is a percentage of the face value of a share that a company returns to its shareholders from its annual profits. Comparing the most other forms of investments investing in equity shares offers the highest rate of returns if invested over a long duration. Banks are the major part of any economic system. They provide a strong base to Indian economy as well. Even in the share markets, the performance of banks shares is of great importance. Thus, the performance of the share market, the rise and the fall of market is greatly affected by the performance of the banking sector shares and this study revolves around all factors, their understanding and a theoretical and technical analysis.
Keywords

e) **Renuka N et. al. (2016)** International journal of management research & review copyright published by Immoral rights reserved 1043 according to them is not buy shares in closely held companies because these shares tend to do less active than the widely held once since they have few numbers of shareholders.

d) **ShaliniShukla (2015)** Conducted a study on performance of the banking industry in India on the bases of financial parameters. The study is conducted on 46 commercial banks public and private banks sectors were included on the size, growth, profitability, and soundness suggested eleven financial performances indicators. The findings highlighted those public and private sectors banks were not very much different in terms of size and growth parameters.

A Study on Risk and Return Analysis on Stock Market

- e) **T. Narayanaswamy & A.P. Muthu Lakshmi (2014)** Examined relative efficiency of all the private sectors banks in India from 2008 to 2013 data evolution analysis methodology. Axis bank, Kotak Mahindra bank, and ICICI bank were relatively efficient in terms of technical efficiency, apart from above three banks, HDFC bank and national bank were also relatively efficient. The average (overall) technical in efficiency score during the study period. (except for the year 2008-09). Negative correlation ranging from -0.3 to 0.5 was observed between non-performing assets ratio and different types of efficiencies during the study (except for the year 2008-09)
- f) **Hanumath Rao P, Subtend Dutta (2014)** Observed that the last 5-6 years have been very volatile for not only the Indian economy. But also, for the entire world economy. lots of investors have lost their money as the stock prices have fallen flat all over the world during the period. The banking sectors has always been one of the important sectors for investment. In the time of uncertainty, when some are arguing that the economies are in the process of recovery, and while others are opening that the world is set for another recession soon, the present article attempted to study the fundamental of the banking sectors in India. Their article considered the variable likes net operating margins (OPM), net profit margin (NPM), return on equity (ROE), earning per share (EPS), price earnings ratio (PER), dividend per share (DPS), and dividend pay-out ratio (DPR), for a period of 6 years from 2006-07 to 2011-12 for three major banks in India.
- g) **R. Thamaraiselvi Anupama (2008)** Studied in their paper that the equity market at present is booming, and with the bull run in our market and with FL's pouring money into our market with industrial expansion and retail participate increasing, everything seems to be set right for an —EQUITY BOOM! in India. So, an individual who wants to earn superior return with substantial amount of risk must necessarily participate in equity market. To get superior returns in the short span of time. Therefore, this project about guiding those investors who would like to invest in nifty50 with some useful insight about the banking sector in Indian market and some company specific information which would help them in selecting their stocks and it would help them in identifying the timing of the purchase, so that one can improve his odd of making money. Hence, the study is an attempt to analyse, the stock price movement based on fundamental.

A Study on Risk and Return Analysis on Stock Market

1.3 STATEMENT OF THE PROBLEM

Returns and Risk are calculated to study the price movements in the stock market. After doing this project one can make decisions regarding the investment in stock market.

1.4 NEEDFOR THE STUDY

Stock Markets have existed in India for a very long time yet the professionals in the field of finance talking negatively about these instruments. The reason why I bring it up again is that it is very important to understand what the old system was verse the new the old system was based on trust. They were closed group system and hence deviation from truly competitive markets. Such closed groups are vulnerable to problem when the demand of the economy reach beyond the capacity of the group and group has expended without open and transparent criteria for entry, the network of trust gets disrupted, with the result that the system is disrupted by frauds. On the other hand, the modern marketplace of Stock Markets, having well developed risk management, transparent rules for entry and stringent regulation, is faceless. That the old type of system had to transform into a new is clear they have played a very important role in the past. It is merely that had to modern markets to keep up with the demand of the times.

The study of risk and return analysis will guide the investors to segment the portfolio of securities Match up to diverse investment option in terms of risk and return.

To create inference on the amount of return one should anticipated from an investment is likely by analysing historical return exacting stock

1.5 OBJECTIVES OF THE STUDY

- To analyse and compare returns of securities of different companies.
- To analyse and compare risk of securities of different companies
- To observe the relation between Returns and Risk in the yearly fluctuations in prices.
- To suggest investors in selecting best stock for investment by comparing return and risk.

A Study on Risk and Return Analysis on Stock Market

1.6 SCOPE OF THE STUDY

This study is based on stock market to analyse national stock exchange and Bombay stock exchange equities in stock market.

The present study is limited to the companies who have listed their securities in Bombay stock exchange and national stock exchange.

1.7 RESEARCH METHODOLOGY:

Methodology is the systematic approach to the given problem. In other words, it is the way in which we go for the collection of data. Therefore, the better way of collecting data is more important than the data collected, because ultimately the data collected is depend upon how we approach the data. The data has been collected in the following ways.

Tools for data collection:

The tools for data collection are divided into two parts

- Primary data
- Secondary data

Primary data

It is the actual data collected by research for self source of primary data.

Secondary data

Secondary data is the data which was already collected by someone else, and which is used for the study purpose.

Secondary data includes books, journals, and internet.

A Study on Risk and Return Analysis on Stock Market

1.8 LIMITATIONS OF THE STUDY:

- The study is limited to the company having equity.
- Detailed study of the topic was not possible due to limited size of project.
- This project analysis report may not be applicable in all equity markets.
- The accuracy of the study is based on the accuracy of the data presented in the NSE listings.
- Suggestions and conclusions are based on the data of only selected companies.

A Study on Risk and Return Analysis on Stock Market

1.9 CHAPTER SCHEME

Chapter 1: Introduction and Research design

This chapter deals with Introduction of the topic, review of literature, statement of the problem, need for the study, objectives of the study, scope of the study, research methodology, limitations of the study.

Chapter 2: Conceptual framework

This chapter deals with Meaning of stock market, meaning of risk, types of risk, meaning of return, types of return, measurement of returns, relationship between risk and return.

Chapter 3: Study Area Profile

This chapter deals with History of stock broking, History of stock exchange, Security market India, National stock exchange, Trading at national stock exchange, recent trends in national stock exchange, objectives of national stock exchange, Bombay stock exchange, Sensex, and nifty

Chapter 4: Data analysis and interpretation

This chapter deals with analysis and interpretation of collected data.

Chapter 5: Finding's suggestions and conclusion

This chapter deals with findings, suggestions, and conclusions of the study.

CHAPTER-2

CONCEPTUAL FRAMEWORK

- 2.1 Introduction
- 2.2 Meaning of stock market
- 2.3 Meaning of risk
- 2.4 Meaning of return

- 2.5 Measurements of returns
- 2.6 Risk
- 2.7 Unsystematic risk
- 2.8 Relationship between risk and return
- 2.9 Relationship between risk and return

A Study on Risk and Return Analysis on Stock Market

CONCEPTUAL FRAMEWORK

2.1 Introduction

The risk and return analysis is important to equity shares investors in the share market. There are many sources of risk that is business risk, market risk, interest rate of risk, return is represent reward for understanding investment.

2.2 Meaning of stock market

The stock market refers to the collection of markets and exchanges where regular activities of buying, selling and issuance of shares of publicly held companies take place. Most of the trading in the Indian stock market takes place on its two stock exchanges: the Bombay Stock Exchange (BSE) and the National Stock exchange.

2.3 Meaning of RISK

In the investing world, the dictionary definition of risk is the chance that an investment's actual return will be different than expected. Technically, this is measured in statistics by Standard Deviation. Risk means you have the possibility of losing some, or even all, of our original investment.

2.4 Meaning of Return

Return is essential spurring power that drives venture. It refers to the reward for the activity of taking risk. Hence the evaluation of return is important to understand the profitability or the functioning of the firm.

There are two types of returns, those are:

- a) **Current return:** The segment regularly strikes a chord when one is contemplating return is occasional income as isolated or premium produced by the venture. Current return is measured as the intermittent return in connection to the starting cost of the venture.
- b) **Capital return:** The second imperative part of return is reflected in the value change called the capital return. It is basically the cost of thankfulness (or deterioration) partitioned by the starting cost of advantage.

$$\text{Total return} = \text{capital return} + \text{current return}$$

A Study on Risk and Return Analysis on Stock Market

2.5 Measurement of return

The purpose of investment is to get a return or income on the funds invested in different financial assets. The most important characteristics of financial assets are the size and variability of their future returns. Since the return on income varies, various statistical techniques are used to measure it. Over the years, many methods have been adopted for quantifying returns. These are now categorized as traditional and modern techniques of measurement.

Traditional Method of Measurement

Computation of yield to measure a financial asset's return is the simplest and oldest technique of measurement. Yield can be both expected or estimated and actual for a particular period. The formula used to find yield is:

Expected Cash Income

a) Estimated Yield = -----

Current Price of Asset

Cash Income

b) Actual Yield = -----

Amount Invested

The yield that is calculated is for a particular period to find out the return on the amount that is invested. For example, the annual yield on the Unit Trust Certificate is the dividend income divided by the amount invested.

2.6 Risk:

Chance alludes towards likelihood that the genuine result of a venture will concede from expected result. More particularly, most speculators are worried about the genuine result being not as much as the normal result. The more extensive scope of conceivable result is more noteworthy the risk.

A Study on Risk and Return Analysis on Stock Market

The different sorts of risks are.

- a. **Systematic risk:** Efficient hazard alludes to that bit of variety consequently brought about by components that influence the cost of all securities. The impact is methodical return makes the costs of all individual securities move in same bearing. This hazard is as a matter of course and cannot be controlled. Efficient hazard emerges because of taking after element:
- b. **Market risk:** Variety in costs started off because of genuine social, political, and monetary occasions is alluded to as market hazard. Showcase hazard emerges out of changes popular and supply weights in the market taking after the changing stream of news or desire.
- c. **Interest risk:** By and large costs of securities tend to move contrarily with changes in the rate of intrigue. The market movement and financial specialists' recognitions are impacted by the adjustments in the loan fees which thusly rely on upon nature of instruments, securities, stocks, and so forth.
- d. **Risk of purchasing power:** This risk refers to the type of risk where the cash flows from an investment in future will not match value of the present purchasing power of money. The main reason behind this is inflation.
- e. **Liquidation risk:** The risk that comes with short term trading of stocks which may go wrong or opposite to the speculation of the brokers or traders. This sort of hazard is essential in some venture speculation choice, yet it is talked about widely in speculation courses.

2.7 Unsystematic risk:

Unsystematic hazard alludes to that segment of hazard that is brought on because of elements one of a kind or identified with a firm or an industry. Unsystematic hazard emerges because of taking after components:

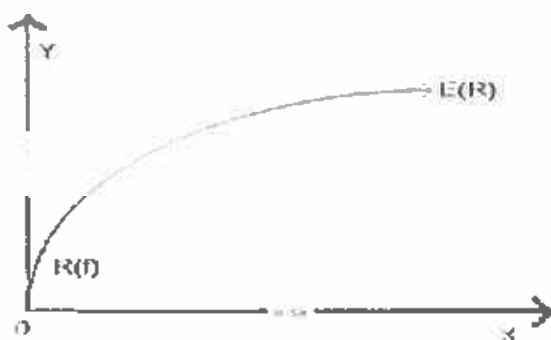
A Study on Risk and Return Analysis on Stock Market

- a. **Business risk:** Business hazard can be inner and in addition outside. Inside hazard is brought about because of shameful item blend, non-accessibility of materials, nonattendance of vital administration, and so forth. Outer hazard emerges because of progress in working conditions, change in business laws, universal economic situations, and so forth.
- b. **Financial risk:** Monetary hazard is related with capital structure of the organization. An organization with no obligation financing has no budgetary hazard. The degree of money related hazard relies on upon the use of the association's capital structure.

2.8 RELATIONSHIP BETWEEN RISK AND RETURN:

There is certain connection between the measure of risk assumed and the number of returns expected. Greater the risk, the larger the expected returns and larger the chance of substantial loss. A rational investor would have some degree of risk aversion, he would expect the risk only if he adequately compensated for it

The following figure shows relationship between the amount of risk assumed and number of expected returns.



Risk is measured along x-axis and return along y-axis. Risk increases from left to right and return rises from bottom to top. The line O to R(r) indicates rate of return on risk less investments. The diagonal curve from R(r) to E(r) illustrates the concept of expected rate of return increasing shows a linear relationship between risk and return.

A Study on Risk and Return Analysis on Stock Market

The monetary division in India has experienced many changes, especially in the capital market Segment, since 1990s. The share price fluctuations in the market can affect the economy of the nation. A fluctuation occurs in the price level of stock because of changes in several factors, like economic, social, and political.

Apart from these factors' information released by the corporate bodies causes volatile nature in the share prices however the corporate announcement has considerable impact on the share price movements. Moreover, the individual investors change their investment pattern depending upon the release of information by the corporate bodies. In other words, the corporate announcements reflect wide variations in the share prices and investors behavioral pattern. This fact is brought into the companies regularly making significant announcement with positive and negative information which will reflect in their prices. When corporate announcement contains good news this stock prices go up, whereas announcements containing bad news push the stock's price down. Given this reality the investors can react positively or negatively depending upon whether it is positive or negative information. Hence the market reactions indicate that the known information is immediately discussed by all investors, and it reflects in the share prices in stock market. The information that affects the prices of securities is strikes, lockouts, joint venture agreements, launching of the new products, financial reports include annual and quarterly releases, press releases, declaration of dividend including interim dividend, outcome of board of directors meeting, outcome of annual general meeting, right issues, bonus issues, allotment of equity shares including allotment of shares under employee stock option scheme, amalgamation, acquisition, buyback offer and sale of shares etc. Among these various corporate announcements giving information, some are likely to be having most significant impact on the share price fluctuation.

2.9 Beta

Beta is a measure of the volatility in security returns due to changes in the economy or the market. Beta is also known as the beta coefficient. Beta is an index of the systematises of a security. The larger the beta, the more volatile the security and vice versa. $\text{Beta } (\beta) = \text{Covim} / \sigma_m$

2.10 ALPHA

Alpha: Alpha is a measure of the active return on an investment the performance of that investment compared with a suitable market index. $\text{Alpha } (\alpha) = R_i - \beta R_m$.

CHAPTER-3

STUDY AREA PROFILE

3.1 Introduction to the Indian Stock Market

3.2 Regulation of the Indian Stock Markets

3.3 Types of Share Markets

3.4 Understanding the Stock Exchange Platform

3.5 History of stock broking

3.6 History of Stock Exchange in India

3.7 Security market India

3.8 National stock exchange

3.9 Bombay stock exchange

3.10 BOLT

3.11 Investment

3.12 Sensex and Nifty

A Study on Risk and Return Analysis on Stock Market

STUDY AREAPROFILE

Shares, bonds, and derivatives. The stock exchange works as a facilitator of this transaction and A stock market is a platform where investors come to trade in financial instruments like enables the buying and selling of shares.

3.1 Introduction to the Indian Stock Market

Stock markets are among the largest avenues for investments. There are primarily two stock exchanges in India, the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE). Companies list their shares for the first time on a stock exchange through an IPO. Investors may then trade in these shares through the secondary market.

The two stock exchanges in India have on some occasions witnessed stocks worth INR 6,00,000 crores being traded. The uninitiated in India often consider investing in stocks markets gambling, but a basic understanding of the share market can change that perception.

3.2 Regulation of the Indian Stock Markets

The regulation and supervision of the stock markets in India rest with the Securities and Exchange Board of India. SEBI was formed as an independent identity under the SEBI Act of 1992 and has the power to conduct inspections of the stock exchanges. The inspections review the operations of the market and the organizational structure along with aspects of administrative control. The main role of SEBI includes:

- Ensuring a fair and equitable market for investors to grow in
- Compliance of the exchange organization, the system its practices in accordance with the rules framed under the Securities Contracts (Regulation) Act (SC(R) Act), 1956
- Ensure implementation of the guidelines and directions issued by the SEBI
- Check if the exchange has complied with all the conditions and has renewed the grants, if needed, under Section 4 of the SC(R) Act of 1956.

A Study on Risk and Return Analysis on Stock Market

3.3 Types of Share Markets

There are two kinds of share markets namely the Primary and Secondary Markets.

a) Primary Share Market

It is in the primary market that companies register themselves to issue their shares and raise money. This process is also known as listing on the stock exchange. The purpose of entering into the primary market is to raise money and if the company is selling their shares for the very first time it is referred to as the Initial Public Offering (IPO). Through this process, the company becomes a public entity.

b) Secondary Market

The shares of a company are traded in the secondary market once the new securities are sold in the primary market. This way investors can exit by selling their shares. These transactions that take place in the secondary market are called trades. It involves the activity of investors buying from each other and selling amongst themselves at an agreed-upon price. A broker is an intermediary that facilitates these transactions.

How do the Share Markets work

3.4 Understanding the Stock Exchange Platform

A stock exchange is precisely a platform that conducts the trading of financial instruments like stocks and derivatives. The activities on this platform are regulated by the Securities and Exchange Board of India. The participants have to register with SEBI and the stock exchange in order to conduct trades. Trading activities include brokering, issuing of shares by companies, etc.

Listing of the Company in the Secondary Market

The shares of a company are listed on the secondary market for the first time through an Initial Public Offer or IPO. The allotment of stocks takes place before listing and investors who bid for the stocks get their share depending on the number of investors.

Trading in the Secondary Market

Once the company has been listed, stocks can be traded in the secondary market by the investors. This is the marketplace for the buyers and sellers to transact and make profits or in some cases, losses.

A Study on Risk and Return Analysis on Stock Market

Stockbrokers

Because of the magnitude of investors whose number is in the thousands, it is difficult to have them assemble at one location. Therefore, to conduct trade, stockbrokers and brokerage firms come into the picture.

These are entities that are registered with the Stock Exchange and serve as intermediaries between the investors and the exchange itself. When you place an order to buy any share at a given rate, the broker processes it at the exchange where there are multiple parties involved.

Passing of your order

Your buy order is passed on to the exchange by the broker, where it is matched for a sell order for the same. The exchange takes place when the seller and the buyer agree upon a price and finalize it; the order is then confirmed.

Settlement

Once you finalize a price, the exchange confirms the details to ensure that there is no default in the transaction. The exchange then facilitates the transfer of ownership of the shares which is known as Settlement. You receive a message once this takes place. The communication of this message involves multiple parties like the brokerage order department, the exchange floor traders, etc.

The settlement time earlier took weeks to materialize which now happens in T+2 days. This means that if you trade today, the shares are reflected in your Demat account in two working days' time. Investing in the share market is subject to market risks. It is recommended you seek expert guidance before investing. Visit Clear Tax to browse through our handpicked mutual funds and pick one based on your suitability.

3.5 History of stock broking:

The history of stockbrokers can be traced back to the origins of the first stock exchange in 1602 at Amsterdam. Even before those brokers are said to have existed in finance dealing with government securities. The Amsterdam stock exchange was involved in buying and selling of shares for the Dutch East India Company.

However, the first real stock exchange comes up in Philadelphia in the United States during the late 18th century. Later it was the New York Stock Exchange which saw a rise in its popularity. Wall Street, as it was called, became the hub of brokerages activities.

A Study on Risk and Return Analysis on Stock Market

Earlier stockbrokers were largely unorganized, but later most of them joined hands to form institutions and organizations.

Till the 1980's stock broking services were used only by the wealthy class who could afford them. Later with the advent of the internet, stock broking became very easy. Thus, the price tag on stockbrokers lowered considerably and their services became available even to the common man.

The stock broking duties are now mostly taken up by major organizations with the smaller companies being absorbed by them. In India too with increasing globalization major corporations are penetrating deeper into the society.

3.6 History of Stock Exchange in India:

Stock markets refer to a marketplace where investors can buy and sell stocks. The prices at which each buying and selling transaction takes is determined by the market forces (i.e., demand and supply for a particular stock).

In earliest times buyers and sellers used to assemble at a stock exchange to make a transaction but now with the advent of IT, most of the operations are done electronically and the stock markets have become almost paperless. Now investors don't have to gather at the exchanges and can trade freely from their home or office over the phone or through internet.

3.7 SECURITY MARKET IN INDIA

The budgetary insurgency occurred due to ventures. Capital market can be divided into essential and auxiliary market. The primary issue of protection happens in the essential market and exchanging among speculators happens in the auxiliary market. The essential market is otherwise called the new issue market. Value initially enters the capital market. The capital market is the foundation of any nation's economy. It encourages a change of reserve to meet the interest in the essential market.

In India, regular speculators taking an interest in the value of the essential market is gigantic. The quantity of organizations offering value in the essential market expanded ceaselessly in the post-independence period till the year 1995. After 1995, there is a consistent drop experienced by the essential market offering value. The fundamental purpose behind the drop is the absence of financial specialists' trust in the essential market.

A Study on Risk and Return Analysis on Stock Market

In this way, it is critical to comprehend the causes and proportions of restoration of financial specialists' certainty prompting capital assembling and interest in right roads making, monetary development in the nation.

All inclusive, there are expanded confirmations to recommend that financial specialist certainty has expected a significant job in the monetary advancement of a nation. The financial specialist (1998) demonstrated that a ton of issues need to deliver to make capital markets more secure. Straightforwardness, reinforcing monetary framework and overseeing emergencies are the issues, which can't be immediately fixed. Be that as it may, they indicate a more grounded framework.

"The Protections market is the market for value, obligation and subsidiaries." The protections market has basically 3 classifications that is the guarantor of protections, the financial specialists in the protections and go-betweens. The guarantors are the borrowers or shortage savers, who issue protections to raise reserves. The financial specialists, who are surplus savers, send their investment funds by buying in to these protections. The go-betweens were the specialists who match the necessities of the clients and providers of assets for a commission.

These middle people pack and unload protections to help both the clients and speculators to accomplish their objectives. There are an enormous assortment and number.

middle people giving different administrations in the Indian Protections advertise. This procedure of Assembling of assets is does under the supervision and review of controllers.

The controllers grow equitable practices and manage the direct of guarantor's protections and middle people. They are likewise responsible for securing the enthusiasm of the financial specialists. The controller guarantees a high administration standard from the mediators and supply of value protections and non-controlled interest for them in the market.

Securities exchange advertiser's development through the production of liquidity. Numerous productive ventures require long haul capital however financial specialists are regularly hesitant to command over their investment funds for significant lots. Value market makes speculation less unsafe, increasingly gainful, and progressively alluring by making it increasingly fluid.

By encouraging long haul and increasingly beneficial speculation, fluid financial exchange improves the designation of capital and upgrades development. Through these impacts, financial exchange liquidity can prompt more reserve funds and venture moreover. Generally, numerous speculators and been made much before they become advancements.

3.8 NATIONAL STOCK EXCHANGE



In order to lift the Indian stock market trading system on par with the international standards. Based on the recommendations of high powered Sherwani committee, the National stock exchange was incorporated in 1992 by industrial development bank of India, industrial credit and investment corporation of India, all insurances corporation, selected commercial banks others.

NSE provides exposure to investors in two types of market, namely

- Wholesale debt market
- Capital market

Wholesale debt market – like money market operations, debt market operations involve institutional investors and corporate bodies entering transaction of high value in financial instrument like treasury bills, government securities, commercial papers etc.

A Study on Risk and Return Analysis on Stock Market

TRADING AT NSE:

- Fully automated screen-based trading mechanism
- Sterically follows the principles of an order-driven market
- Trading members are linked through a communication network
- The network allows them to execute trade from their offices
- The prices at which the buyer and seller are willing to transact will appear on the screen
- When the prices match the transaction will completed
- A confirmation slip will be printed at the offices of the trading member

Advantages of trading at NSE:

- Integrated network for trading in stock market of India
- Fully automated screen-based system that provides higher degree of transparency
- Investors can transact from any part of the country at uniform prices
- Grater functional efficiency supported by totally computerized network

RECENT TRENDS IN NSE

Expansion: After establishing operation in Mumbai. The NSE had expanded its operation to the other cities: NSE has installed 2580 VASTS in 317 cities across the country. A breakup of VSATs across 317 cities is given below.

Quality: Apart from the consolidation of the market at the national level, the transaction cost along with the bad deliveries has declined. The affective fun cottoning on National Securities Clearing Corporation Limited is another reason for it.

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More Liquidity: With its online system and quick trading facilities the NSE has introduced some liquidity into the capital market. In the last quarter of 1997, the NSE was more liquid for the 835 scrips that accounted for 97% of total trading volume. In number of trades, an indicator of the presence of the retail investor, the NSE was ahead of the BSE.

Less Brokerage: Transparency in NSE allows the breaking up of the costs into brokerage fees, market impact costs and clearing and settlement. The brokerage fee at the BSE terminals outside Mumbai is 0.5% of the value transacted. On the NSE, it's around 0.1% of the value transacted.

Quick Clearing and Settlement: NSE has introduced a full range of clearing house facilities; a pan of securities is processed at the regional clearing centres (Delhi, Chennai, and Calcutta). The inter region clearing facility provided at present, reduced that risk of the members because of not getting timely delivery of shares or loss of shares in transit. The facility is also expected to boost delivery-based trading.

Promoters

NSE has been promoted by leading financial institutions, banks, insurances, companies, and other financial intermediaries.

- Industrial development bank of India limited.
- Industrial finances corporation of India limited.
- Life insurances corporation of India limited.
- State bank of India
- ICICI bank limited.
- IL and FS trust company limited.
- SBI capital market limited.
- Bank of Baroda.
- Canara bank.
- General insurances corporation India.
- National insurance company limited.
- The oriented insurance company limited.

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National stock exchange (NSE) of India became operational in the capital market segment on 3rd November 1994 in Mumbai. The genesis of the NSE lies in the recommendation of the pertain committee (1991). Apart from NSE, it had recommended for the establishment of National Stock Market the defects specified.

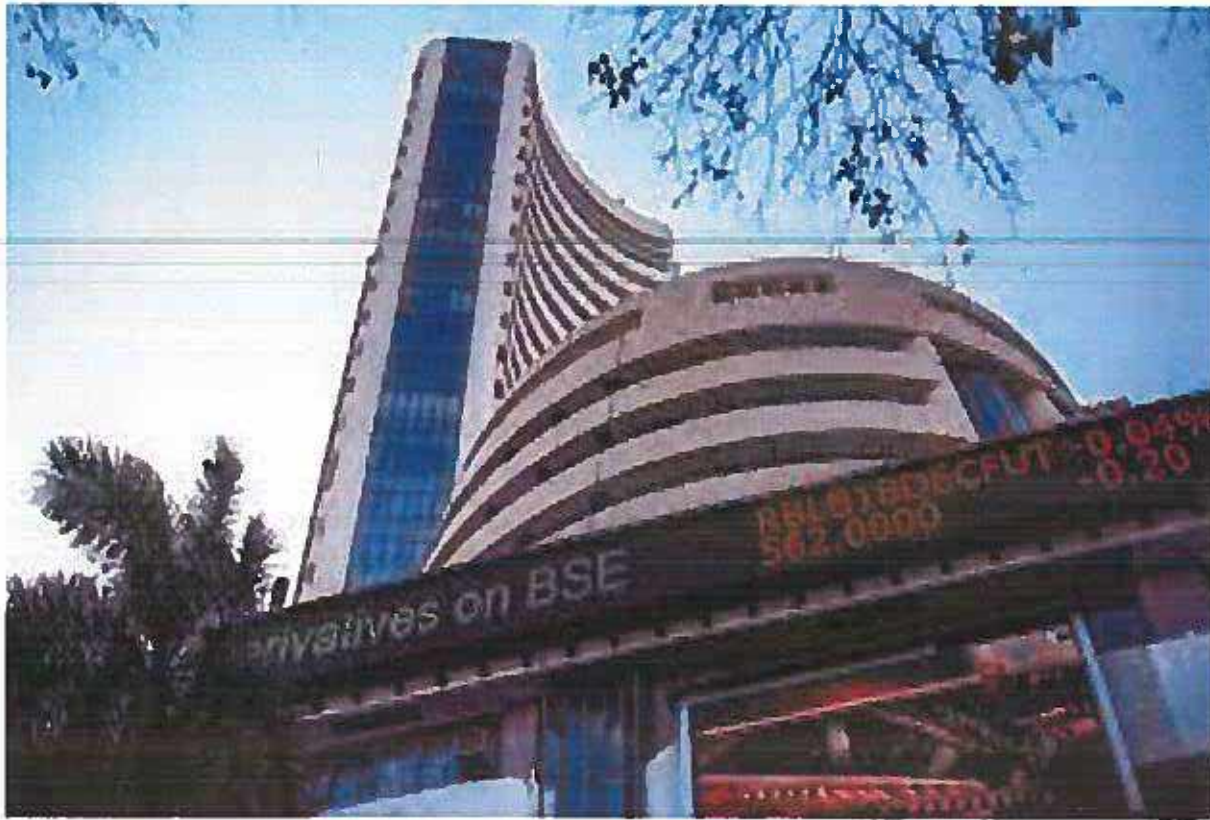
- Lack of liquidity in most of the market in terms of depth and breadth
- Lack of ability to develop markets for debt.
- Lack of infrastructure facilities and outdated trading system.
- Lack of transparency in the operations that effect investor 's confidence.

Outdated settlement system that are inadequate to cater to the growing volumes. Leading to delay

The Main Objectives of NSE as Follows

- To establish a nationwide trading facility for equities, debt instruments and hybrids
- To ensure equal access to investors all over the country through appropriate communication network
- To provide a fair, efficient and transparent securities market to investors using an electronic communication network.
- To enable shorter settlement cycle and book entry settlement system
- To meet current international standards of securities market.

3.9 BOMBAY STOCK EXCHANGE



Bombay stock exchange is the oldest stock exchange in Asia with a rich heritage, now spanning three centuries in its 133 years of existence. What is now popularly known as BSE was established as —The Native shares & Stockbrokers Association in 1875.

BSE is the first stock exchange in the country which obtained permanent recognition (in 1956) from the government of India under the securities contracts (Regulations) act 1956. BSE 's pivotal and pre-eminent role in the development of the Indian capital market is widely recognised. It migrated from the open outcry system to an online screen-based order driven trading system in 1995.

Earlier an Association of persons (AOP), BSE is now a corporatized and demutualised entity incorporated under the provisions of the company's act, 1956, pursuant to the BSE (corporatisation and demutualisation) schemes, 2005 notified by the securities and exchange board of India (SEBI). With demutualisation, BSE has two of world 's best exchanges, deutsche Brose Singapore Exchange, as it strategic partners.

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Over the past 133 years, BSE has facilitated the growth of the Indian corporate sector by providing it with an efficient access to resources. There is perhaps no major corporate in India which has not sourced BSE's servicing in raising resources from the capital market.

Today, BSE is the world's number 1 exchange in terms of the number of listed companies and the world's 5th in transaction numbers. The market capitalization as on December 31, 2007, stood at USD 1.79 trillion. An investor can choose from more than 4,700 listed companies. Which for easy reference, are classified into A, B, S, T and Z groups.

The BSE index, SENSEX, is India's first stock market index that enjoys an iconic stature and is tracked worldwide. It is an index of 30 stocks representing 12 major sectors. The SENSEX is constructed on a free-float methodology and is sensitive to market sentiments and market realities. Apart from the SENSEX, BSE offers 21 indices, including 12 sectoral indices. BSE has entered into an indexed cooperation agreement with Deutsche Borse. This agreement has made SENSEX and other BSE indices available to investors in Europe and America. Moreover, Barclays Global Investors (BGI), the global leader in ETF's through its shares brand, has created the shares BSE SENSEX India Tracker which tracks the

SENSEX. The ETF enables investors in Hong Kong to take an exposure to the Indian equity market.

The first exchange traded fund (ETF) on SENSEX, called Splice is listed on BSE. It brings to the investors a trading tool that can be easily used for the purpose of investment, trading, hedging and arbitrage. SPICE allows small investors to take a long-term view of the market.

BSE provides an efficient and transparent market for trading in equity, debt instrument and derivatives. It has a nation-wide reach with a presence in more than 359 cities and towns of India. BSE has always been at par with the international standards. The system and processes are designed to safeguard market integrity and enhance transparency in operations. BSE is the first exchange in India and the second in the world to obtain an ISO 9001:2000

certification. It is also the first exchange in the country and second in the world to receive information security management system standards BS 7799-2002 certification for its BSE on-line trading system.

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3.10 BOLT

BSE continuous to innovative. In recent times, it has become the first national level stock exchange to launch its website in Gujarati and Hindi to reach out to a larger number of investors. It has successfully launched a reporting platform for corporate bonds in India christened the ICDM or Indian corporate debt market and a unique ticker-cum-screen aptly named BSE broadcast which enables information dissemination to the common man on the street.

In 2006, BSE launched the director 's database and ICERS (Indian corporate electronic reporting system) to facilitate information flow and increase transparency in the Indian capital market. While the director 's database provides a single-point access to information on the boards of directors of listed companies, the ICERS facilities the corporates in sharing with BSE their corporate announcements

Meaning of BOLT trading system

Both NSE (National Stock Exchange) and BSE (Bombay Stock Exchange) offer fully computerized screen-based trading facilities to investors. The on-line trading system of BSE is known as BOLT (BSE's On-line Trading System), while that of NSE is known as NEAT (National Exchange for Automated Trading).

Bombay online trading system works

- **Trading:** by electronic order matching based on price-time priority through the BOLT (BSE Online Trading) System with the continuous trading sessions from 9.15 a.m. to 3.30 p.m. as is operational in the Equities Segment. Retail Trading in G-secs is on a Rolling Settlements basis with a T+2 Delivery Cycle.
- **Clearing and Settlement:** The Clearing and Settlement mechanism for the Retail trading in G-Secs is based on the existing institutional mechanism available at BSE. The trades executed throughout the continuous trading sessions are netted out at the end of the trading hours through a process of multilateral netting. The transactions are netted out member-wise and then security-wise so as to determine the net settlement and payment obligations of the members. The Delivery obligations and the payment orders in respect of these members are generated by the Clearing and Settlement system of BSE. These statements indicate the pay-in and pay-out positions of the Members for securities and funds who then give the necessary instructions to their Clearing Banks and depositories.

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The entire risk management and the clearing and settlement activities for the trades executed in the Retail Debt Market System are undertaken by BSE Exchange Clearing House.

- **Holding and Transfer of G-Secs:** The G-secs for retail trading through BSE can be held by investors in the same Demat account as is used for equity at the Depositories. NSDL and CDSL hold the combined quantity of G-Secs in their SGL-II A/cs of RBI, meant only for client holdings.
-

The Mumbai Exchange has initiated a number of measures aimed at providing quality products and services and expanding its network using cutting edge information technology. The BSE made its transition from an 'outcry' system of trading to a completely electronic trading system. BSE has introduced electronic trading system known as BOLT (BSE online Trading) with the following facility

1. Trading system displays on a continuous basis script and market-related information required supporting traders. (Information includes best five bids and offers, last traded quantity and price, total buy and sell depth (irrespective of rates), open, high, low, and close price, total number of trades, volume and value, and index movement. Other company-related information is also displayed)
2. As soon as an order is matched, the confirmation of the trade is generated on-line.
3. The order matching logic is based on best price and time priority.
4. The BSE Online Trading Platform has a capacity of conducting 2 million trades per day.
5. The latest state of the art technology infrastructure with Trader Workstations located in more than 400 cities all over the country.
6. Trading on the BOLT system is conducted from Monday to Friday between 9:30 a.m. and 3:30p.m.
7. Trading can also be conducted through the BSE Internet Trading System - www.bsewebx.com the first Exchange enabled Internet Trading System.
8. BSE aims to provide trading anywhere and at any time. With this endeavour in mind, the exchange continuously upgrades the hardware, software and networking systems so as tenable it to enhance the quality and standards of service to its members and other market intermediaries.

A Study on Risk and Return Analysis on Stock Market

Methodology

The primary objective of the study is to examine the profile of the BSE in order to evaluate the recent trend in the stock exchange in terms of changing style of functioning, membership (brokers) composition within the BSE and aggregate of all India level, member's clients' dispersion and spread of workstations. Further, comparison with other stock exchanges also intended. To reach out the pre-defined objectives of the study it was planned to use secondary data. The data was collected from official website of the BSE, RBI, journals and magazines, published and unpublished sources. The collected data was processed, tabulated and interpreted with help of percentages, compound annual growth and wherever it was necessary 't' test has been used to check the significance of the growth rate.

Objectives and functions

The main objectives behind the establishment of the BSE could be summarised as under: (i) to make funds available to entrepreneurs of business class; (ii) to ensure maximum possible return on investment to investors; (iii) to provide a platform for savings, investments and reinvestment activity; (iv) to provide a market for the purchase and sale of securities; (v) to promote and develop a well-regulated market for dealings in securities; (vi) to establish and promote honourable and just practices in the securities market; and (vii) to encourage investment culture across the country.

Finance is the oxygen for any economy. Stock exchanges are commonly associated with industrial finance. Stock exchanges provide transaction facility to investors and thus discover the price for securities traded on them.

The stock exchanges are organised markets for buying and selling existing industrial stocks, shares, debentures, government securities and hybrid instruments due to their functioning. The main function of a stock exchange is to create conducive climate for an active primary market and to ensure fair and efficient trading in securities in the secondary market. The former Finance Minister of India, Sri C.D Deshmukh, while placing a bill on securities contracts (regulation) bill in the Lok Sabha during November 1955, stated that the economic services which a well constituted and efficiently run securities market can render under normal incentives and impulse of private enterprise are considerable. This statement reveals the importance of stock exchanges in promoting desirable economic growth.

A Study on Risk and Return Analysis on Stock Market

At present, the BSE functions across 380 medium and big cities in the country. The foremost function of the BSE is to channelize savings from household sector to meet the investment requirements of productive sectors of the economy. The functions include to: (i) impart liquidity to securities in the market i.e. securities can be readily converted into cash; (ii) provide stability of continuity in price; (iii) provide easy marketability of shares and other securities so that value of these securities can keep pace with growth; (iv) provide a well organised mechanism to create a common platform for trading in securities; (v) safeguard the interest of investors through strict enforcement of rules and regulations; (vi) regulate members through registration, inspection and enforcement of provisions; (vii) provide speculation in the market to absorb more investor folk into the market; and (viii) provide listing and quotation for trading of securities. The BSE also undertakes support functions such as training and education, technology solutions, data/information services and index services.

Organisation and Management

Historically trading members used to control and manage the stock exchanges in the country. This model was designed to serve the exchanges, which were essentially regional in character. After opening of the economy, the Indian stock market registered robust development. With the advent of telecommunications during 1990, a need was felt to recognise the structure of the BSE to cope with the interest of investors spread over the country. Towards this end, the BSE has initiated several measures to separate trading rights from ownership and management.

The Governing Board of the BSE comprises 9 directors, one managing/chief executive director, two public representatives and three representatives from each of the shareholders and trading members. A President, Vice-President, Treasurer and Secretary are annually elected from among the elected directors of the governing body. The members of the stock exchange elect their directors.

The representation of trading members does not exceed one fourth of total strength and the remaining directors are appointed as per the guidelines given by the Securities and Exchange Board of India (SEBI) from time to time.

Demutualisation

Traditionally, stock exchanges were organised in the form of clubs, with the ownership and control vested with the brokers. In case of disputes, often the interests of brokers alone were protected, leaving the investors at the losing end.

A Study on Risk and Return Analysis on Stock Market

Therefore, to reduce the dominance of trading members in the management of stock exchanges, the government of India has proposed to corporatize the stock exchanges by which ownership, management and trading membership segregated from one another. In this row, during 2005, the erstwhile BSE became the BSE Limited. The ownership has been diluted. The public shareholders took 51 per cent of brokers' stake. The public shareholding includes 5 per cent share of each of its strategic partners i.e., Deutsche Bores and Singapore Exchange.

Membership

In reflection of the need to upgrade the professional standards of market intermediaries, the admission standards for trading membership have become more vigilant. The BSE administration has tightened the qualifications/norms such as capital adequacy, experience etc. Now, the ownership and management of the BSE are completely separated from the rights of trading member to trade on the BSE. No person is eligible for admission as a member unless : (i) he/she worked for not less than two years as partner with or an authorised clerk or remisier or apprentice; or (ii) he/she agrees to work for a minimum period of two years, as a representative member with another member and enters into bargains on the floor of the exchange not in his own name but in the name of such other member; or (iii) he/she succeeds to the established business of a deceased or retiring member who is his father, uncle, brother or any other person who is in the opinion of the Governing Board a close relative; or (iv) he/she has a minimum net worth, possesses a minimum working capital of cash and/or marketable securities, and possesses assets belonging to himself/herself and/or spouse or children, of such nature and value as the Governing Board may from time to time.

In its opinion, determine and consider acceptable; and (v) he/she qualifies in a written test conducted by the exchange and in case of a corporate member, the directors referred to in sub-clause (v) of Rule 19A(b) qualify in a written test conducted by the exchange, and in the case of a Financial Corporation, the Chief Executive Officer and another Director/Officer both possessing experience as provided in sub-clause (v) of Rule 19A(b) qualify in a written test conducted by the exchange.

The applicant must be engaged solely in the business of securities and must not be engaged in any fund/asset-based activity. Admission of trading members in the BSE is a two-stage process. After meeting the minimum eligibility to become a member, the applicants are required to go through a written examination followed by an interview. The candidates are interviewed by a committee consisting of experienced people from the industry. The committee assesses the applicants' capability to operate as a member. Trading members of the BSE are the individuals, partnership, and corporate members. They have the right to trade in the stocks listed on the BSE. An investor can buy/sell securities through one of the trading members of the exchange. The members must be registered with the SEBI.

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In India, traditionally, brokerage firms were proprietary or partnership concerns with unlimited liabilities. This restricts the amount of capital that such firms can raise. The ever-growing volume of transactions made it imperative for such firms to be well capitalised and professional. The necessary changes were effected to the existing legal frame work to open up the membership of stock exchanges to corporate members with limited liability.

FACTORS AFFECTING BSE

There are various factors that affects BSE:

FOREIGN INSTITUTIONAL INVESTORS (FII)

Foreign investment refers to investments made by residents of a country in another country's financial assets and production processes. After the opening up of the borders for capital movement, foreign investments in India have grown enormously. It affects the productivity factor of the beneficiary or the receiver country and has the potential to create a ripple effect on the balance of payments of that country. In developing countries like India, foreign capital helps in increasing the productivity of labour and to build up foreign exchange reserves to meet the current account deficit. It provides a channel through which these countries can have access to foreign capital.

Foreign investment can be of two forms: Foreign direct investment (FDI) and foreign portfolio investment (FPI). FDI involves direct production activity and has a medium to long term investment plans. In contrast the FPI has a short-term investment horizon. They mostly investment in the financial markets which consist of Foreign Institutional Investors (FIIs). They invest in domestic financial markets like money market, stock market, foreign exchange market etc.

According to Michael Frenkel and Lukas Menkhoff, "FIIs are beneficial for an economy under specific institutional conditions. It is defining characteristic of an emerging market that these conditions are often not met".

Foreign institutional investors 'investments are volatile in nature, and they mostly invest in the emerging markets. They usually keep in mind the potential of a particular market to grow.

FII has led a significant improvement in India relating to the flow of foreign capital during the period of post economic reforms. The inflow of FII investments has helped the stock market to raise at a greater height according to financial analysts. Sensex touched a new height. It crossed 10000-mark in January 2006, which was 8073 on November 2, 2005, and 9323 in December 2005

A Study on Risk and Return Analysis on Stock Market

FII participation in the Indian stock market triggers its upward movement, but, at the same time, increased liquidity through FII investment inflow increases volatility too.

FII's IMPACT ON THE INDIAN ECONOMY.

The Indian stock markets are both shallow and narrow and the movement of stocks depends on limited number of stocks. As FIIs purchases and sells these stocks there is a high degree of volatility in the stock markets. If any set of development encourages outflow of capital that will increase the vulnerability of the situation. The high degree of volatility can be attributed to the following reasons:

The increase in investment by FIIs increases stock indices in turn increases the stock prices and encourages further investments. In this event when any correction takes place the stock prices declines and there will be pull out by the FIIs in large number as earning per share declines.

The FIIs manipulate the situation of boom in such a manner that they wait till the index raises up to a certain height and exit at an appropriate time. This tendency increases the volatility further.

So even though the portfolio investment by FIIs increases the flow of money in the economic system, it may create problems of inflation.

TRANSFORMATION OF THE STOCK EXCHANGE, MUMBAI TO BSE LTD.

The change in the name of Asia's oldest stock exchange, from the Stock Exchange, Mumbai to the Bombay Stock Exchange Ltd., (BSE Ltd.) is of more than cosmetic significance. Along with the change in name comes a new perspective, one brought about by a comprehensive change in its ownership and management. Until now, the BSE like most other exchanges in India was owned and managed by brokers, who also had the sole right to trade in the exchanges. Conflicts of interest were bound to arise in such situations. Until the advent of the National Stock Exchange in 1994, the BSE was India's pre-eminent exchange, accounting for an overwhelmingly large proportion of the share market transactions of the country.

Companies wherever located were advised to seek a listing of their shares on the BSE so that they could have access to its large reservoir of capital and investor base. Legally speaking, it was enough if they listed their shares on any one of the regional stock exchanges, closest to their registered office. This last rule, like so many others connected with the securities market, had to be discarded in the wake of the sweeping changes in the financial markets since the 1990s. Perceptions of both investors and regulators changed dramatically forcing the stock exchanges to overhaul themselves.

A Study on Risk and Return Analysis on Stock Market

A series of securities scams through the 1990s in which brokers were invariably held accountable, the inability of the broker-dominated exchanges to check malfeasance, and a vastly expanding role for the capital market in the national economy necessitated a thorough review of the age-old stock market structure.

In the new demutualised and corporatized exchanges that came about as part of a major capital market reform a time-bound program for 10 other exchanges has since been announced — the right to trade is segregated from the right to own and manage the exchange. The transition is not going to be easy as it involves the imparting of a much greater degree of professionalism. Stock market professionals from outside the broking community are reportedly in short supply. By far the biggest unknown factor relates to the future ownership of the exchange. Brokers will cede control and investors including retail ones will hold a substantial portion of the exchange's equity. Apart from this being totally new to India, it does raise the possibility of other conflicts of interest including the one connected with the listing of its own shares.

3.11 INVESTMENT

Investment means the use of money for the purpose of making more money, to gain income or increase capital, or both.

Short Term Investment: It is more risky. A successful short term trading mindset instead requires iron discipline, intense focus and steely devotion.

Short term trading can be divided in 3 sections

- Day Trading
- Swing Trading
- Position Trading

Day trading

Day traders buy and sell stocks throughout the day in the hope that the price of the stocks will fluctuate in value during the day, allowing them to earn quick profits. A day trader will hold a stock anywhere from a few seconds to few hours but will always sell all those stocks close of the day. The day trader will therefore not own any position at the close of each day, and there is overnight risk. The objective of day trading is to quickly get in and out of any particular stock for profits anywhere from few cents to several points per share on an intra-day basis. Day trading can be further sub-divided into number of styles, including.

A Study on Risk and Return Analysis on Stock Market

Scalpers: This style of day trading involves the rapid and repeated buying and selling of a large volume of stocks within seconds or minutes. The objective is to earn a small per share profit on each transaction while minimizing the risk.

Momentum Traders: This style of day trading involves identifying and trading stocks that are in a moving pattern during the day, in an attempt to buy stocks at bottoms and sell at tops.

Swing Trading

The principal difference between day trading and swing trading is that swing traders will normally have a slightly longer time horizon than day traders for holding a position in a stock. As is the case with day traders, swing traders also attempt to predict the short-term fluctuation in a stock's price. However, swing traders are willing to hold the stocks for more than one day, if necessary, to give to stock price some time to move or to capture additional momentum in the stock's price. Swing traders will generally hold on to their stock positions anywhere from a few hours to several days.

Swing trading has the capability of providing higher returns than day trading. However, unlike day traders who liquidate their positions at the end of each day, swing traders assume overnight risk. There are some significant risks in carrying positions overnight. For example, news events and earnings warnings announced after the closing bell can result in large, unexpected and possibly adverse changes to a stock's price

Position Trading

Position trading is similar to swing trading, but with a longer time horizon. Position traders hold stocks for a time period anywhere from one day to several weeks or months. These traders seek to identify stocks where the technical trends suggest a possible large movement in price is likely to occur, but which may not be fully played out for several weeks or months.

Long Term Investment:

A successful long term trading mindset requires, above all, patience, and perseverance. These are more difficult attributes to develop in the average trader. Too often the average short-term trader succumbs to the markets lure and develops a frantic, get-it-now mindset believing every price blip represents a trading opportunity. As this attitude is fanned by the media and brokerage industry, more and more long-term traders have become aggressive swing traders and swing traders become rabid day traders - more often than not with disastrous consequences.

A Study on Risk and Return Analysis on Stock Market

Long term trading results in less trades with fewer mistakes and lower commission and slippage costs because overtrading is one of the biggest sources of losses facing both new and established traders. Why is this so? Obviously, more trades mean more commissions and more slippage. Few short-term traders realize, however, that their total commission and slippage costs in any year often exceed their total losses for the year. In other words, many losing short-term traders would have actually made money on an annual basis had they not incurred the exorbitant commission and slippage costs of trading throughout the year. Fewer trades mean fewer mistakes.

Long term trading unlike short term requires dramatically reduced time for analysis and trading. If you are trading using weekly data, only one to two hours each weekend are required to implement a sophisticated long term trading system for 21 or more commodities. This includes the time to completely download your quotes and update your data files, verify which are the correct months to trade for each commodity, figure out if you have any positions to rollover, generate your trading signals, and write down orders to your broker. On the contrary a typical successful day trader literally becomes a slave to their quote machines during market hours.

The important advantages of listing are listed below

- **Fund Raising and exit route to investors**
Listing provides an opportunity to the corporates/ entrepreneurs to raise capital to fund new projects/undertake expansions/diversifications and for acquisitions. Listing also provides an exit route to private equity investors as well as liquidity to the ESOP-holding employees.
- **Ready Marketability of Security**
Listing brings in liquidity and ready marketability of securities on a continuous basis adding prestige and importance to listed companies.
- **Ability to raise further capital**
An initial listing increases a company's ability to raise further capital through various routes like preferential issue, rights issue, Qualified Institutional Placements and ADRs/GDRs/FCCBs, and in the process attract a wide and varied body of institutional and professional investors.
- **Supervision and Control of Trading in Securities**
The transactions in listed securities are required to be carried uniformly as per the rules and byelaws of the exchange. All transactions in securities are monitored by the regulatory mechanisms of the stock exchange, preventing unfair trade practices. It improves the confidence of small investors and protects them.

A Study on Risk and Return Analysis on Stock Market

- **Fair Price for the Securities**

The prices are publicly arrived at based on demand and supply; the stock exchange quotations are generally reflective of the real value of the security. Thus, listing helps generate an independent valuation of the company by the market.

- **Timely Disclosure of Corporate Information**

The listing agreement signed with the exchange provides for timely disclosure of information relating to dividend, bonus and right issues, book closure, facilities for transfer, company related information etc by the company. Thus providing more transparency and building investor confidence.

- **Collateral Value of Securities**

Listed securities are acceptable to lenders as collateral for credit facilities. A listed company can also borrow from financial institutions easily as it is rated favourably by lenders of capital; the company can also raise additional funds from the public through the new issue market with a greater degree of assurance.

- **Better Corporate Practice**

Since the violation of the listing agreement entails the de-listing/suspension of securities from the rings of the exchange, the listed companies are expected to follow fair practices to the advantage of investors and public.

- **Benefits to the Public**

The data daily culled out by the stock exchange in the form of price quotations and others; provide valuable information to the public which can be used for project and research studies. The stock exchange prices can be an index of the state of the economy. Financial institutions, NRI, individual investors etc. can take wise decisions before making investments.

Subdivision and Consolidation of Holdings

Stock exchange byelaws provide for explicit rules for subdivision and consolidation of securities as desired by the investors. There is special trading sessions in the exchange for conversion of odd lots into market lots arranged by financial and institutional investors. Thus, listing helps to provide flexibility to investors in the subdivision and consolidation of their holdings with speed and earnestness.

A Study on Risk and Return Analysis on Stock Market

3.12 SENSEX AND NIFTY

The Sensex is an —Index. What is an Index? An index is basically an indicator it gives you general idea about whether most of the stocks have gone up or most stocks have gone down. The Sensex is an indicator of all the major 's companies of the BSE The NEFTY is an indicator of all the major 's companies of the NSE. If the Sensex goes up, it means that the prices of the stocks of most of the major companies on the BSE have gone up. If the Sensex goes down, this tells you that the stocks prices of most of the majors 'stocks on the BSE have gone down Just like the Sensex represents the top stocks of the BSE, the Nifty represents the top stocks of the Misadjust in case you are confused. the BSE, is the Bombay stock exchange and the NSE is the National Stock Exchange. The BSE is situated at Bombay and the NSE is situated at Delhi. These are the major stocks exchange in the country. There are other stocks exchanges like the Calcutta stocks Exchange etc. but they are not as popular as the BSE and the NSE most of the stock trading in the country is done through the BSE and the NSE most of the stocks trading in the country is done through the BSE and the NSE.

The Sensex is India's benchmark stock index and represents 30 of the country's largest and most well-capitalized stocks listed on the BSE.

- The index was launched in 1986 and is operated by S&P.
- It is calculated in Indian rupees and U.S. dollars.
- The index is float-adjusted, and market capitalization weighted.
- The Sensex has grown since India opened up its economy in 1991.

Sectoral Indices OF NIFTY 50

- **Nifty Auto Index:** Nifty Auto Index comprises of 15 stocks. Furthermore, these 15 stocks of companies are in the business of manufacturing cars & motorcycles, heavy vehicles, auto ancillaries, tyres, etc. This index reflects the performance of automobile sector.
- **Nifty Bank:** Nifty Bank comprises of India's large, capitalized banking stocks. This index has 12 stocks from the banking sector. It captures the performance of the banking sector of the country.
- **Nifty Financial Service Index:** Nifty Financial Service Index reflects the performance of banks, financial institutions including housing, and other companies that provide financial services. This index comprises of 15 companies that are part of NSE.
- **Nifty FMCG Index:** This index comprises of fast-moving consumer goods companies. Furthermore, this index has 15 stocks that are listed on NSE. These companies produce goods that are of mass consumption and non-durable.

A Study on Risk and Return Analysis on Stock Market

- **Nifty IT Index:** Nifty IT index reflects the performance of Indian IT sector. The index includes companies that have more than 50% of their turnover from IT related activities like IT Infrastructure, Telecommunication Services and Networking Infrastructure, IT Education and Software Training, Software Development, Hardware Manufacturer's, Vending, Support and Maintenance. The index currently has 10 companies listed on the NSE.
- **Nifty Media:** This index captures the performance of media and entertainment sector of the economy.
- **Nifty Metal Index:** Nifty metal index comprises of 15 stocks listed on the NSE. In addition, this index reflects the performance of the metal index.
- **Nifty Pharma Index:** This index captures the performance of the pharma sector of the country.
- **Nifty Private Bank Index:** This index comprises of 10 private banking stocks listed on NSE. Furthermore, it measures the performance of private banks of the country.
- **Nifty PSU Bank Index:** This index reflects the growth and performance of public sector banks of the country.
- **Nifty Reality Index:** Nifty reality index comprises of growth and performance of the real estate and infrastructure companies of the country.
- **Nifty 500 Industry Indices Index:** IISL maintains different industry groups under Nifty 500 Industry Indices Index.

CHAPTER-4

DATA ANALYSIS AND INTERPRETATION

Table 4.1 show that risk and return of companies in 2014-2015

Table 4.2 show that risk and return of companies in 2015-2016

Table 4.3 show that risk and return of companies in 2016-2017

Table 4.4 show that risk and return of companies in 2017-2018

Table 4.5 show that risk and return of companies in 2018-2019

Table 4.6 show that risk and return of companies in 2014-2019

Table 4.7 show that alpha and beta of companies in 2014-2015

Table 4.8 show that alpha and beta of companies in 2015-2016

Table 4.9 show that alpha and beta of companies in 2016-2017

Table 4.10 show that alpha and beta of companies in 2017-2018

Table 4.11 show that alpha and beta of companies in 2018-2019

Table 4.12 show that alpha and beta of companies in 2014-2019

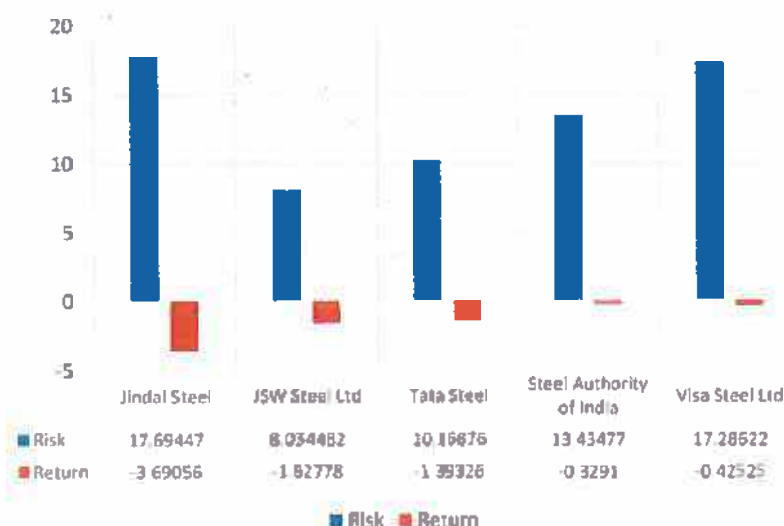
A Study on Risk and Return Analysis on Stock Market

DATA ANALYSIS AND INTREPRETATION

Table no 4.1 shows risk and return of companies in 2014-2015

Company	Risk	Return
Jindal Steel	17.69447	-3.69056
JSW Steel Ltd	8.034482	-1.62778
Tata Steel	10.16876	-1.39326
Steel Authority of India	13.43477	-0.3291
Visa Steel Ltd	17.28622	-0.42525

Graph No 4.1 shows risk and return of companies in 2014-2015



Interpretation

The above table shows that risk and returns of the companies during the year 2014-15, where Jindal company is risk is 17.69447 and return -3.69056, JSW company risk is 8.034482 and return -1.62778, Tata steel company risk is 10.16876 and return -1.39326, Steel authority risk is 13.43477 and return -0.3291 Visa steel company risk 17.28622 and -0.42525 therefore comparing risk and return of all companies JSW steel limited is best.

A Study on Risk and Return Analysis on Stock Market

Table no4.2 shows that risk and return of companies in 2015-2016

Company	Risk	Return
Jindal Steel	18.11985	-5.96798
JSW Steel Ltd	5.891452	2.922839
Tata Steel	12.39056	0.627014
Steel Authority of India	11.03634	-3.57244
Visa Steel Ltd	12.02054	-0.3332

Graph No 4.2 shows risk and return of companies in 2015-2016



Interpretation

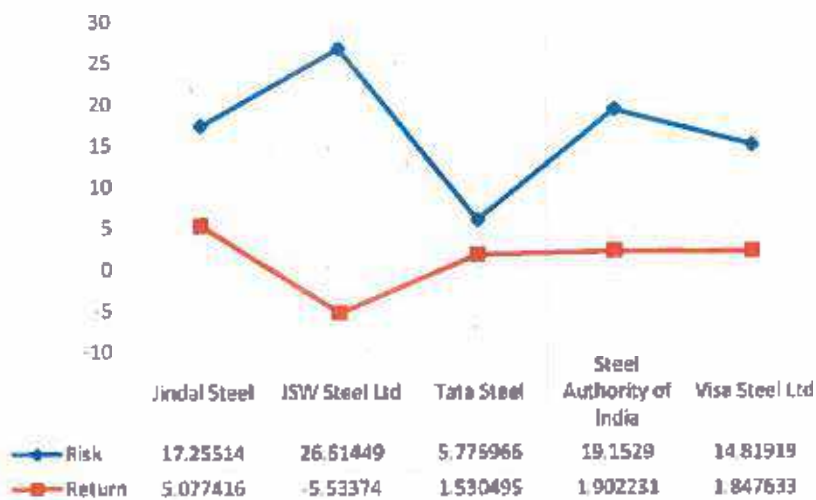
The above table shows that risk and returns of the companies during the year 2015-16, where Jindal company risk is 18.11985 and return is -5.96798, JSW company risk is 5.891452 and return 2.922839, Tata steel company risk is 12.39056 and return 0.627014, Steel authority company 11.03634 and return -3.57244 and visa steel limited risk is 12.02054 and return is -0.3332 therefore comparing risk and return of companies JSW company risk is low and return is more so this is the best company.

A Study on Risk and Return Analysis on Stock Market

Table no4.3 shows that risk and return of companies in 2016-2017

Company	Risk	Return
Jindal Steel	17.25514	5.077416
JSW Steel Ltd	26.61449	-5.53374
Tata Steel	5.775966	1.530495
Steel Authority of India	19.1529	1.902231
Visa Steel Ltd	14.81919	1.847633

Graph No 4.3 shows risk and return of companies in 2016-2017



Interpretation

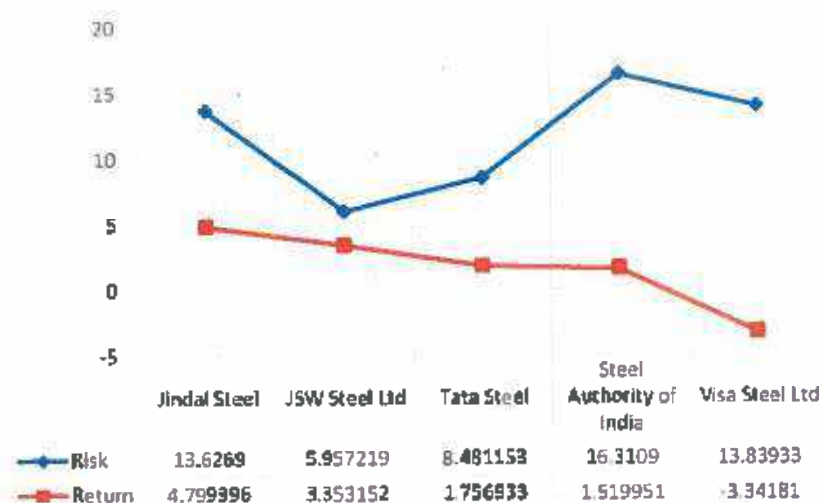
The above table shows that risk and returns of the companies during the year 2016-17, where Jindal company risk is 17.25514 and return is 5.077416, JSW company risk is 26.61449 and return -5.53374, Tata steel company risk is 5.775966 and return 1.530495, risk of Steel authority company 19.1529 and return 1.902231 and Visa steel limited risk is 14.81919 and return is 1.847633 therefore comparing risk and return of companies tata steel company having highest return so this is best among alternatives.

A Study on Risk and Return Analysis on Stock Market

Table no 4.4 shows that risk and return of companies 2017-18

Company	Risk	Return
Jindal Steel	13.6269	4.799396
JSW Steel Ltd	5.957219	3.353152
Tata Steel	8.481153	1.756933
Steel Authority of India	16.3109	1.519951
Visa Steel Ltd	13.83933	-3.34181

Graph No 4.4 shows risk and return of companies in 2017-2018



Interpretation

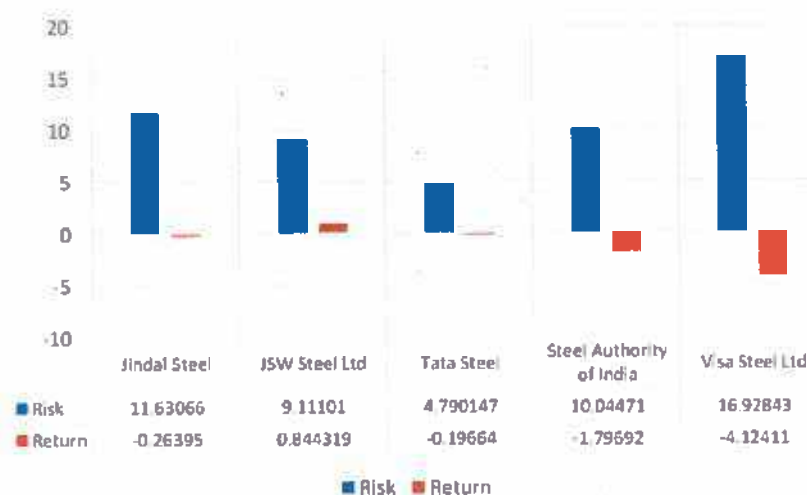
The above table shows that risk and return of companies during the year 2017-2018 where, Jindal company is 13.6269 and return is 4.799396; JSW company risk is 5.957219 and return 3.353152, Tata steel company risk is 8.481153 and return 1.756933, risk of Steel authority company 16.3109 and return 1.519951 and Visa steel limited risk is 13.83933 and return is -3.34181 therefore comparing risk and return of companies JSW steel ltd is the best company.

A Study on Risk and Return Analysis on Stock Market

Table no4.5 shows that risk return of companies 2018-19

Company	Risk	Return
Jindal Steel	11.63066	-0.26395
JSW Steel Ltd	9.11101	0.844319
Tata Steel	4.790147	-0.19664
Steel Authority of India	10.04471	-1.79692
Visa Steel Ltd	16.92843	-4.12411

Graph No 4.5 shows risk and return of companies in 2018-2019



Interpretation

The above table shows that risk and return of companies during the year 2018-2019 where, Jindal company is 11.63066 and return is -0.26395, JSW company risk is 9.11101 and return 0.844319, Tata steel company risk is 4.790147 and return -0.19664, risk of Steel authority company 10.04471 and return -1.79692 and Visa steel limited risk is 16.92843 and return is -4.12411 therefore comparing risk and return of companies Tata steel company risk return is good.

A Study on Risk and Return Analysis on Stock Market

Table no4. 6 shows that performance of selected steel companies for the period of 2014-15 to 2018-19

Company	Risk	Return
Jindal Steel	15.6654	-0.00914
JSW Steel Ltd	11.12173	-0.00824
Tata Steel	8.321317	0.464908
Steel Authority of India	13.99592	-0.45526
Visa Steel Ltd	14.97874	-1.27535

Graph No 4.6 shows that performance of selected steel companies for the period of 2014-15 to 2018-19



Interpretation

The above table shows that risk and returns of the companies during year 2014-15 to 2018-19, where Jindal company risk is 15.6654 and return is -0.00914, JSW company risk is 11.12173 and return -0.00824, Tata steel company risk is 8.321317 and return 0.464908 risk of Steel authority company 13.9959 and return -0.45526 and visa steel limited risk is 14.97874 and return is -1.27535 therefore comparing all companies performance tata steel company shows best result.

A Study on Risk and Return Analysis on Stock Market

Table no4.7 shows that beta and alpha of companies 2014-2015

Company	Beta	Alpha
Jindal Steel	1.374002	-4.51954
JSW Steel Ltd	0.613188	-1.99773
Tata Steel	0.937856	-1.9591
Steel Authority of India	1.320698	-1.12593
Visa Steel Ltd	1.649354	-1.42036

Graph No 4.7 shows that beta and alpha of companies 2014-2015



Interpretation:

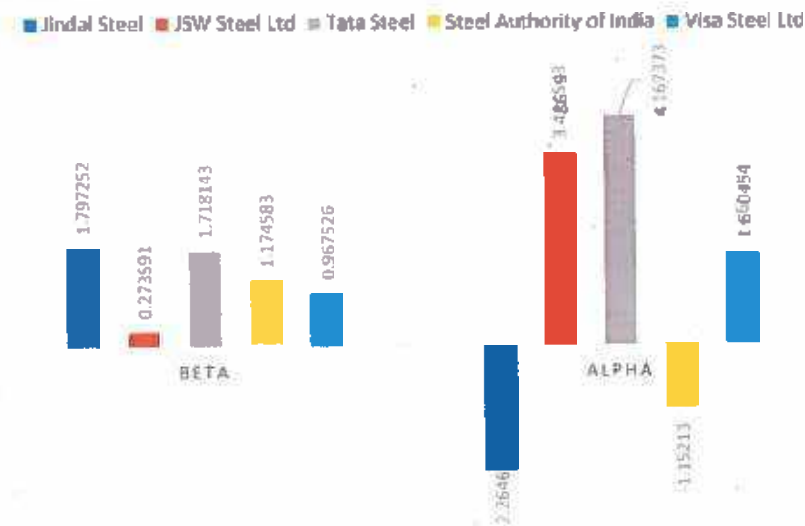
From the above table shows that beta and alpha of companies during the year 2014-2015. Where, Jindal company beta 1.374002 and alpha -4.51954, JSW steel limited beta 0.613188 and alpha -1.99773, Tata steel company beta is 0.93785 and alpha-1.9591, Steel authority of India company beta is 1.320698 and alpha -1.12593 and Visa steel company beta is 1.649354 and alpha -1.42036. Visa steel limited is least volatility and JSW steel company shows good performance among all.

A Study on Risk and Return Analysis on Stock Market

Table no4.8 shows that beta and alpha of companies 2015-2016

Company	Beta	Alpha
Jindal Steel	1.797252	-2.26461
JSW Steel Ltd	0.273591	3.486593
Tata Steel	1.718143	4.167373
Steel Authority of India	1.174583	-1.15213
Visa Steel Ltd	0.967526	1.660454

Graph No 4.8 shows that beta and alpha of companies 2015-2016



Interpretation:

From the above table shows that beta and alpha of companies during the year 2015-2016 where, Jindal company beta 1.797252 and alpha -2.2646, JSW steel limited beta 0.273591 and alpha 3.486593 Tata steel company beta is 1.718143 and alpha 4.167373 Steel authority of India company beta is 1.174583 and alpha -1.15213 and Visa steel company beta is 0.967526 and alpha 1.660454. Comparing companies alpha and beta Jindal steel company is least volatility and Tata steel company showing good performance in this year.

A Study on Risk and Return Analysis on Stock Market

Table no4.9 shows that beta and alpha of companies 2016-2017

Company	Beta	Alpha
Jindal Steel	0.937737	2.357225
JSW Steel Ltd	-2.20875	0.873409
Tata Steel	0.697193	-0.49193
Steel Authority of India	2.853511	-6.37525
Visa Steel Ltd	1.906868	-3.68382

Graph No 4.9 shows that beta and alpha of companies 2016-2017



Interpretation

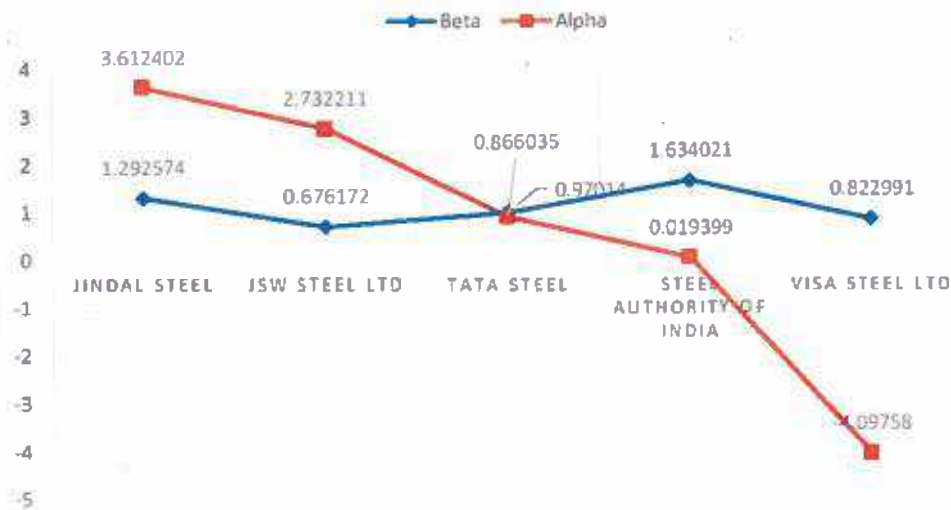
From the above table shows that beta and alpha of companies during the year 2016-2017 where Jindal company beta 0.937737 and alpha 2.357225, jsw steel limited beta 2.357225 and alpha 0.873409, Tata steel company beta is 0.697193 and alpha -0.491 Steel authority of India company beta 2.853511 is and alpha -6.37525 and visa steel company beta is 1.906868 and alpha -3.68382. comparing companies alpha and beta steel authority of India is least volatility and Jindal steel company showing good performance in this year.

A Study on Risk and Return Analysis on Stock Market

Table no 4.10 shows that beta and alpha of companies 2017-2018

Company	Beta	Alpha
Jindal Steel	1.292574	3.612402
JSW Steel Ltd	0.676172	2.732211
Tata Steel	0.97014	0.866035
Steel Authority of India	1.634021	0.019399
Visa Steel Lid	0.822991	-4.09758

Graph No 4.10 shows that beta and alpha of companies 2017-2018



Interpretation

From the above table shows that beta and alpha of companies during the year 2017-2018 where Jindal company beta 1.292574 and alpha 3.612402, jsw steel limited beta 0.676172 and alpha 2.732211, Tata steel company beta is 0.97014 and alpha 0.866035 Steel authority of India company beta is 1.634021 and alpha 0.019399 and Visa steel company beta is 0.822991 and alpha -4.09758. Comparing companies alpha and beta steel authority of India company is least volatility and Jindal steel company showing good performance in this year.

A Study on Risk and Return Analysis on Stock Market

Table no4.11 shows that beta and alpha of companies 2018-2019

Company	Beta	Alpha
Jindal Steel	1.802171	1.278666
JSW Steel Ltd	1.569035	2.187379
Tata Steel	0.796887	0.485474
Steel Authority of India	1.117471	-0.84039
Visa steel ltd	1.998103	-2.41378

Graph No 4.11 shows that beta and alpha of companies 2018-2019



Interpretation

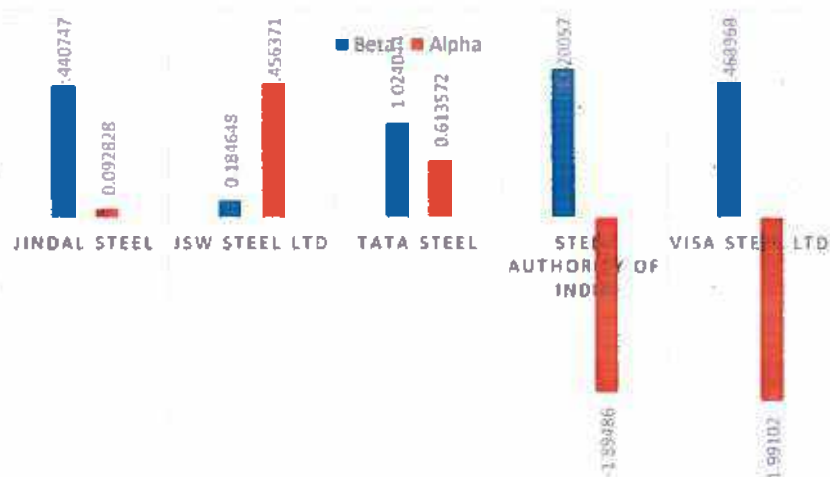
From the above table shows that beta and alpha of companies during the year 2018-2019 where, Jindal company beta 1.802171 and alpha 1.276686, JSW steel limited beta 1.569035 and alpha 2.187379, Tata steel company beta 0.796887 is and alpha 0.485474 Steel authority of India company beta is 1.117471 and alpha -0.84039 and Visa steel company beta is 1.998103 and alpha -2.41378. Comparing companies alpha and beta visa steel company is least volatility and JSW steel company showing good performance in this year

A Study on Risk and Return Analysis on Stock Market

Table no 4.12 shows that beta and alpha of companies 2014-2015 to 2018-2019

Company	Beta	Alpha
Jindal Steel	1.440747	0.092828
JSW Steel Ltd	0.184648	1.456371
Tata Steel	1.024044	0.613572
Steel Authority of India	1.620057	-1.89486
Visa Steel Ltd	1.468968	-1.99102

Graph No 4.12 shows that beta and alpha of companies 2014-2015 to 2018-2019



Interpretation

From the above table shows that beta and alpha of companies during the year 2014-2015 to 2018-2019 where Jindal company beta 1.440747 and alpha 0.092828, jsw steel limited beta 0.184648 and alpha 1.456371, tata steel company beta is 1.024044 and alpha 0.613572, steel authority of India company beta is 1.620057 and alpha -1.89486 and visa steel company beta is 1.468968 and alpha -1.99102. Comparing companies alpha and beta steel authority of India company is least volatility and JSW steel company showing good performance.

CHAPTER-5

FINDINGS SUGGESTIONS AND CONCLUSION

5.1 Findings

5.2 Suggestions

5.3 Conclusions

A Study on Risk and Return Analysis on Stock Market

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

- From the study we can see that comparing risk and return of companies in 2014-2015 JSW steel company limited risk is 8.034482 and return is -1.62778 so this is the best company comparing other companies in this year.
- The study shows that comparing risk and return of companies in 2015-2016 jsw steel company risk is 5.8914 and return 2.92283 therefore this is the best company comparing others in this year.
- It can be observed from the study comparing risk and return of companies in 2016-2017 results shows that tata steel company is best company because of risk is 5.7759 and return 1.5304 so this is best among alternatives in this year.
- From the study we can see that comparing risk and return of companies in 2017-2018 Jsw steel company risk is 5.9572 and return 3.3531 so this is the best company comparing other companies in this year.
- The study reveals that comparing risk and result of companies in 2018-2019 risk is 4.79014 and return 0.1966 so this is best company among alternatives in this year.
- From the study we can see that overall performance of companies 2014-15 to 2018-19 comparing risk and return tata steel company is the best company because of risk is 8.3213 and return is 0.4649.
- From the study we can see that beta and alpha of companies in the year 2014-2015. JSW steel limited beta 0.613188 and alpha -1.99773, and visa steel company beta is 1.649354 and alpha -1.42036. visa steel limited is least volatility and JSW steel company shows good performance among all.
- The study reveals that beta and alpha of companies in the year 2015-2016. jindal company beta 1.797252 and alpha -2.2646, tata steel company beta is 1.718143 and alpha 4.167373. comparing companies alpha and beta Jindal steel company is least volatility and tata steel company showing good performance in this year.
- From the study we can see that beta and alpha of companies in the year 2016-2017. jindal company beta 0.937737 and alpha 2.357225, steel authority of India company beta 2.853511 is and alpha -6.37525 and comparing companies alpha and beta steel authority of India is least volatility and Jindal steel company showing good performance in this year.

A Study on Risk and Return Analysis on Stock Market

- It can be observed that the study beta and alpha of companies in the year 2017-2018, Jindal company beta 1.292574, and alpha 3.612402, steel authority of India company beta is 1.634021 and alpha 0.019399. Comparing companies alpha and beta steel authority of India company is least volatility and Jindal steel company showing good performance in this year.
- From the study we can see that beta and alpha of companies in the year 2018-2019, JSW steel limited beta 1.569035 and alpha 2.187379, visa steel company beta is 1.998103 and alpha 2.41378. Comparing companies alpha and beta visa steel company is least volatility and JSW steel company showing good performance in this year.
- From the study we can see that beta and alpha of companies in the year 2014-2015 to 2018-2019, JSW steel limited beta 0.184648 and alpha 1.456371, steel authority of India company beta is 1.620057 and alpha 1.89486. Comparing companies alpha and beta steel authority of India company is least volatility and JSW steel company showing good performance.

A Study on Risk and Return Analysis on Stock Market

5.2 SUGGESTIONS

The study has conducted on risk and return analysis on stock market. Based on the secondary data as researcher I would like to give some suggestions about stock market.

1. As per the performance of select steel companies JSW steel was outperformed with low return & risk with less volatility when compared to other selected steel companies.
2. It is suggested to potential investors to select JSW steel company for their investment purpose.
3. Indian economy is growing at a constant growth of 9% it is expected that industries will be highest performer in the coming years. investors are suggested to invest regularly and invest for long term to earn maximum returns with minimum risk. Since the Indian economy is growing rapidly there will be a good return in the industry sector investments, so it is suggested to hold the shares for a long term of more than 3-5 years.
4. The performance and health of stock exchange is solely dependent on the behaviour n pattern of investments by the investor. Most of the investors wants high return at low risk and they buy and sell based on their perception causing stock market taking random walk. The capital market goes through briskchanges, investors should look for right opportunities keeping in tune with the dynamics of market environment.

Technical analysis gives hints about the buy and sell of the stocksto the investor. Therefore, the small investors and traders should not blindly make an investment rather they should analyse using the various tools like beta, standard deviation, and mean deviation to check if the scrip is technically strong.

5. The investors should understand the past performance of the companies before investing in the shares of those companies. Both the Fundamental analysis and technical analysis should be used to study the stocks. Investors should understand the limitations of the techniques used in both Fundamental as well as technical analysis.

5.3 CONCLUSION

The study was conducted on analysing risk and return analysis on stock market.

As per the above study, in conclusion we say that investing in stock market gives higher return compared to other sector stock as the stock of industry growing at higher speed and industry leading towards development. Basic strategies like investing in good quality IPOs and in shares of listed companies with good prospects for the future will go a long way in building a good long-term portfolio. Long term investments carry a lower risk and so are comparatively safer to invest. If the portfolio is carefully chosen long term investments yield very high returns. It is always better to invest for long term. There should not be grading for the earnings.

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**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON LOANS AND ADVANCES "**

AT

SHANTAPPA MIRAJI URBAN BANK, CHIKODI

Submitted to

RANI CHANNAMMA UNIVERSITY, BELAGAVI



FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE

DURING THE ACADEMIC YEAR 2020-2021

SUBMITTED BY

Miss. Rajalaxmi Ingavale

M.COM-IV SEMESTER

REGISTER NO: MC191611

UNDER THE GUIDANCE OF

SHRI. S. M. BHOSAGE

K.L.E. SOCIETY'S

**BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that Miss. Rajalaxmi Ingavale has satisfactorily completed the Project Report Entitled "A Study on Loans and Advances" At Shantappaanna Miraji Urban bank, Chikodi for the partial fulfilment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year 2020-2021.

SHRI. S. M. BHOSALE

PROJECT GUIDE

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ಶ್ರೀ ಶಾಂತಪ್ಪಣ್ಣಾ ಮಿರಜಿ ಪಟ್ಟಣ ಸಹಕಾರಿ ಬ್ಯಾಂಕ್ ನಿ., ಚಿಕ್ಕೋಡಿ
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Ref. No. Certificate/203/2021-22

Date: 13-09-2021

TO WHOMSOEVER IT MAY CONCERN

C E R T I F I C A T E

This is to Certify that Miss: **Rajalaxmi R. Ingavale** of Chikodi had completed the Project work from 28th June 2021 to 30th August 2021 on “ **A Study on Loans and Advances** ”.

During her study she had been provided with the necessary informations.

We wish her every success in her future endeavours.

For Shri Shantappa Miraji Urban
 Co-op. Bank Ltd., Chikodi.

General Manager



DECLARATION

I declare that the project report entitled "A Study on Loans and Advances" At Shantappaanna Miraji Urban Bank, Chikodi is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. S. M. Bhosage, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part there of has not been previously submitted for the award of any other degree or diploma.

Date: 25/09/2021

Place: Chikodi



Miss. Rajalaxmi Ingavale

Register No: MC191611

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The success of any project is incomplete without mentioning the names of the people who made it possible.

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Miss. Rajalaxmi Ingavale

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CHAPTER 1**INTRODUCTION AND RESEARCH DESIGN**

- 1.1 Introduction**
 - 1.2 Review of Literature**
 - 1.3 Need for the study**
 - 1.4 Statement of problem**
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 - 1.7 Research Methodology**
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-

CHAPTER-1

INTRODUCTION AND RESEARCH DESIGN

1 Introduction :

Finance has been called the life blood of business because it deals with the money and it requires funds for day to day activities. A co-operative or credit is an autonomous association of person who voluntarily cooperate for their mutual social, economic, and cultural benefit. In India Co-operative Banks engaged in banking barriers are regulated with the RBI and governed Co-operative Banks Act, 1965. Co-operative banking Systems are also usually more integrated than credit union systems. Local branches of Co-operative banks select their own boards of directors and manage their own operations, but most strategic decisions require approval from a central office. The Co-operative Banks and societies were established to curb the activities of money lenders and unorganized money market agencies. As co-operative bank is retail and commercial banking organized on a co-operative basis. Co-operative banking institutions take deposits and lend money in most parts of the world. The Banking Industry was once a simple and reliable business that took deposits from investors and lent it to borrowers at a higher rate. In India, Co-operative Banks are working for nearly hundred years. Co-operative Banks are considered as one of the important financial institutions in the country. The major contributions of these banks are mostly in rural areas where they play the most vital role in rural financing and micro financing. The major strength of co-operative banks are their easy local reach, transparent interaction with the customers and their efficient services to common people.

1.2 Review of Literature

Singh and Singh (2010), in their study titled, "Technical and Scale Efficiency in District Central Co-operative Banks of Punjab –A Non- Parametric Analysis" had attempted to investigate the extent of technical efficiency across 20 DCCBs of Punjab with the help of Data Envelopment Analysis. They brought out that size of DCCBs and profits had been affecting the measures of technical efficiency significantly. The study further revealed that DCCBs of Punjab were suffering from the problems of managerial irregularities and improper production scale. Appropriate policy interventions by state government, RBI and NABARD have been suggested by the authors.

Shanappa (2009) in his study titled, "Performance Evaluation of UCBs: A Case

udy of Kallappa Awade Ichalkaranji Janata Sahakari Bank Ltd. Ichalkaranji" made an attempt to examine the working and financial performance of UCBs. The objective of the study was to examine and analyze the trend, progress and problems of this bank, and to offer some important suggestions for improving the competency and efficiency of the bank. The related data had been collected for the period from 1995-96 to 2007-08. He used various statistical tools such as ratios, percentages, averages, and chi-square test to analyze the data, to know the performance of the UCBs in respect of share capital, deposits, reserve funds, loans and advances, investment, profit, and NPAs. He observed that the bank had maintained NPAs under control at the best stipulated level of RBI norms. There was immense instability in net profit.

The bank should focus on non-interest income sources (commission based services) to increase the profit level and reduce the NPAs. CD ratio of the bank was declining continuously which was not a good signal. The economic health of the bank was sound and the Bank was able to compete with other banks. He further suggested that loans should be provided (at least to regular borrowers) on competitive rates of interest.

The European Association of Co-operative Banks (2009), in its article titled, "European Co-operative Banks in Financial and Economic Turmoil" was of the view that despite extensive interest rate cuts, liquidity injections and support measures the financial markets were not stable. Figures showed that global economy will experience a deep recession in 2009 and perhaps also 2010. But as has been demonstrated, most co-operative bank groups had fortunately been able to weather the financial crisis relatively well so far without any state support. This was due to the fact that they generally had limited exposure to toxic assets, a predominant focus on domestic retail banking with stable results, strong capital buffers and principally conservative risk management. The co-operative banks that did report losses due to the subprime crisis were affected primarily at the level of subsidiaries and at the level of APEX institutions. The local banks were not hit directly by the financial crisis.

Moreover, they continue to lend money to SMEs and retail customers. Co-operative banks were consequently solid and robust at the local level and accordingly demonstrated stability of the retail banking industry in Europe.

Rayaraman and Srinivasan (2009) in their study titled, "Relative Efficiency of Scheduled Commercial Banks in India (2001-08): A DEA Approach" attempted to measure the scale efficiency of scheduled commercial banks in India using Data Envelopment Analysis. The study listed out the number of efficient banks on the basis of relative performances using efficiency scores. It was found that

The general performance of scheduled commercial banks under study was relatively high during the study period 2001-08 and the average efficiency score was ranging between 0.919 and 1. More than 60 per cent of the scheduled commercial banks under study were above the average efficiency score for each study period except for the year 2006, where it was around 53 per cent. The results show that ICICI Bank, IndusInd Bank, ABN Amro Bank, Calyon Bank and Citibank were efficient for all years during study period. In addition to above banks, efficiency scores of State Bank of Travancore, Vijaya Bank, Bank of Maharashtra, and Oriental Bank of Commerce, Axis Bank, Federal Bank and Yes Bank were above the average efficiency scores for all the years.

Rajamohan and Pasupathy (2009) in their study titled, "Performance Evaluation of AICO (Tamil Nadu Industrial Co-operative Bank Ltd.) – An Application of Structural and Growth Analysis" stated that there were several factors that determined the operating efficiency and profitability of the bank. In this context, the general performance of a bank can be analyzed more meaningfully and objectively for a given period of time through structural and growth analysis. Through structural analysis the figures reported in the profit and loss account and balance-sheet are converted into percentages for each period to ensure uniformity for the purpose of comparison with those of other periods. Macro mean had been used to exhibit the strength and weakness of each factor considered. The results were summarized in capsule form. Macro mean in respect of interest received constituted 5.8% of the total income; it was 81.2 % for interest paid, 18.8% for operating expenses, 91% in the case of spread and 83% for burden. It was found that the net profit recorded a negative growth of 27.8%. Growth rate of operating expenses was at 44%, spread at 15%, burden at 29% and advances at 49%. Therefore, it was recommended that the burden rate should be reduced by effecting cost control measures, and the spread rate be increased so that the profitability may be at a higher rate.

Sumar (2008), in her thesis, worked on "Management of Non-Performing Advances – A Study of District Central Co-operative Banks of Punjab". A sample of ten DCCBs, i.e., five with high level of NPAs and five with low level of NPAs, was taken for the study. It was found that despite the best efforts, Central Co-operative banks had not succeeded in diversifying their business. The NPAs in crop loan were found to be the lowest, while these were the highest in non-farm sector loan. On the basis of step-wise

multiple regressions, it was found that caste, education, amount and adequacy of loan were the main factors affecting repayment performance of the borrowers. She suggested that these banks should form a special cell to monitor NPAs and should take services of recovery agents.

Murthy (2008), in his paper titled, "Rural Finance: A Remedial Measure for Rural Poor" focused on the role of financial services as key to enhancing economic development and reducing poverty in rural areas. Rural finance has often led the way in addressing social, gender and ethnic equity issues which hold families in poverty.

He, however, observed that the access was limited for poor households and for micro, small and medium enterprises. Despite rapid economic development in India the number of people living below the poverty line has decreased only slightly. While there was a numerically strong infrastructure of formal financial institutions in rural

India, they often lacked the capacity to provide adequate demand-oriented services.

He recommended that the major constraint of such important rural finance agencies,

i.e., lack of resources should be removed, by facilitating them to mobilize resources from capital market and other newer sources.

Mutamu and Ganesan (2008), in their research article titled, "Profit and Profitability of Co-operative banks: The Case of Banques Populaires (Peoples' Bank) of Rwanda" stated that financial institutions in general and banking sector in particular play a strategic role in the financing stage of capital formation. In the banking sector, cooperative banks undertake the responsibility of mobilising the scarce savings of the community and channelising these savings for productive investment in the economy.

They discussed the performance of Banques Populaires and the determinants of its Profit and Profitability. It had been noted that the net profit was not distinguished from Gross Profit in the years 1994-2004. The empirical results from the six models of Profit and Profitability showed that total assets per branch, other earnings and total deposits per branch were the determinants of profit in Banques Populaires, while total assets per branch, and the number of branches were the determining variables of profitability of Banques Populaires. The low return from investment of Banques Populaires indicated a lack of cost control and unsatisfactory sources of income other than interest from advances. It was, therefore, crucial that Banques Populaires should make further effort for the improvement of its efficiency in operations so that the low profitability might be uplifted.

Waike and Martin (2007) of IMF conducted a study on co-operative banks and their financial stability. The study was based on individual bank data drawn from the Bank Scope Database for 29 major advanced economies and emerging markets that were members of the Organization for Economic Co-operation and Development (OECD)

Wadhvani (2007) conducted a case study of Single and Bandana District Central Cooperative Banks regarding the financial health of credit co-operatives in Maharashtra and found NPAs or overdoes as the main factors for deterioration in health of these banks. The study revealed that both these banks showed a decline in their financial health and economic viability during the late nineties as against the early nineties period

Waghmare (2006), in his study titled "Agriculture and Rural Development are Anonymous in Reality: Suggested Role of CAs in Accelerating Process" analyzed the performance of Primary Agriculture Credit Societies, and observed that PACS could not match up to the increasing requirements of growth dimensions in the Agriculture /Rural development in the Post-independence period, though till the late 50s, they were the only available source of institutional rural finance.

Wadhvani and Singh (2006) in their study titled, "Funds Management in Central Cooperative Banks—Analysis of Financial Margin" attempted to estimate the impact of identified variables on the financial margin of the central co-operative banks in Punjab with the help of correlation and multiple step-wise regression approach.

Wadhvani and Veluraj (2005), in their study titled, "Profitability Analysis of the Pondicherry State Co-operative Bank", analyzed the performance of the bank from 1998-99 to 2002-03. Various ratios, such as cost of management (total expenses) to working capital ratio, profit to working capital ratio, non-interest income to total income ratio, etc. were used to assess the general performance of the bank. Spread and burden positions of the bank were also analyzed. They concluded that the profitability performance of the bank was impressive and bank was able to meet its obligations and

irms. The cost of management and establishment expenses got reduced during the period of study which further strengthened the profitability position of the bank.

air (2004) in his paper titled, "Village Co-operatives – A Century of Service to the Nation" observed that in 2004, the formal institutionalized co-operative sector completed a century of its service to the nation. Analyzing the progress of Primary Agricultural Co-operative Societies, he observed that during the half century spread over 1951-2001, the PACs made rapid strides in membership, owned funds, deposits, and channelising production credit for farmers. They were versatile in the sense; they can take up any type of rural financing and rural service activity at short notice and at lowest transaction cost. But besides excelling on all fronts, the co-operatives are feeling handicapped due to mounting NPAs. The overdue loans of PACs increased to ₹5,899.60 million in 2000-01 as compared to ₹63.79 million indicated in 1950-51, thereby subjecting them to a sustained and systematic process of reviews, reorganisation and restructuring.

Prishana et al. (2003), in their research paper, "Performance of Regional Rural Banks in Karnataka: An Application of Principal Components and Discriminant Function Analysis" tried to identify the important discriminating characteristics of the two identified groups of Regional Rural Banks in the state of Karnataka. They used the discriminate function approach and sought to obtain linear discriminate coefficient, such that the squared difference between the mean Z-score for the one group and the mean Z-score for the other group was as large as possible in relation to the variation of Z-scores within the groups. They concluded that the number of employees per branch had maximum discriminating power to the extent of 55%, followed by amount of borrowings (18%), credit deposit ratio (14%) and income to expenditure ratio (13%).

Modha (2002), in his study titled "Social Lending – Its Relevance in Deregulated Economy" studied how far the two extremities, viz. profit maximization and social lending will co-exist in the deregulated market, particularly in a developing economy like India. He concluded that

- 1) Social lending should continue despite reforms;
- 2) Economic reforms should continue;
- 3) Target lending should be abolished;
- 4) Social lending should be confined to weaker sections only;
- 5) Time bound lending with least formalities should be ensured;

-) Lending decision should be based on cost benefit analysis;
-) Subsidy in social lending should be scrapped;
-) Loss making rural branches should be converted into satellite offices;

iswanath (2001) in his study titled, "An Analysis of Performance of Agricultural Credit Co-operatives and their Overdues Problems in India" concluded that during the period 1950-51 to 1995-96, the total loans advanced by PACs increased from ₹24 crore to ₹14,201 crore i.e. 587 times, but unfortunately this increase was followed by a corresponding increase in overdues. The results of Development Index in PACs of 16 states indicated that the performance of only 5 states, i.e., Karnataka, Gujarat, Tripura, Orissa, and Maharashtra was above the National average, while that of the remaining 11 states including Punjab were below the average. Using correlation technique, the extent of relationship between overdues and four variables,

1.3 Need for the study

Loans and advances are the most important aspect of any banking organization. Loan is a type of debt. Like all debt instruments, a loan entails the redistribution of financial assets over time. The borrower initially receives an amount of money from the lender, which they repay later. This service is generally provided at a cost, referred to as interest on the debt, a sum of borrowed money (principal) is generally repaid with interest which in turn helps the organizations gain profits and also use these profits for the welfare of the organization as well as to pay interest on deposits.

This study is mainly concentrated on the lending practices pattern and influence in the organization performance. It also helps to know the objectives and goals as well as it help to ascertain people's response on bank lending. The study is taken on "A STUDY ON LOANS AND ADVANCES" IN THE SHANTAPPA MIRAJI URBAN BANK LTD. CHIKODI". The Co-operative credit banks are playing an essential role in the rural development. This study shows us the procedure that are taken place for purpose of providing loans to customers/borrowers and also with respect to the study of the whole organization and the process followed in that organization.

1.4 Statement of problem:

There is no project report found on the A study on loans and advances of Shri Shantappa Miraji Urban Bank. The title of the project work is "a study on loans and advances" with reference to The Shantappa Miraji Urban Bank Chikodi

This topic was selected to analyze the **Performance of loans and advances** in **“Shrishantappa Miraji Urban Bank Ltd Chikodi.”**. That has shown good profit and turnover in the recent years. The study is conducted to represent the concept of loans and advances and critically analyse them. Finally provides conclusion relating to **Performance of loans and advances** of **shrishantappannamiraji urban co-op bank**.

5 Scope of the Study:

The present case study on **“Shantappa Miraji Urban Bank Ltd Chikodi.”** covers a study on **‘Performance of Loans and Advances’**. The study also makes a micro focus in all the major functional areas of the Bank. The various types of loans are studied by analyzing the financial statement of the Bank.

6 Objectives of the Study:

- To study the concept of loans and advances.
- To study different types of loans given by the bank.
- To know the period of repayment for varies provided by The Co-operative Bank Ltd ,
- To know the overall performance of Loans and Advances.
- To suggest measures for better performance.

7 Research Methodology:

The present study mainly based on the **primary and secondary data** i.e., annual reports of the bank for the respective years is from 2015 to 2016. The necessary primary data is collected through informal discussion with the secretary, founder and also with the members of the bank.

- **Tools for data collection:**

The tools for data collection are divided into two parts i.e.

Primary data

This data is being collected by the help and guidance of **Shri K.N.KUMBAR** who is the manager of **Shantappa Miraji Urban Bank Ltd Chikodi.”**. The conversation helped to have a idea about the Bank, its functions and other aspects of the Bank.

- **Source of Primary data:**

- Observation
- Discussion

Secondary Data:

Secondary Data which includes the annual reports of the Bank for the past years helped to study the financial aspects of the Banks. This data shows about gain/loss in the financial statement of the bank. It is the data, which gives relevant information in the different fields of "THE Shantappa Miraji Urban Bank Ltd Chikodi".

The secondary data also includes the data collected from other sources mentioned below:

- Annual Reports and magazines of the Shri Shantappa Miraji Urban Co-operative Bank.
- The part of required data has also been collected through browsing.
- Books
- Reference materials.

1.8 Limitations of Study:

- Due to strict confidential policy of the bank the accounts departments provided only screened information.
- Accuracy of the data provided cannot be guaranteed which does not give a clear idea about the actual functioning of the Bank
- Due to busy schedule of secretary, the company's financial statements obtain secondary data.
- Time of constraint
- The present study is confined only for a period of five years from 2015-16 to 2019-20.

9 Chapter scheme

NIT I; INTRODUCTION AND RESEARCH DESIGN:

The first chapter gives details of introduction, review of literature, Statement of problem, need for the study, objective of study, scope of study, research methodology and limitations.

NIT II-CONCEPTUAL FRAMEWORK

gives the profile of the bank where the project is conducted. It also explains about future plan of the bank.

NIT III-BANK PROFILE:

gives the profile of the bank where the project is conducted. It also explains about future plan of the society.

NIT-IV: DATA ANALYSIS AND INTERPRETATION

This chapter gives detail regarding the analysis and interpretation of data. It also consists of the table, graphs and its interpretation.

NIT-V: FINDINGS, SUGGESTIONS AND CONCLUSION

This chapter concludes the project report. It comprises of the findings, conclusion drawn from above analysis based on the data collected and also included suggestions.

CHAPTER 2

CONCEPTUAL FRAMEWORK

2.1 Introduction of loans and advances

2.2 Role of loans and advances

2.3 Types of loans

2.4 Classifications of loans and advances

2.5 Principles of lending

2.6 Various types of loans given by the Bank

CHAPTER-2

CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION OF LOANS AND ADVANCES

Loans and advances are the most important aspects of any banking organizations. Loan is a type of debt, like all debt instruments, a loan entails the redistribution of financial assets over time.

Meaning of loan :

When money is given to another party in exchange of or repayment of the loan principal amount plus interest.

Meaning of advances :

When fund provided by the bank to an entity for a specific purpose to be repayable after a short duration is known as advances.

Loans vs Advances Comparison Table

Below is the 5 topmost Comparisons Between Loans vs Advances

The Basic of Comparison	LOANS	ADVANCES
* About	Funds lent by one entity to another for a purpose	Lent by a bank to firms to meet their short-term financial requirements
*Nature	A loan is a debt by nature	Advances for a credit facility by
*Time Duration	Loans are for a long-term	Advances are for a short-term (maximum one year)
*Collateral Security	A loan may or may not be secured (Secured and Unsecured Loans)	Facilitated only against primary security or a guarantee

1.2 We can discuss the role played by the bank in the business world by way of loans and advances as follows;

- Loans and advances can be arranged from banks in keeping with the flexibility in business operations. Traders may borrow money for day today financial needs availing of facility of cash credit, bank overdraft and discounting of bills. The amount raised as loan may be repaid within a short period suit the convenience of the borrower. The business may be run efficiently with borrowed funds from banks for financing its working capital requirements.
- Loans and advances are utilized for making payments of current liabilities, wages and salaries of employees, and also the tax liability of the business.
- Loans and advances from banks are found to be economical for traders and businessman; banks charge a reasonable rate of interest on such loans or advances. For loans from money lenders, the rate of interest charged is very high. The interest charged by commercial banks is regulated by the RBI of India.
- Banks generally do not interfere with the use, management and control of the borrowed money. But it takes care to ensure that the money lent is used for business purpose.
- Banks loans and advances are found to be convenient as far as its repayment is concerned. This facilitates planning for future and timely repayment loans. Otherwise business activities would have come to a halt.
- Loans and advances by banks generally carry element of secrecy with it. Banks are duty – bond to maintain secrecy of their transactions with customers. This enhances people faith in the banking system.

2.3 TYPES OF LOANS:

The loans can be broadly classified as follows;

1. Short term loan as demand loan.

2. Long term loan

Short Term Loan means it is granted for a short period of a year or less than one year.

Long Term loan: Term Loan is of two types

1. Medium term loan being repayable in 1 to 3 years.

2. Long-term loan is being repayable in above 3 to 5 years.

A Loan is granted either against collateral securities, or against the personal security of the borrowers. In the case of a loan, interest is charged on the whole amount of the borrower at different intervals, but the rate of interest charged on a loan is slightly lower than that charged on overdraft, cash credit. Generally a banker prefers to make an advance in the form of a loan for two reasons.

1. He can collect interest on the entire amount of the loan sanctioned.

2. A loan involves very little accounting work as the granting & the repayment of the loan are generally done in the lump-sum. But the borrower does not prefer that type of advances, as he is required to pay interest on the full amount of the loan sanctioned to him irrespective of the amount of the loan sanctioned to him irrespective of the amount actually withdrawn by him.

2.4 Further Loans and advances are classified into two main categories mentioned below:

- **Secured Loan or Advance:-**

Secured loan or advance means a "Loan or Advance made on the security of assets. The market value of which is not at any time less than the amount of such loan or advance."

These are the loans granted by the bankers/society by obtaining security equal or more than the loan amount. In other words, a secured loan is the one in which specific property is pledged to secure payment of the loan. The security may be in the form of shares, debentures, LIC policies, goods, Fixed Deposit receipts, etc.

Advantages of Secured Loans:

- Take possession of security,
- Validity of title,
- Marketability,
- Stability of price,
- Durability,
- Easy ascertainment of value,
- Easy transfer of title,
- Margin,
- Approved securities,
- Lower cost of storage and supervision.

Insecured Loan or Advance: -

An unsecured loan or advances means a "Loan or advance not so secured. A partly covered loan or advance is partly covered by the security of assets, the market value of such securities being less than the amount that has been lent or outstanding at any time." These are the loans granted without any security or on personal security of the borrower. Unsecured loans are often more expensive and less flexible than secured loans, but suitable if you want a short-term loan (one to five years).

Advantages of Unsecured Loans:

- Unsecured loans can be obtained without collateral.
- This loan is involved time factor.
- This loan is suits the various financial needs of its borrowers.
- In unsecured loans cannot create any legal charges.
- In unsecured loan personal liability come first

1.5 Principles of lending

When a banker is approached for a loan he has to keep his eyes and ears wide open. Apart from appraisal of individual loan proposal, there are some general principles, which should guide him determine whether a proposed loan is desirable, irrespective of whether or not securities is offered. It has been stressed throughout that a banker does not lend only because the advance will be secured many other consideration influence his decision. Following are some of the principles of the loans and advances.

Safety:

For a banker, the celebrated principle in holding asset is "safety first" nothing is more important to him than the preservation of the principle some advanced. In fact by safety is meant the ability of the borrower to repay the principle and the interest their own according to term and conditions provided in the loan agreement.

Liquidity:

The next principle of the bank lending is that the advances should be liquid. The assets should be readily into cash without much loss of the value, which temporary advances granted to finance some purchased of stock, raw materials etc.

Diversification of risk:

It is another important principle of the sound lending is that they should hold loan assets of diversified character. So as to reduce the degree of credit risk. It should be one of the banker's ax Ions to advance relatively moderate sums to many customers rather than large sums to few customers. Loans are also tied to be diversified with respect to maturity, security and type of the borrower.

Profitability:

A significant matter for consideration is the remunerative of the advance i.e., the yield which the particulars advance is going to give to the banker. The rate of interest to be charged has to be commensurate with the risk involved in loan. The object of the profitability has to be moderate by safety and liquidity of funds and than by national policies as lay down by the government and the central bank.

Purpose oriented:

Normally the bank should not finance unproductive, consumption loans, else extend short- term credit for movement of goods and other productive purposes. The banks are generally expected to make

available ways and means of accommodation working capital advantage and not to finance fixed assets formation just as the disbursement of the repayment of the loan is made in one lump sum.

benefits to the Lender

- The lender of the loan gets the desired rate of interest on the amount he/she have borrowed.
- The lender can plan his investment and can earn good return on the investment to be utilized in the future and can build a good reputation in the market.

benefits to the Borrower

- The Advantage with loans is that you can design your repayment period as well as monthly installments according to your financial capacity. A secured business loan comes at lower interest rates when compared with other business loans. As these loans are taken against collateral, any default in repayment can put the commercial property at risk.
- Interest rates offered on secured business loan is variable and easily affordable. Such opportunities are provided entrepreneurs to encourage them and ultimately enhance the economy of the region. By promising business or industries, local government can even eradicate unemployment and improve overall standard of living.

Drawbacks of Loan: -

- **Inflexibility: -**

Every time a loan is required, it is to be negotiated with the banker. To avoid it, borrower may borrow in excess of their exact requirement to provide for any contingency.

- **Abuse of funds: -**

Banks have no control over the use of funds borrowed by the customers. However, banks insist on hypothecation of the assets purchased with loan amount.

- **Indistinct period:**

Though the loans are for fixed period but in practice roll over, i.e. they are renewed frequently.

- **Complexity for document:**

Loan documentation is more comprehensive as compared to each credit system.

Procedure for Granting Loans: Duties and Responsibilities of Guarantors

- The guarantor is equally responsible for the loan to which he becomes guarantor. Before signing as the guarantor, member should ensure payment capacity and credit worthiness of the loanee.

Members Should Know:

- Any member without the prior permission of sahakari remains absent for 3 consecutive AGM's are liable for disqualification of the membership and may lose their membership.
- Every member should have minimum transactions with SBSCS.
- Members who do not receive the dividend within 3 years, the amount will be transferred to reserve fund and any query in this regard will not be entertained.
- In case of any changes in the address, members should intimate in writing to the office for the proper payment of dividend. Any problem arising due to the impress address SBSCS will not be responsible.
- Nomination facility is provided to all the services. All members should be to avail this facility to avoid the legal complications.
- As per KCS & KSS Act the member of one Cooperative bank cannot become the member of another Cooperative bank engaged in same trade of business.
- **2.6 The following are the various types of loans given by the Bank:**
 - Mortgage Loan
 - Salary secured loan
 - Surety loan
 - Salary credit loan
 - Fixed deposit loan
 - Vehicle loan
 - Housing loan
 - Motor cycle loan
 - Plant and machinery loan
 - Medium term loan
 - NSC loan

CHAPTER 3

BANK PROFILE

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CHAPTER-3
BANK PROFILE

INDIAN BANKING STRUCTURE:-

RESERVE BANK OF INDIA

(CENTRAL BANKING AND SUPREME MONETARY AUTHORITY)

SCHEDULED BANKS

COMMERCIAL BANKS

CO-OPERATIVE BANKS

ALL INDIA FINANCIAL INSTITUTIONS

FOREIGN BANKS

STATE CO-OPERATIVES

NABARD

REGIONAL RURAL BANKS

CENTRAL CO-OPERATIVES

SIDBI

PRIMARY CREDIT SOCIETIES

EXIM

PRIVATE SECTOR BANKS

OLD

IDBI

1.1 CO-OPERATIVE BANKS OVERVIEW:

The Co-operative Banks has a history of more than 100 years. The Co-operative Banks are an important part of the Indian financial systems. The Co-operative movement originated in the West but the importance that such banks assumed in India is rarely paralleled anywhere else in the world. Their role in rural financing continues even today and their business in urban areas also has increased phenomenally in recent years mainly due to sharp increase in the number of primary Co-operative Banks.

While the Co-operative Banks in rural areas mainly finance agriculture based activities including farming, personal finance, Hatchery along with some Small Scale Industries and Self-employment driven activities. The Co-operative Banks in urban area mainly finance various categories of people for self - employment industries, Small Scale Units, Home finance, Consumer finance, Personal finance etc. Co-operative movement is quite established in India. The first legislation on Co-operation was passed in 1904. In the beginning of the 20th Century availability of Credit in India more particularly in rural areas was almost absent. The rural folk have to depend on the money lenders, who lent often at various rate of interest.

Co-operative Banks are organized and managed on the principal of Co-operation, self help and mutual help. They function with the rule of "One Member, One Vote" Co-operative Banks perform all the main banking functions of deposits, supply of Credit and provision of remittance facilities. Co-operative Banks provide limited banking products and are functionally specialist in agriculture related products. Co-operative Banks now provide Housing loans, Vehicle loans, Industrial loans, Hypothecation loans etc.

A co-operative bank promotes economic activity and provides banking facilities and service to the rural people. The significant role of co-operative banks in the agricultural economy impacts a lesson to commercial banks and dispels from their minds the age old inertia and the gloom of conservatism by shifting emphasis from credit worthiness of the purpose and from tangible security to the character of the business.

2 HISTORY OF CO-OPERATIVE BANKS IN INDIA

The beginning of co-operative banking in India dates back to 1904. The institutional source of credit for agriculture and related activities was very inadequate at that time. The money lenders would provide some credit at very high rates of interest. The co-operative banks were expected to substitute such unorganized money market agencies and provide short and long term credit at reasonable rates of interest. It was expected that they would co-ordinate the activities of unorganized and organized segments of Indian money market. Subsequent to the adoption of economic planning in 1951, co-operative banks were expected to play a crucial role in achieving agricultural and rural development. Before the nationalization of commercial banks the cooperative banks were the only substitute for money lenders and other informal sector lenders. But after nationalization and creation of Regional Rural Banks and NABARD their relative share declined.

Co-operative Banks in India, (with their network; spread over remote rural areas and a large number of smaller towns), have historically played a major role in mobilization of domestic savings for economic development of the country. They have provided the farmers and non-farm entrepreneurs with the needed credit support. These institutions have also contributed significantly to private capital formation in agriculture and accelerated the pace of distribution of farm inputs (NABARD 2002).

Co-operative banks are promoted to meet the banking requirements of consumers. They are established not only in the urban areas but also in the rural areas. In rural areas these banks supply finance to agriculture, while in the urban areas they are started to provide finance to buy consumer goods. They provide short and medium term loans. They provide loans at a lower rate comparatively. They are formed on the co-operative bank principles and as such are more service oriented than profit oriented.

1.3 Meaning and Definition of Bank:

A bank is a financial institution licensed to receive deposits and make loans. Banks may also provide financial services, such as wealth management, currency exchange and safe deposit boxes. There are two types of banks commercial/retail banks and investment banks.

A bank is financial institution that accepts deposits from the public and creates credit. Lending activities can be performed either directly or indirectly through capital markets.

Banking business in India is largely governed by the Banking Regulation Act, 1949. According to Section 5(b) of this Act, banking means "the acceptance for the purpose of lending or investment of deposits of money from the public repayable on demand, order or otherwise and withdraw able by cheque, draft, order or otherwise.

Definition and meaning of co-operative banks:

In the words of HENRY WOLFF “co-operative banking is an agency which is in a position to deal with the small means on his own terms accepting the security he has and without drawing upon the protection of the rich.

DEVINE defines “a mutual Bank formed composed and governed by working people themselves for encouraging regular saving and generating miniature loans on easy terms of interest and repayments”.

In the analysis of above definitions, one can say that co-operative banks is a co-operative organization where persons Voluntarily associate together as human being on the basis of equality for the Promotion of economic interest of themselves engaged in the banking functions of acceptance of deposits and lending the credit. In short, co-operative bank is an institution, which performs the banking functions of accepting deposits and borrowing of funds and lending of credit.

4 Features of Co-operative Bank:

1. They are organized and managed on the principle of co-operation self help and mutual help. They function with the rule of “one member one vote”.
2. Co-operative banks perform all the main banking function of deposit mobilization, supply of credit and provision for remittance facilities.
3. Co-operative banks are perhaps the first government supported agency in India.
4. Co-operative banks belong to the money market as well as the capital markets.
5. Co-operative banks accept current saving, fixed and other types of time deposits from individuals and institutions including banks.
6. Co-operative banks do banking business mainly in the agricultural and rural sector.
7. Some co-operative banks are schedule co-operative banks while others are non-schedule co-operative banks.
8. Co-operative banks also required to comply with requirement of statutory liquidity ratio (SLR) and cash reserve ratio (CRR) liquidity requirements as other scheduled and non-scheduled banks.

The co-operative banking is federal in character with three tie linkages between state, district and village level institutions. At the state level, we have development banks (SLDBs) at the district level, the central co-

erative banks (CCBs) or the District Central co-operative banks (CLDBs), then at the village level, the primary agricultural credit societies (PACs), and the primary land development banks (PLDB's and the ranches of SLDBs).

he lower ties are members and the shareholders of the immediate higher ties. Besides, there are urban co-operative banks (UCBs) or the primary co-operative banks (PCBs) which are outside this federal structure. hough federal in its nature the system is integrated vertically on the basis of functional responsibilities of various components of the system. The SCBs, CCBs, & PACs form the short term and medium term credit structure and it is the same in all states. The LDBs at various levels make the long term credit structure which is not uniform in all states.

he state level co-operative banks are said to be the apex institution in their federal structure. However, the apex institutions from the point of view of promotion, supply of resources and supervision are controlled by the government. NABARD and National co-operative bank of India, SCBs and SLDBs are in the immediate position between the institution just mentioned on the one hand and co-operative banks on the other.

he SCBs co-ordinate and regulate the working of CCBs. They act as custodians of surplus funds of the CCBs and supplement them by attracting deposits and by obtaining loans from the RBI. The CCBs mobilize resources in districts to finance their members and they also channelized funds from the SCB to primary credit societies.

he primary co-operative banks at the village level form the base of the co-operative banking. Although they are expected to be multipurpose societies, they mostly deal in credit unlike the short and medium term credit structure.

he PACs at the village level form the base of the co-operative banking. Although they are expected to be multipurpose societies, they mostly deal in credit. Unlike the short and medium term credit structure, the arrangements for the provision of long term are not uniform in all the states however a majority states have a federal set up for this purpose also. These states have SLDBs at the states level affiliated to primary land development banks at the district and taluk levels. In other states the operational units below the SLDBs are ranches of SLDBs. The SLDBs obtain funds by issuing ordinary debentures and special development debentures.

5 Characteristics of Co-operative Bank

Co-operative Bank is a special type of business organisation different from other forms of organisation you have learnt earlier. Let us discuss its characteristics.

Open membership

The membership of a Co-operative Bank is open to all those who have a common interest. A minimum of seven members are required to form a co-operative Bank. The Co-operative Bank Act does not specify the maximum number of members for any Co-operative Bank. However, after the formation of the Bank, the member may specify the maximum number of members.

Voluntary Association

Members join the Co-operative Bank voluntarily, that is, by choice. A member can join the Bank as and when he likes, continue for as long as he likes, and leave the Bank at will.

i. State control

To protect the interest of members, Co-operative Banks are placed under state control through registration. While getting registered, a Bank has to submit details about the members and the business it is to undertake. It has to maintain books of accounts, which are to be audited by government auditors.

7. Sources of Finance

In a Co-operative Bank capital is contributed by all the members. However, it can easily raise loans and secure grants from government after its registration.

Democratic Management

Co-operative Banks are managed on democratic lines. The Bank is managed by a group known as "Board of Directors". The members of the board of directors are the elected representatives of the Bank. Each member has a single vote, irrespective of the number of shares held. For example, in a village credit Bank the small farmer having one share has equal voting right as that of a landlord having 20 shares.

7. Service motive

Co-operatives are not formed to maximize profit like other forms of business organization. The main purpose of a Co-operative Bank is to provide service to its members. For example, in a Consumer Co-operative Store, goods are sold to its members at a reasonable price by retaining a small margin of profit.

7.1 Separate Legal Entity

A Co-operative Bank is registered under the Co-operative Banks Act. After registration a Bank becomes a separate legal entity, with limited liability of its members. Death, insolvency or lunacy of a member does not affect the existence of a Bank. It can enter into agreements with others and can purchase or sell properties in its own name.

i. Distribution of Surplus

The income of the Co-operative Banks is distributed among the members on the basis of their capital contribution. According to Co-operative Banks Act, 1919 the rate of dividend is limited to 9 percent.

ii. Self-help through mutual cooperation

Co-operative Banks thrive on the principle of mutual help. They are the organisations of financially weaker sections of Bank. Co-operative Banks convert the weakness of members into strength by adopting the principle of self-help through mutual Co-operation. It is only by working jointly on the principle of "Each for all and all for each", the members can fight exploitation and secure a place in Bank.

7.6 Advantages of Co-operative Bank

Co-operative form of business organisation has the following advantages:

Easy Formation

Formation of a Co-operative Bank is very easy compared to a joint stock company. Any ten adults can voluntarily form an association and get it registered with the Registrar of Co-operative Banks.

. Open Membership

Persons having common interest can form a Co-operative Bank. Any competent person can become a member at any time he/she likes and can leave the Bank at will.

i. Democratic Control

A Co-operative Bank is controlled in a democratic manner. The members cast their vote to elect their representatives to form a committee that looks after the day-to-day administration. This committee is accountable to all the members of the Bank.

ii. Limited Liability

The liability of members of a Co-operative Bank is limited to the extent of capital contributed by them. Unlike sole proprietors and partners the personal properties of members of the Co-operative Banks are free from any kind of risk because of business liabilities.

. Elimination of Middlemen's Profit

Through Co-operatives the members or consumers control their own supplies and thus, middlemen's profit is eliminated.

i. State Assistance

Both Central and State governments provide all kinds of help to the Banks. Such help may be provided in the form of capital contribution, loans at low rates of interest, exemption in tax, subsidies in repayment of loans, etc.

ii. Stable Life

A Co-operative Bank has a fairly stable life and it continues to exist for a long period of time. Its existence is not affected by the death, insolvency, lunacy or resignation of any of its members.

7 Limitations of Co-operative Bank

esides the above advantages, the Co-operative form of business organisation also suffers from various limitations. Let us learn these limitations.

Limited Capital

he amount of capital that a cooperative Bank can raise from its member is very limited because the membership is generally confined to a particular section of the Bank. Again due to low rate of return the members do not invest more capital. Government's assistance is often inadequate for most of the Co-operative Banks.

8 Problems in Management

generally it is seen that Co-operative Banks do not function efficiently due to lack of managerial talent. The members or their elected representatives are not experienced enough to manage the Bank. Again, because of limited capital they are not able to get the benefits of professional management.

i. Lack of Motivation

every Co-operative Bank is formed to render service to its members rather than to earn profit. This does not provide enough motivation to the members to put in their best effort and manage the Bank efficiently.

ii. Lack of Co-operation

he Co-operative Banks are formed with the idea of mutual Cooperation. But it is often seen that there is a lot of friction between the members because of personality differences, ego clash, etc. The selfish attitude of members may sometimes bring an end to the Bank.

iii. Dependence on own Capital & Members

he inadequacy of capital and various other limitations make cooperative Banks dependant on the government for support and patronage in terms of grants, loans subsidies, etc. Due to this, the government sometimes directly interferes in the management of the Bank and also audits their annual accounts.

1.8 Types of Co-operative Banks

1. Producer's Co-operative Banks

The producer's Co-operative Banks are established by the small producers. The members of the Bank produced goods in their houses or a common place. The raw material, tools money etc. is provided to them by the Bank. The output is collected by the Bank and sold in the market at the wholesale rate. The profit is distributed among the member in proportion to the goods supplied by each member.

2. Consumer's Co-operative Banks

Consumer's Co-operative Banks are established to remove middleman from the field of trade. These Banks purchase goods at low wholesale prices and sell these goods to the members at cheaper rates than the market price. However, the goods are sold to the non members at the market rates. The profit, if any, is distributed among the members in the shape of bonus according to their purchases ratio.

3. Marketing Co-operative Banks

The marketing Co-operative Banks are formed by the small produces for the promotion of trade. The two main objectives of these Banks are, to sell the good at reasonable prices by eliminating middlemen and to make the ready for the product of the member. These types of Banks are formed by the small agriculturalist and artisans. These Banks collect the product of its members and make its grading and keep them in warehouses and sell them in the market at whole sale rate when the market is ready for this product. The profit is distributed among the member according to the ratio of goods supplied by them.

4. Farming Co-operative Banks

These solicits are formed by the small agriculturalist to get then benefits of large scale forming. These Banks provide help to the farmer for the improve method of cultivations by providing large scale forming tools such as tractors, threshers and harvesters etc.

5. Housing Co-operative Banks

These Banks are formed for the procurement of land for the construction of houses on homogeneous basis. These Banks are formed by those members who are intended to construct their own home. These Banks provides loan to the members for the construction of houses. These also purchase construction material in bulk and provide this material to its member at cheaper rates.

. Insurance Co-operative Banks

These Banks make contract with insurance companies for the purchase of different insurance policies for its member at lower premium. This Bank may take a group insurance policy for its members. The main object of the Bank is to minimize the risk of its member.

. Transport Co-operative Banks

These Banks are formed to provide the services of its members at lower rates welfare bus scheme is an example of this type of Banks. A pass handed over to the member for travelling on approved routes.

. Storage Co-operative Banks

These Banks are formed for the provision of storage facilities to its member for perishable and non perishable goods at lower rates. These Banks also provide grading and distribution services to its members.

. Labour Co-operative Banks

These Banks are formed by unskilled labour for selling their services at reasonable wage rate. This type of bank makes a contract with different firm for the provision of labour to them.

D. Miscellaneous Banks

Some other important Banks, in addition to the major form of Banks discussed above are, Processing Co-operative Banks, Fisheries Co-operative Banks, Forestry Co-operative Banks and Poultry Farming etc

1. Credit Co-operative Banks

These Co-operative Banks are formed for the financial help of the members. These Banks provide loans to the members at low rate of interests. In rural area these provides loans to the farmers for the purchase of seeds, fertilizers and cattle. In urban area these Banks provide loan to its members for the purchase of raw material and tool.

These are the various types of Co-operative Banks which are formed to achieve economic objectives of the members. Hence the further study is related to "Loans & Advances" of "Co-operative Credit Bank.

.9 BANK PROFILE

The name of the bank is Shrishantappannamiraji Urban Bank Ltd Chikodi. Established in the year 1961. The bank is situated in Chikodi. The bank register NO. C/ARCD/6193/77-78 AND Reserve Bank license number. IBD/KAN/1499P.

The ShriShantappanaMiraji Urban Bank Limited is head quartered at Chikodi is professionally managed bank. Started 3 decades back, at a time when banking was less known to the people. The bank grew in strength over the years. The Shrishantappannamirajiurban bank three branches spread over in Belgaum. The bank has ambitious plans for growth in branches total business and profits. The bank has achieved substantial sophistication in the various banking services provided.

The bank is managed by a group of professionals' administrators and businessman. From the starting the bank has been going in 'A' as an audit classification. And also it is giving 14% as dividend to the shareholders.

REGISTERED OFFICE:

The address of the registered office of the bank shall be Shrishantappannamiraji Urban Bank. If any change in above address shall be intimated to the Reserve Bank of India and Registrar of Co-operative Societies within fourteen days from the date of occurrence of such a

change. Such a change of address shall also be immediately published in a local news papers and displayed in the bank's notice board.

VISION AND MISSION:**MISSION:-**

- Understanding the needs of customers & offering them superior product and services.
- Leveraging technology to service customers quickly and conveniently
- **Mission:**
 - Customer Service and Product Innovation tuned to diverse needs of individual and corporate clientele.
 - Continuous technology up gradation while maintaining human values
 - Efficiency and effectiveness built on ethical practices

Name of the bank	The shantapannamirje urban co-operative bank ltd chikodi.
Year of Establishment	1961
Nature of Business	Banking service
Location	944,945 Guruwar peth CHIKODI Tq: ChikodiDist: Belgaum Karnataka 591201(India)
RBI register number	ACD\KA\271\P27-S-1981
Registered number of bank	8206 DATE 23-6-1961
Telephone number	08338-272149
E-mail	Shantapannamirajibank.com
Working hours	10 AM to 6 PM

3.10 THE ADDRESS OF THE BANK

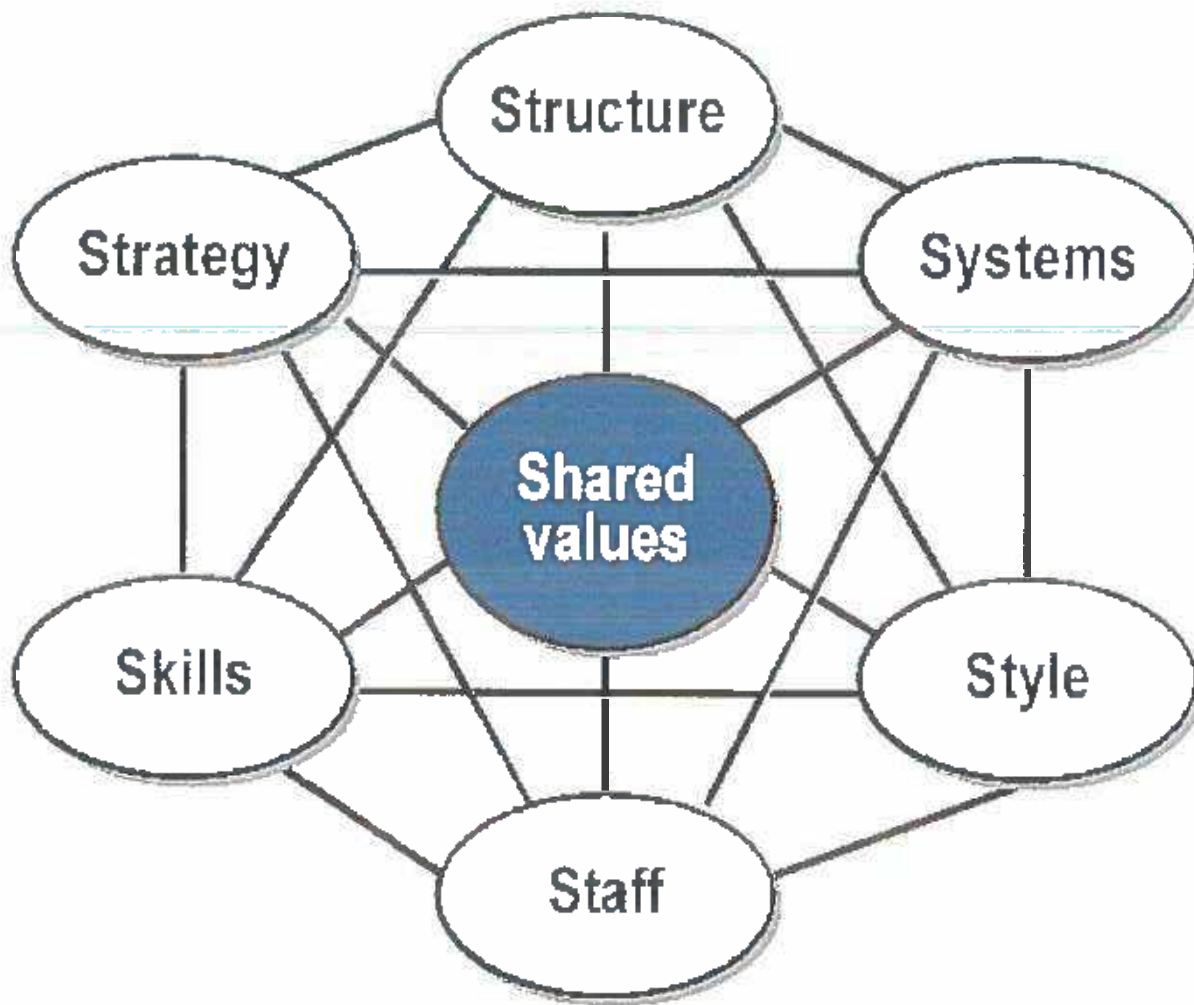
PROGRESS OF THE BANK : (In lakhs)

Sl No	Particulars	2015-16	2016-17	2017-18	2018-19	2019-20
1	No of members	3116	3085	4025.33	4095.20	5025.23
2	Share Capital	261.45	289.85	305.25	405.30	4950.90
3	Reserve and Surplus	875.38	934.19	1020.30	1017.33	1080.25
4	Deposits	8255.74	9170.98	1010.50	1090.33	11025.66
7	Investment	4007.98	4351.65	4695.63	5020.30	5525.95
8	Net Profit	97.44	101.10	120.00	180.25	210.55
9	Dividend	14%	14%	14%	14%	14%

STAFF

SL.NO	NAME	DESIGNATION
1	K . N. KUMBAR	chief accountant
2	B .A. BHOJAKAR	general manager
3	D. J .MUNNOLLI	charted accountant
4	YASHWANT	Pigmy Agent
5	KUMAR KUPANATTI	Watchman

6.11 MCKENSY'S 7S FRAMEWORK WITH RESPECT TO SHRI SHANTAPPA MIRAJI URBAN BANK CHIKODI



STRATEGY:

A set of decision and action aimed at gaining a sustainable competitive advantage. It includes mission and vision of the Bank.

The term strategy is derived from the Greek word 'strategies' which means general. Strategy can be defined as the general programs of action and deployment of resource to attain comprehensive objectives. Strategy is the route that the organization has chosen for its future growth, and plan an organization formulates to gain a sustainable competitive advantage.

STRUCTURE:

The structure of an organization is what follows from division of work, the tasks and responsibilities, both horizontally and vertically. It is the total of various ways in which the work is divided into separate tasks and the way in which these tasks are co-ordinated. It also includes how the policies and procedures, govern the way in which the organization acts within itself and within its environment. Structure of any organization is the frame work in which the activities of the organizations members are co-ordinated.

STYLE:

Style refers to the employees shared and common way of thinking and behaving -unwritten norms of behaviour and thought. The managerial approach is more projects focused than process focused. The management is likely mixture of self-management for customer facing activities and task management for organizational activities.

For ex: if the staff is to treat customers as individuals, then they themselves will need to be managed as individuals, this suggests a self-management style.

5.12 Models for leadership:

Sharing leadership is key to the white stag philosophy of leadership because overtly promotes the distribution of the function of the leader among the group. Competitive styles of leadership are less and less responsive to complex Bank today. Participative or cooperative styles of interaction are the keys to our future. An individual's style in interacting with others is an outward sign of the substance within. With experience, we can really tell a lot about people's capabilities by looking at them, but it is better to watch them in action. How does a good leader behave when the group is confronted with the need for decision.

Leadership Styles in shrishantappannamirajiurban bank:

It has been observed in Shrishantappannamiraji Urban Urban Bank that the behaviour of superior towards the subordinates is pleasant. They motivate fresher who are working under them. The superior tells the subordinates what he has to do. The objective of the work is clearly defined to them. Otherwise the superior talks to the subordinate, ask the difficulties that the subordinate is facing, and tries to solve his problems. It is also been observed that in the organization that while speaking to their subordinates, superiors will be very friendly and affectionate to the subordinates.

Systems:

The systems refers to the procedure, processes and routine that characterize how important works has to be done like financial systems, hiring, promotion and performance appraisal systems, information .Systems require capabilities in both information technology and in organizational process methods and controls. The capabilities are required in:

1. Information Technology & Information System:

It is used for Designing a user interface, analysis and design techniques, Development of prototype, new product development, database, System delivery like distribution to multiple users, locations, media type and combinations and operation of wide area network management, security management.

2. Sales and service:

Design, development and delivery of new responsive processes to support intimate customer relationships. And operation sales, services, claims, 24/7 day support.

3. Legal:

For like personalization and customization of products/services. The decision-making system within the organization can range from management institution, to structured computer system to complex expert system an artificial intelligence. It includes

- Computer system
- Operational System
- Human Resource System
- Marketing
- Finance

Staff:

This refers to organizations human resources. How organizations human resource is developed, trained, socialized, integrated, motivated and how their career development is managed.

Shri Shantappa Miraji Urban Bank encourages every member of the Bank to practice the Indian principles of work: service with devotion. Sound management practices, professionalism of a high calibre, a cohesive group policy which charters of independence in individual operations are the strengths of the Shantappa Miraji Urban Bank.

At Shri Shantappa Miraji Urban Bank believe that people are the key resources - especially in a high tech competitive environment. It is the people behind the work, behind the product and behind the service that make the difference. That is the reason we take exceptional care to hire the best - both in terms of qualification and attitudes, and constantly train and upgrade their skills.

The company has employed able people, trained them well and assigned them to the right jobs. Selection, training, reward and recognition, retention, motivation and assignment to appropriate work are all key issues.

Skills:

Skills refer to distinctive capabilities of personnel or of the organization as a whole. Skills are that for which the staff to develop appropriate new skills, for which it requires a learning environment. If the staff managers are to acquire the skills, then there needs to be an appropriate learning environment. One that:

- Is driven by desire to realize the vision.
- Has a sharing culture with mutual support.
- Provides space and time for learning. Preferably closely linked to specific tasks and objectives (just in time learning).
- Allows risk
- Tolerates failure, provided it is part of the learning process.
- Has visible recognition for success that is built on new learning.

Where skills and experience cannot be resourced or developed internally within the required timescales then external companies will need to be retained.

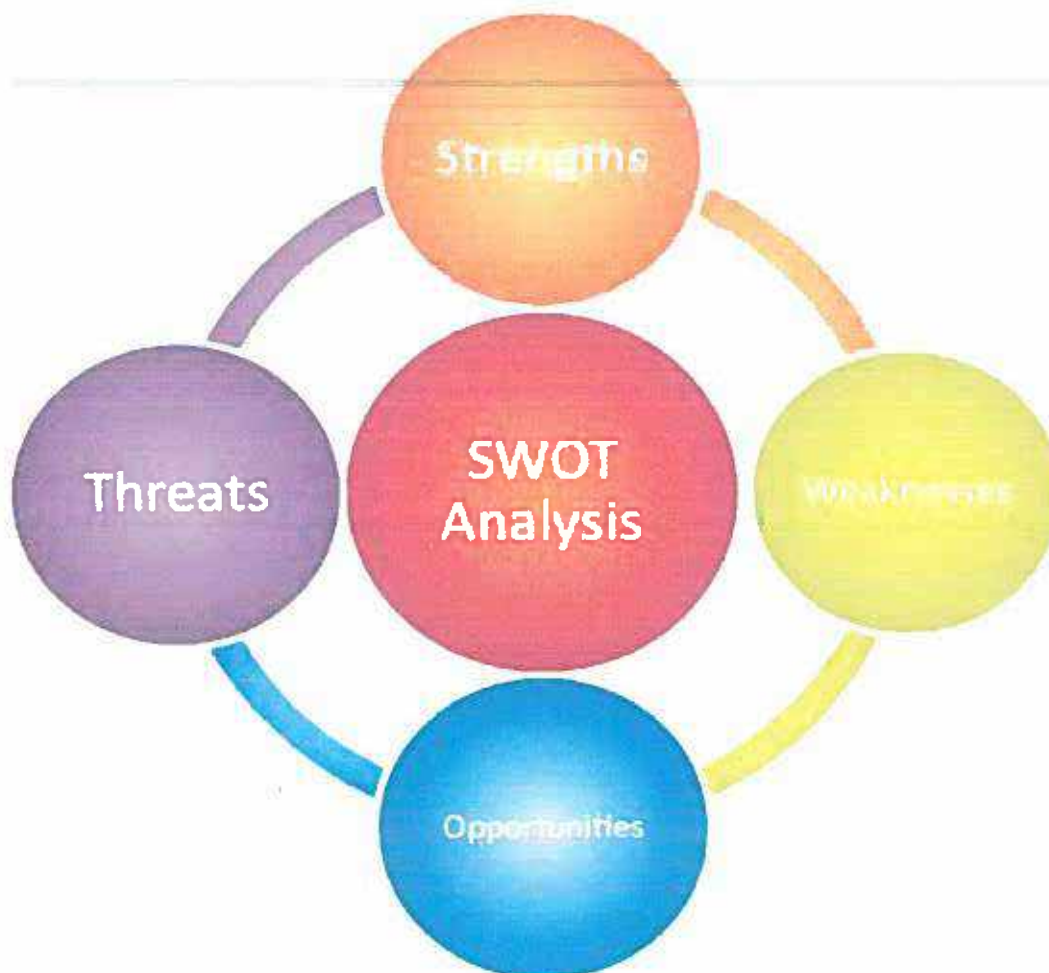
In short skills refer to the fact that employees have the skills needed to carry out the company's strategy.

Training and development ensuring people know how to do their jobs and stay up to date the latest techniques.

Shared Values: -Customer Satisfaction through

- Providing quality service effectively and efficiently
- Smile, it enhances your face value" is a service quality stressed on
- Periodic Customer Service Audits
- Maximization of Stakeholder value

SWOT Analysis:



Strengths

- Shrishantappanmiraji urban Bank has been in the banking industry since 1989. It has successfully completed SILVER JUBLI CEREMONY.
- The bank has a sound network i.e. it providing mobile SMS service to their customer.
- The bank is having well experienced, trained, most dedicated and committed staff.
- It has a strong customer base.

Weakness

- Tedious procedures have to be followed before advancing loans causing inconvenience to customers.
- Bank has less resource as compare to nationalized bank.
- No internet banking, mobile ATM banking.

Opportunities

- The bank can optimize the growth opportunities arising out of retail banking and small and medium enterprises (SMEs).
- Further expansion of business networks and possible arrangements of sharing networks of other banks by issuing mutual funds and insurance

Threats

- Bank is facing competition from its other Private Sector Banks
- Changing economic policies of Government will have serious impact on interest rates and reserve ratio maintained with RBI.

3.14 List of Department and functions:

Department of the Bank

- Credit department
- Operation department
- Marketing department
- Cash department
- Clearing department
- Customers Relation
- Cash Management service

1. Credit Department:

This department mainly concentrates on lending activities to its customers and client. For smoothing of its activities it has further sub department. This department provides different loan like personal loan, housing loan, education loan, agriculture loan etc. While providing loan it evaluate the capability, back ground of client and analyze the risk involved in recollecting the same. To operate its activity it has given maximum decision power by management which will help to run organization successfully. As it is credit department it involves more risk and uncertainty towards its client and customers, so that the contribution to other department for achieving targets usually less. And it has also its future plans for achieving its goals.

Functions:

- Examining the proposals.
- Documentations.
- Disbursements of loans.
- Recovering the loan.
- Credit appraisal.

2. Operation Department:

This department which is taking care of daily banking activities for smooth running of organization. The operation has been delegated average decision authority in their routine work by management. It full cooperation with other department and also it is necessary for other department for smooth running. The department has been appraised by the management with different criteria, like by customer satisfaction, by branch performance. As it is an operation department, so it will contribute to all departments in achieving their planned targets.

Functions:

Out-station cheque realization.

- Attending customer's queries.
- ATN office in charge.
- Handling day to day transactions.
- Cash and clearance.
- Handling govt. business.

- RTGS (Real Time Gross Settlement System).

3. Marketing Department:

It is the department, which will take care of organization expansion by way of achieving targeted goals. Means in this department it mainly concentrate on selling security, acquiring more number of deposits, accounts etc. The marketing department has been given decision power 50-90% by the management to achieve their target and, make it success. For achieving of this success department has supporting and cooperate with this department. Hence the marketing department performance has appraised with technique like, by customer satisfaction, by branch performance, by self appraisal, by giving targets. Therefore to achieve this target marketing department has its own plan and strategies like,

By obtaining new customers.

By generating new business through existed customers.

Functions:

- Coordinating with sales executives.
- Customer service.
- Opening of new account (building of new relation).

4. Cash Department:

In this department it evaluates the daily requirements of cash, based on this it is going to maintain liquidity. If the bank having heavy cash liquidity, this department will keep all cash in to higher authority bank. The department has been given 50-80% of decision power by management to their routine activities. It has given more contribution to other departments in achieving their goals in terms of co-operation. As it is cash department there are no any future plans. But as per present scenario market it is going to act.

Functions:

- Handling daily cash transaction.
- Balancing cash figure at the end of day.
- Maintaining cash level of the bank.

Maintaining liquidity.

2. Clearing Department:

This department which is taking care of customer work regarding receiving out station cheques and Odds. The department has given average decision power by the management. Regarding go-operation it has contributing to other department as much as possible. As it is clearing department it had no any future plans but it is ready accept all positive changes towards improvement.

Functions:

- Clearance of out stations cheque.
- Clearance of locals cheque
- CBSS (software name used for giving information to the current account holders).

1.15 Information Technology:

The bank is continuously focusing on improvement in IT related functions to have an edge over other market players. The bank continues to leverage information technology as a strategic tool for its business operations, to gain competitive advantage by offering customer convenience and improved services as well as improving productivity and efficiency. UTI Bank technology strategy emphasis enhanced level of customer services through multi channel banking and straight through processing, and cost efficiency through wider and focus market reach and opportunities for cross selling.

As a measure to reduce operational cost, increase the deposit base and enhance customer service, the bank in increasing the number of ATMs. The bank has introduced the Intranet banking facility-titled connect.

Product and Services

Consumer banking

Shrishantappanmiraji urban Bank is providing in consumer banking the following products and services:-

- Savings Account
- Salary Power

- Power Salute
- Priority Banking
- Senior Privilege
- Fixed Deposits
- lockers

Services

- Corporate banking
- Cash Management Services
- Trade Service
- Lending/Financing

Corporate banking

In corporate banking shantappaanna miraji urban Bank is providing following services.

- Cash Management Services
- Lending/Financing
- Trade Service
- Current Account
- Fixed Deposits

Cash Management Services

Through bank cash management service, bank brings to customers a wide array of collection and payment services for improved liquidity through faster access to their funds and total control on their fund movements through customized MIS reports. Banks cash management service solutions include

- Collection services that offer local cheques collection (LCC) at more than 100 locations and upcountry cheques collection (UCC) for more than 800 locations.

Lending/Financing

Working capital finance

- Cash credit / working capital demand loan
- Term lending
- Channel finance
- Asset securitizat

CHAPTER-4

DATA ANALYSIS AND INTERPRETATION

Table 4.1 shows mortgage loan

Table 4.2 shows salary secured loan

Table 4.3 surety loan

Table 4.4 salary credit loan

Table 4.5 fixed deposit loan

Table 4.6 vehicle loan

Table 4.7 housing loan

Table 4.8 motor cycle loan

Table 4.9 plant machinery loan

Table 4.10 medium term loan

Table 4.11 pigmy deposit loan

Table 4.12 nsc loan

Table 4.13 recurring deposit loan

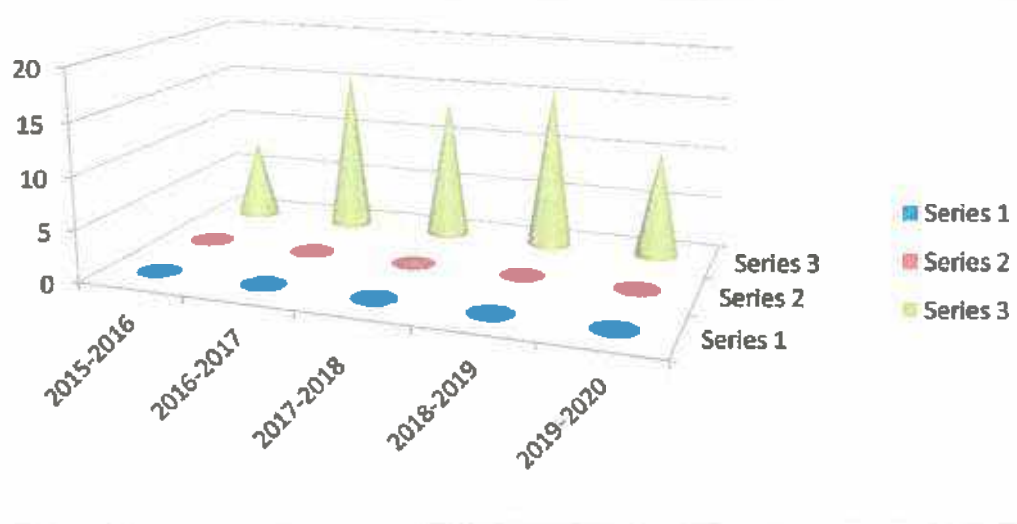
CHAPTER-4

DATA ANALYSIS AND INTERPRETATION

TABLE NO. 4.1 SHOWS MORTGAGE LOAN

Years	Loan Amounts	Total Loans	Amount in Percentage
2015-2016	51,36,091.00	6,35,10,515.61	8.08
2016-2017	1,13,12,207.00	6,85,04,118.00	16.51
2017-2018	1,00,65,962.00	7,02,92,709.20	14.32
2018-2019	1,53,09,476.00	8,19,97,399.21	16.23
2019-2020	88,07,667.00	8,25,63,619.21	10.67

Graph 4.1

**Interpretation:**

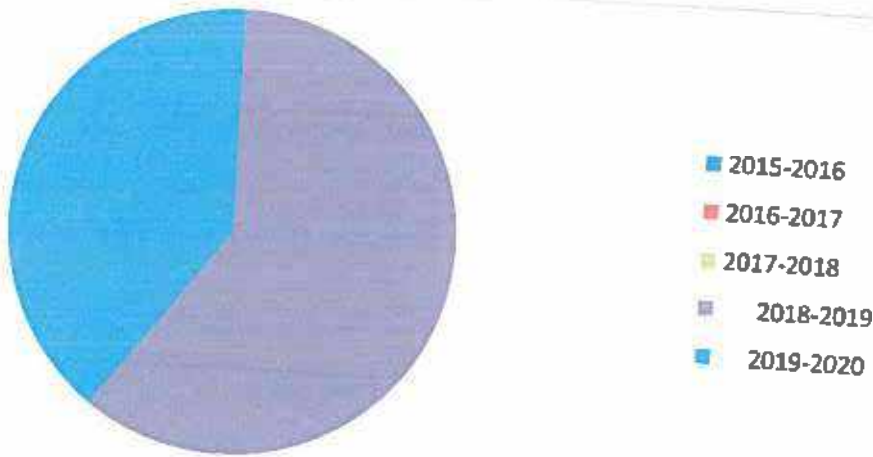
The given graph shows that the Mortgage Loan has increased from 8.08% to 16.51% in the year 2016-2017 as compared to the year 2015-2016. And it has decreased to 14.32% in the year 2017-2018. And it has increased to 16.23% in the year 2018-2019 and it has decreased to 10.67% in the year 2019-2020 as compared to the previous year.

TABLE NO. 4.2 SHOWS SALARY SECURED LOAN

Years	Loan Amounts	Total Loans	Amount in Percentage
2015-2016	1,17,482.00	6,35,10,515.61	0.18
2016-2017	1,09,191.00	6,85,04,118.00	0.16
2017-2018	1,86,048.00	7,02,92,709.20	0.26
2018-2019	74,895.00	8,19,97,399.21	0.09
2019-2020	49,531.00	8,25,63,619.21	0.05

Source: Annual Reports of the Bank from the year 2015-16 to 2019-20

Graph 4.2



Interpretation:

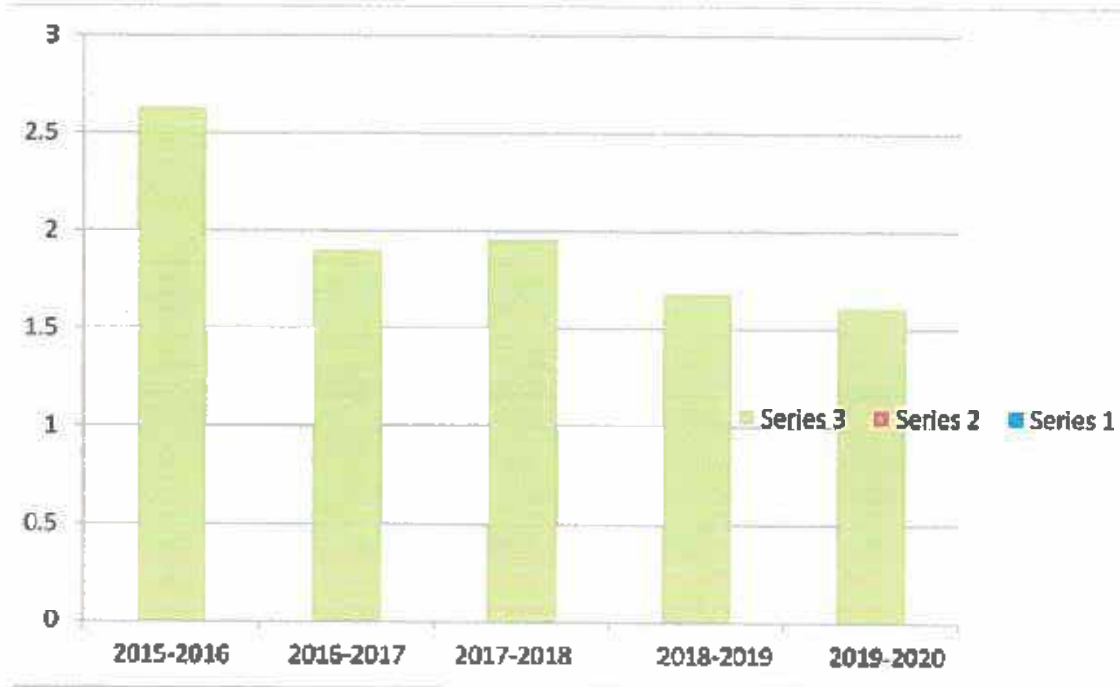
The above graph shows the salary based loan has decreased from 0.18% to 0.16% in the year 2016-2017 as compared to the year 2015-2016. And it was highest in the year 2017-2018, 0.26% and again it decreased to 0.09% in the year 2018-2019 and 0.05% in the year 2019-2020.

TABLE NO.4.3 SHOWS SURETY LOAN

Years	Loan Amount	Total Loans	Amount in percentage
2015-2016	16,69,182.00	6,35,10,515.61	2.63
2016-2017	13,06,868.00	6,85,04,118.00	1.90
2017-2018	13,81,921.00	7,02,92,709.20	1.96
2018-2019	13,80,558.00	8,19,97,399.21	1.68
2019-2020	13,29,541.00	8,25,63,619.21	1.61

Source: Annual Reports of the Bank from the year 2015-16 to 2019-20

Graph no 4.3



Interpretation:

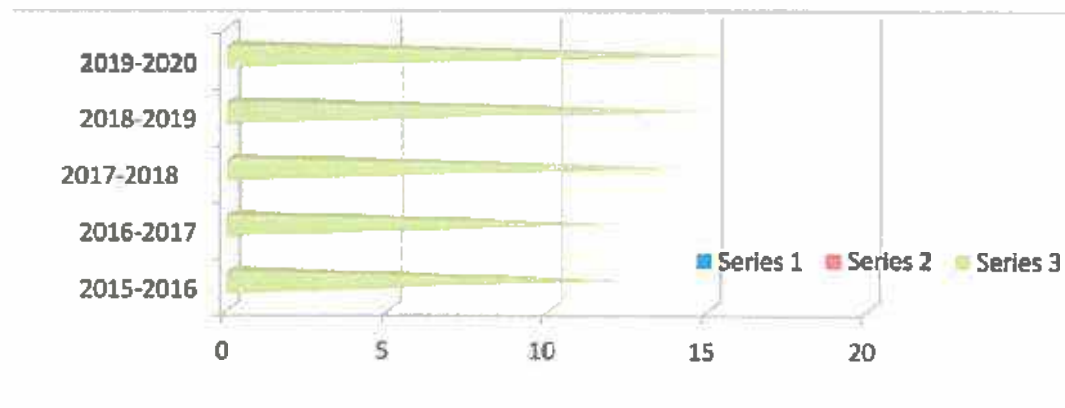
Given graph shows that the surety loan has decreased from 2.63% to 1.90% in the year 2016-2017 as compared to the previous year 2015-2016. And it has gradually increased 1.96% in the year 2017-2018. And it has decreased 1.61% in the year 2019-2020.

TABLE NO.44 SHOWS SALARY CREDIT LOAN

Years	Loan Amount	Total Loans	Percentage
2015-2016	80,96,070.61	6,35,10,515.61	12.75
2016-2017	86,46,392.00	6,85,04,118.00	12.62
2017-2018	1,03,97,537.20	7,02,92,709.20	14.79
2018-2019	1,28,58,029.80	8,19,97,399.21	15.68
2019-2020	1,35,49,787.80	8,25,63,619.21	16.41

Source: Annual Reports of the Bank from the year 2015-16 to 2019-20

Graph 4.4



Interpretation:

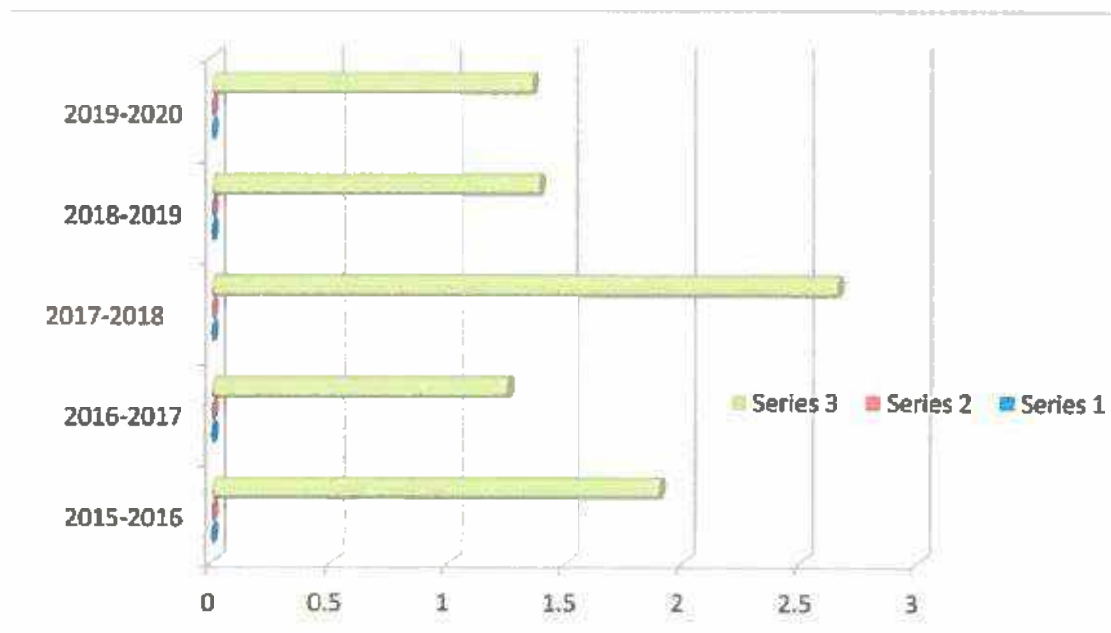
The above graph shows us the cash credit loan was 12.75% in the year 2015-2016. And it has gradually decreased 12.62% in the year 2016-2017. But it has continuously increased from 14.79% to 16.41% in the year 2019-2020 as compared to the previous years.

TABLE NO.4.5 SHOWS FIXED DEPOSIT LOAN

Years	Loan Amounts	Total Loans	Amount in Percentage
2015-2016	12,08,112.00	6,35,10,515.61	1.90
2016-2017	8,57,686.00	6,85,04,118.00	1.25
2017-2018	18,69,000.00	7,02,92,709.20	2.66
2018-2019	11,46,500.00	8,19,97,399.21	1.39
2019-2020	11,24,000.00	8,25,63,619.21	1.36

Source: Annual Reports of the Bank from the year 2015-16 to 2019-20

Graph 4.5

**Interpretation:**

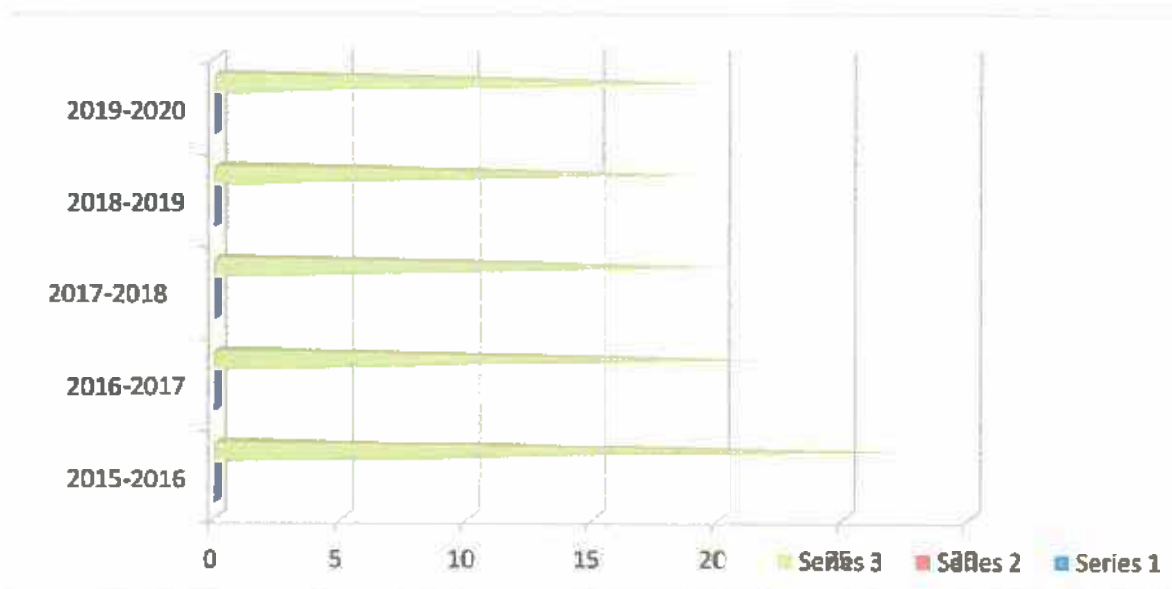
Given graph shows the fixed deposit loan has gradually decreased from 1.90% to 1.25% in the year 2016-2017 as compared to the year 2015-2016. And it has increased 2.66% in the year 2017-2018 and it has decreased to 1.36% in the year 2019-2020.

TABLE NO.4.6 SHOWS VEHICLE LOAN

Years	Loan Amount	Total Loans	Amount in Percentage
2015-2016	1,82,64,382.00	6,35,10,515.61	28.75
2016-2017	1,55,81,784.00	6,85,04,118.00	22.75
2017-2018	1,51,26,911.00	7,02,92,709.20	21.52
2018-2019	1,64,29,915.00	8,19,97,399.21	20.03
2019-2020	1,72,21,437.00	8,25,63,619.21	20.85

Source: Annual Reports of the Bank from the year 2015-16 to 2019-20

Graph 4.6



Interpretation:

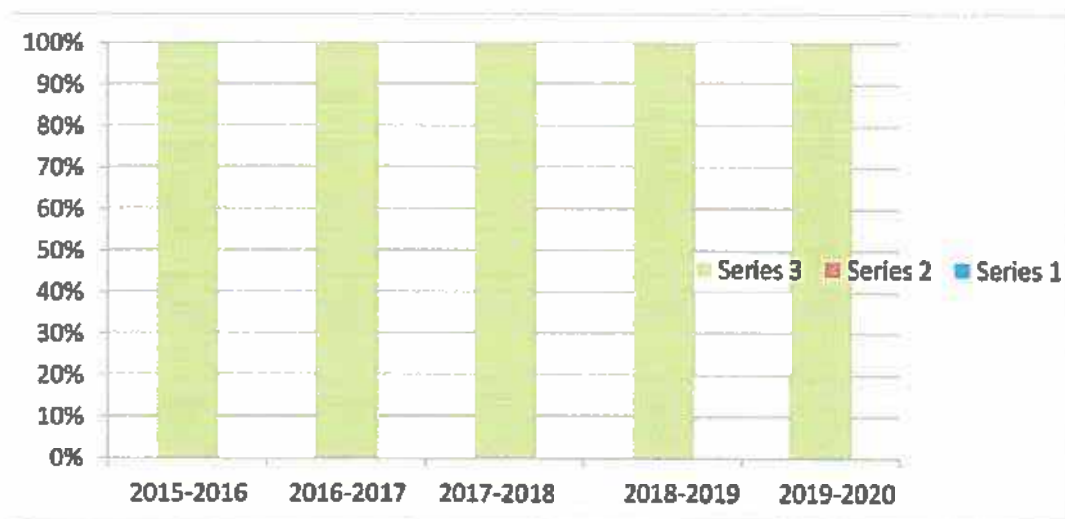
The vehicle loan continuously decreased from 28.75% to 20.85% in the year 2019-2020 as compared to the previous year 2015-2016.

TABLE NO.4.7 SHOWS HOUSING LOAN

Years	Loan Amount	Total Loans	Amount in Percentage
2015-2016	1,08,60,915.00	6,35,10,515.61	17.10
2016-2017	1,16,40,062.00	6,85,04,118.00	16.99
2017-2018	1,30,29,756.00	7,02,92,709.20	18.54
2018-2019	1,66,22,201.00	8,19,97,399.21	20.27
2019-2020	2,20,79,585.00	8,25,63,619.21	26.74

Source: Annual Reports of the Bank from the year 2015-16 to 2019-20

Graph 4.7



Interpretation:

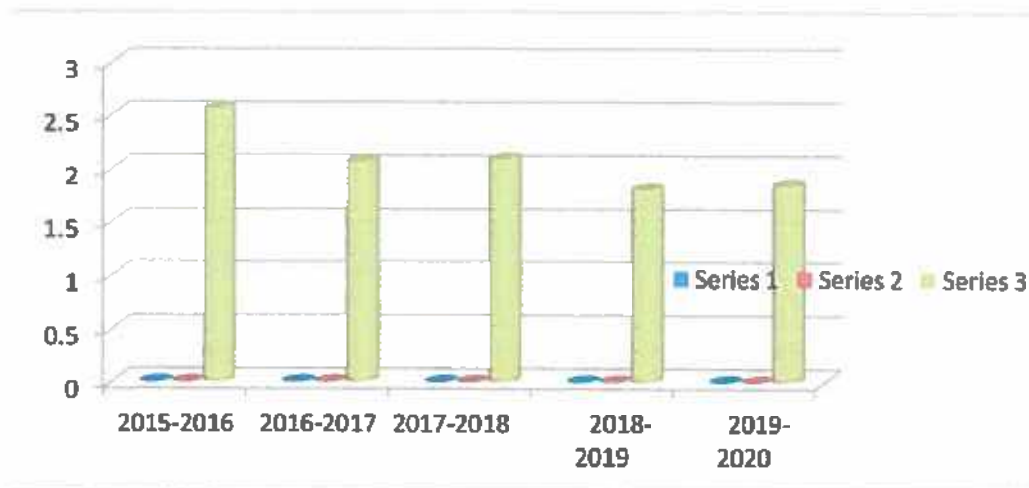
The above graph shows that the housing loan has decreased from 17.10% to 16.99% in the year 2016-2017 as compared to the previous year 2015-2016. And it has continuously increased from 18.54% to 26.74% in the year 2019-2020.

TABLE NO.4.8 SHOWS MOTOR CYCLE LOAN

Years	Loan Amount	Total Loans	Amount in Percentage
2015-2016	16,35,208.00	6,35,10,515.61	2.57
2016-2017	14,20,394.00	6,85,04,118.00	2.07
2017-2018	14,74,387.00	7,02,92,709.20	2.09
2018-2019	14,90,299.00	8,19,97,399.21	1.81
2019-2020	15,31,861.00	8,25,63,619.21	1.85

Source: Annual Reports of the Bank from the year 2015-16 to 2019-20

Graph 4.8



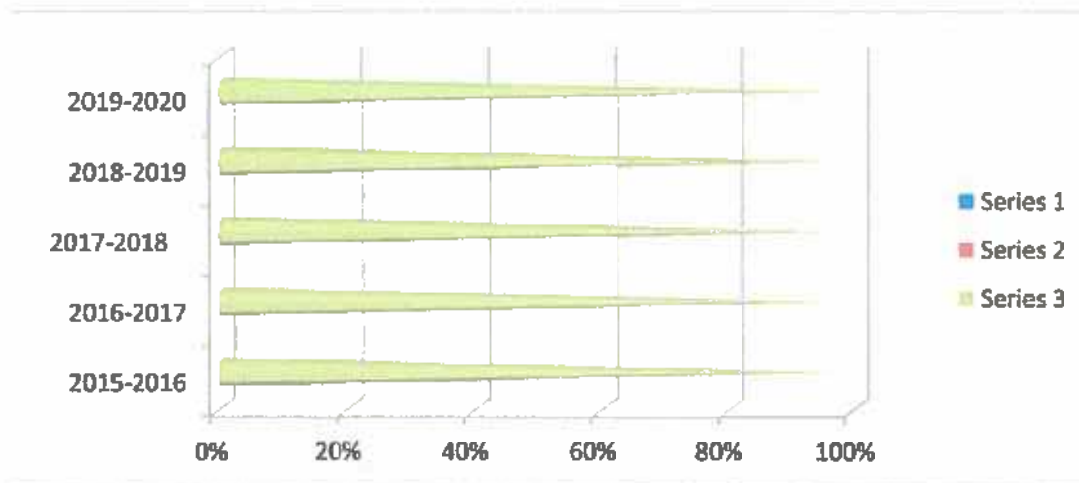
Interpretation:

Given graph shows that the motor cycle loan has decreased from 2.57% to 2.07% in the year 2016-2017 as compared to the previous year 2015-2016. And it gradually increased to 2.09% in the year 2017-2018. And it has decreased 1.81% in the year 2018-2019 and it has increased 1.85% in the year 2019-2020.

TABLE NO.4.9 SHOWS PLANT MACHINERY LOAN

Years	Loan Amounts	Total Loans	Amount in Percentage
2015-2016	96,51,066.00	6,35,10,515.61	15.20
2016-2017	80,49,681.00	6,85,04,118.00	11.75
2017-2018	61,29,562.00	7,02,92,709.20	8.72
2018-2019	53,30,462.00	8,19,97,399.21	6.50
2019-2020	40,64,308.00	8,25,63,619.21	4.92

Source: Annual Reports of the Bank from the year 2015-16 to 2019-20

Graph 4.9**Interpretation:**

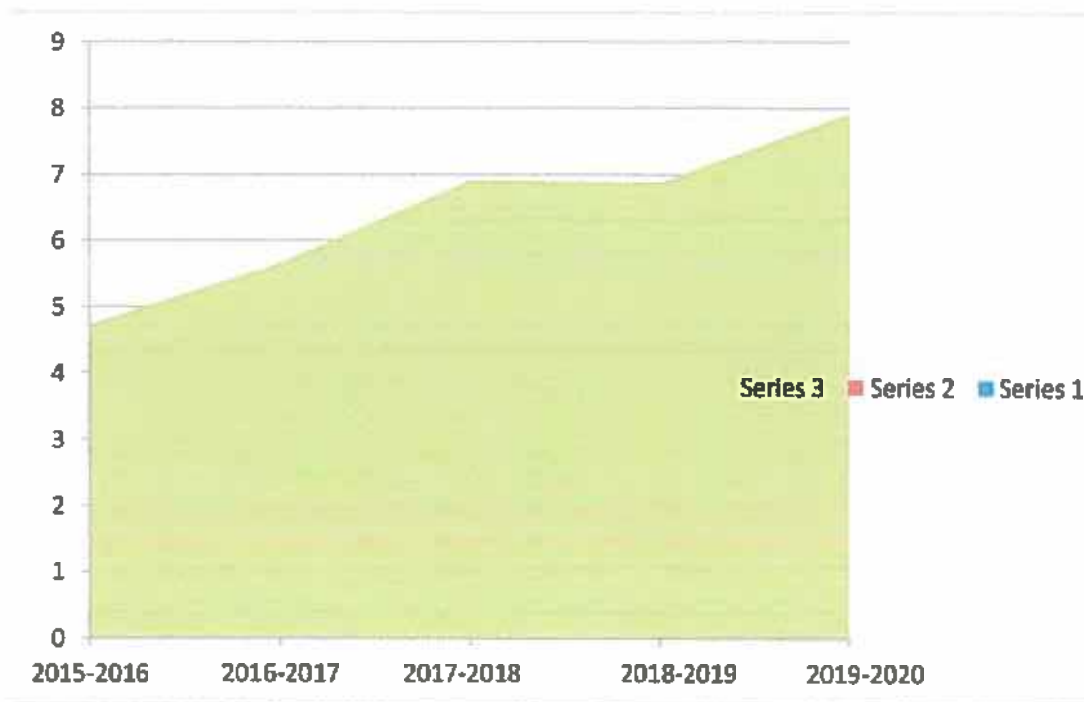
The above graph shows that the plant and machinery loan was 15.20% in the year 2015-2016 And it continuously decreased from 15.20% to 4.92% during the study period.

TABLE NO.4.10 SHOWS MEDIUM TERM LOAN

Years	Loan Amount	Total Loans	Amount in Percentage
2015-2016	30,11,459.00	6,35,10,515.61	4.74
2016-2017	38,60,471.00	6,85,04,118.00	5.66
2017-2018	48,64,987.00	7,02,92,709.20	6.92
2018-2019	56,45,425.41	8,19,97,399.21	6.88
2019-2020	65,47,167.41	8,25,63,619.21	7.93

Source: Annual Reports of the Bank from the year 2015-16 to 2019-20

Graph 4.10

**Interpretation:**

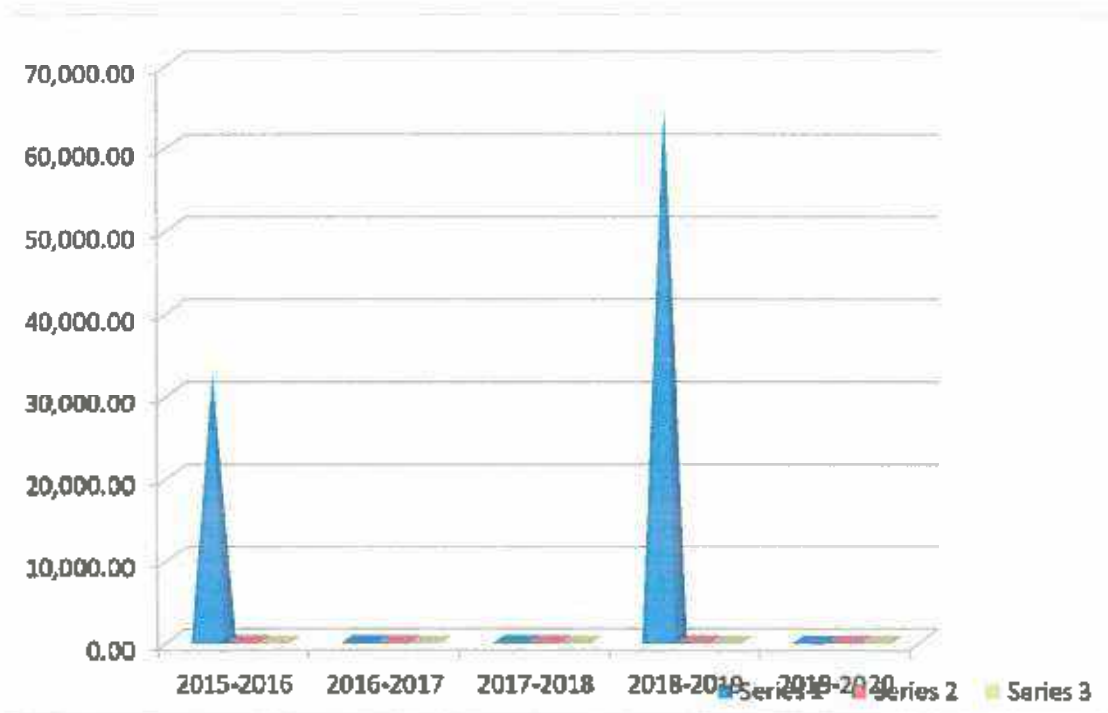
The above graph shows that the medium term loan was 4.74% in the year 2015-2016. And it has continuously or simultaneously increased from 4.74% to 7.93% during the stage

TABLE NO.4.11 SHOWS PIGMY DEPOSIT LOAN

Year	Loan Amount	Total Loan	Amount in percentage
2015-2016	32,500.00	6,35,10,515.61	0.09
2016-2017	4,69,000.00	6,85,04,118.00	0.68
2017-2018	1,68,000.00	7,02,92,709.20	0.26
2018-2019	65,137.00	8,19,97,399.21	0.07
2019-2020	2,57,000.00	8,25,63,619.21	0.31

Source: Annual Reports of the Bank from the year 2015-16 to 2019-20

Graph 4.11



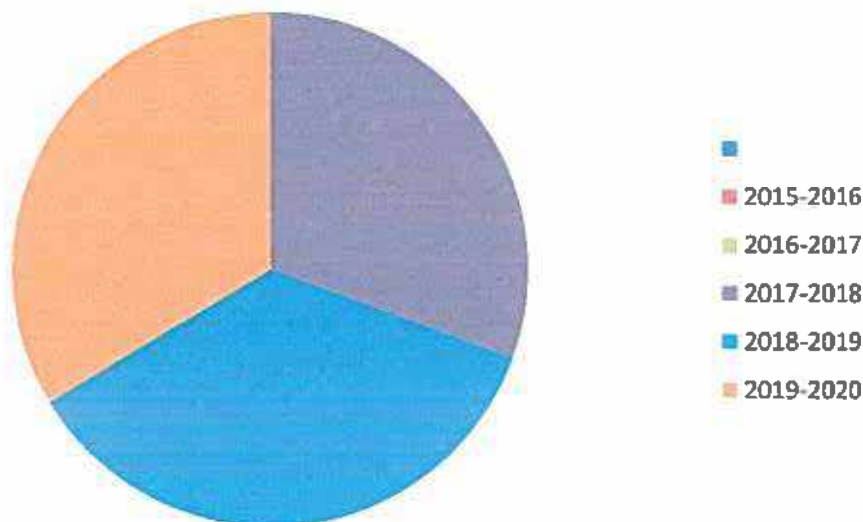
Interpretation: Given graph shows that the pigmy deposit loan was increased from 0.09% to 0.68% in the year 2015-2016 as compared to the previous year and it has decreased 0.26% in the year 2018-2019. And again it has decreased 0.07% in the year 2015-2016. But it increased 0.31% in the year 2016-2017

TABLE NO.4.12 SHOWS NSC LOAN

Year	Loan Amount	Total Loan	Amount in percentage
2015-2016	3,40,903.00	6,35,10,515.61	0.52
2016-2017	2,60,754.00	6,85,04,118.00	0.38
2017-2018	82,300.00	7,02,92,709.20	0.12
2018-2019	95,908.00	8,19,97,399.21	0.11
2019-2020	90,296.00	8,25,63,619.21	0.10

Source: Annual Reports of the Bank from the year 2015-16 to 2019-20

Graph 4.12

**Interpretation:**

The above graph shows that the National Saving Certificate Loan continuously decreased from 0.52% to 0.10%

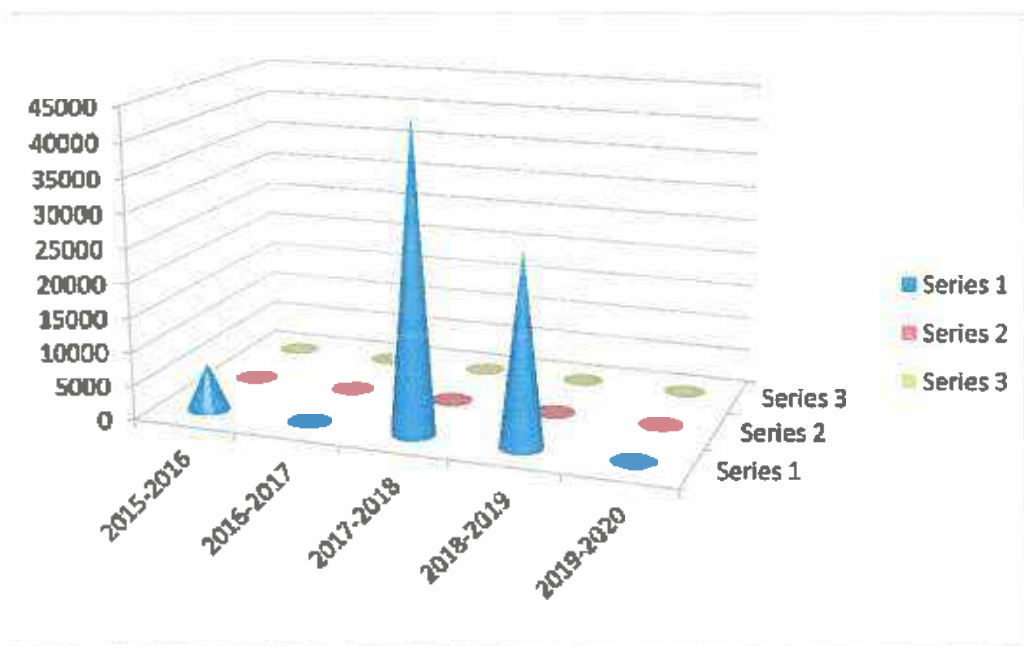
during the study period.

TABLE NO.4.13 SHOWS RECURRING DEPOSIT LOAN

Year	Loan Amount	Total Loan	Amount in percentage
2015-2016	7000.00	6,35,10,515.61	0.01
2016-2017	Nil	6,85,04,118.00	Nil
2017-2018	45000.00	7,02,92,709.20	0.06
2018-2019	28000.00	8,19,97,399.21	0.03
2019-2020	2,16,000.00	8,25,63,619.21	0.26

Source: Annual Reports of the Bank from the year 2015-16 to 2019-20

Graph 4.13



Interpretation:

Given graph shows that the recurring deposit loan 0.01% in the year 2015-2016 and in the year 2016-2017 it was nil and it increased 0.06% and again it was increased to 0.26% in the year 2016-2

CHAPTER -5
FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 Findings

5.2 Suggestions

5.3 Conclusion

CHAPTER -5

FINDINGS, SUGGESTIONS AND CONCLUSION

.1.FINDINGS:

From the study we can see that the number of members has increased from 2985 in the year 2015-2016 to 116 in the year 2016-2017.

From the study we can see that the amount of deposits in the 2015-2016 was Rs. 6013.33 lakhs and it increased to Rs.8255.74 lakhs by the year 2019-2020.

The Loans sanctioned in the year 2015-2016 were Rs. 3734.90 lakhs and it has reached to Rs. 4386.56 lakhs in the 2019-2020.

The Mortgage loan initial it was stood at Rs. 51, 36,091.00 when it is compared to total loans it was just 0.08%. It reveals that in the subsequent years rate is increased from 0.08% to 10.67% in last year's.

The loans like salary secured loan and surety loan have shown decreasing trend over the study period.

During the study it was found that the cash credit loan was Rs.80, 96,070.61 when it is compared to total loans it was just 12.75%. But it increased from 12.75% to 16.41% in the year 2019-2020.

During the study period it was found that the vehicle loan shows continuously decreasing trend over the study period. Initial it was Rs.1, 82, 64,382 when it is compared to total loans it was 28.75%. But it decreased to 20.85% in the year 2019-2020.

The Housing loan have shown increasing trend over the study period. The Housing loan was 17.10% in the year 2015-2016 and it was increased to 26.74% in the year 2019-2020.

The Medium Term Loan was increased year by year. Initial it was 4.74%, over the year it increased to 7.93%.

The Motor Cycle Loan was decreasing year by year. In the year 2019-2020 it was 2.57% but it decreased to 1.85% in the year 2019-2020.

The Plant and Machinery Loan initial was stood Rs 62, 55,064 when it is compared to total loans it was just 15.20%. It reveals that in the subsequent years rate is decreased from 15.20% to 4.92% in the year 2019-2020.

The BLCC Loan was lowest 4.74% in the year 2015-2016. But it was highest 9.17% in the year 2017-2018.

Few others loans like Fixed Deposit Loan and Pigmy Deposit Loan have been fluctuating over the study period.

The NSC Loan has been shows decreasing trend. Initial it was 0.52% but it was decreased to 0.10% in the year 2019-2020.

1 Recurring Deposit Loan initial was stood at Rs. 7000. When it is compared to total loans it was just .01%. It reveals that in the subsequent years rate is increased from 0.01% to 0.26% in last year. It predicts the recovery tool is not utilized in effective manner.

After the financial statement analysis of the SHRI SHATAPPANNA MIRAJI URBAN BANK LTD CHIKODI. It is observe that the Federal Bank Ltd is doing business very good in banking sector. The bank is providing Credit Card, Debit card and Online banking facility to customer.

From the balance sheet it observes that the Asset of bank is increase year to year. It indicates that the bank is having good position of Asset as compare to liability.

2 SUGGESTIONS

1 through the banks performance is very good and at par with industry, here is the some humble suggestions.

- The trend of surety loan is decreasing year by year by observing this I would like to suggest that bank should maintain the increasing in future.
- The trend of cash credit loan and housing loan increasing year by year by observing this I would like to suggest that the bank should maintain the increasing in future.
- The trend of Vehicle loan and Motor cycle loan decreasing year by year by observing this I would like to suggest that the bank should maintain increasing in future.
- It is suggested to the bank to arrange more training and development programs for the workers of the bank.
- The success of any loan scheme depends on how the bank can identify eligible borrower. Therefore appropriate action should be taken by field officers.
- Bank should open its branches at various rural areas places in the district. ATM facility should be provided to the account holders. Insist PAN Cards while operating the bank accounts. Provide facilities regarding recent developments like, Mobile Banking System, Core banking system, Tele

Banking System and Anywhere Banking System. The bank should try to increase its interest spread ratio significantly by increasing its credit deposit ratio.

- The bank must also try to increase its other income ratio by introducing more and more other lucrative services to its customers.
- The procedure for sanctioning loans and advances needs to be customer friendly and not too rigid.
- The bank has to improve their infrastructure facilities.
- Finally, the bank should Endeavour to reduce its other expenditure by implementing stringent controls on all types of expenses.

6.3 CONCLUSION:

The study conducted on Performance of Loans and Advances of "Shri Shantappa Miraji Urban co-op. Bank LTD" has shown concern for the growth of rural economy by providing required amount of credit facilities to the rural artisans, small and medium business units.

The bank is doing very good job and providing various types of loans to the customer. This bank is in the growth path because loans and advances are increasing year by year. The loan amount advanced to the needy borrower is increasing from year to year during the study period which indicates greater benefit to the members and customers. The amount of deposits is also showing increasing trend from year to year which reflects the confidence and trust of the public on the management of the bank and efficiency of the staff members. The amount of profit earned is found increasing from year to year. The increasing rate of dividend at the rate 14% distributed from year to year represents the operational efficiency of the bank.

However the researcher feels that the staff members need to be updated with new technology of banking business which facilitates the management in introducing new business services to the present and potential customers.

To conduct a project work was a great experience at "Shri Shantappa Miraji Urban co-op. Bank LTD" I really come to know what are the procedure and formalities required to take loans and advances even the problem faced while recovery of such loans taken.

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**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON MERGERS AND ACQUISITIONS
IN
INDIAN BANKING SECTOR"**

**Submitted to
RANI CHANNAMMA UNIVERSITY, BELAGAVI**



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

**SUBMITTED BY
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CERTIFICATE

This is to certify that **Miss. Ramya Dharanagutte** has satisfactorily completed the Project Report Entitled **"A Study on Mergers and Acquisitions in Indian Banking Sector"** for the partial fulfillment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year **2020-2021.**

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DECLARATION

I declare that the project report entitled "**A Study on Mergers and Acquisitions in Indian Banking Sector**" is a record of independent research work carried out by me and submitted in partial fulfillment of the Degree in "**Master of Commerce**" as prescribed by the Rani Channamma University, Belagavi for the academic year **2020-21**.

It has been prepared under the guidance and supervision of **Shri. V. S. Khot**, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: **31/8/2021**

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Miss. Ramya Dharanagutte

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CHAPTER 1

INTRODUCTION AND RESEARCH DESIGN

- 1.1 Introduction
- 1.2 Review of the literature
- 1.3 Statement of the problem
- 1.4 Need for the study
- 1.5 Objectives of the study
- 1.6 Scope of the study
- 1.7 Research Methodology
- 1.8 Limitations of the study
- 1.9 Chapter Scheme

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

The evolution of bank is from Old Italian word "banca" or from a French word "banque". The meaning of this word is "a bench or a money exchange table". Normally bank is known as financial institutions which accept deposit to provide loan. But today bank work as an agent, as underwriter, as advisor, as investor also. Indian banking is regulated by banking regulation act 1949.

Structure of the Indian Banking Sector:

1. Public Sector Banks
2. Regional Rural Banks
3. Private Sector Banks
4. Foreign Banks

The Reserve Bank of India is the supreme monetary and banking authority in the country and has the responsibility to control the banking system in the country. It keeps the reserves of all commercial banks and hence is known as the "Reserve Bank".

The first bank "Bank of Venice" (1157) was erected in Italy. Bank of Hindustan is India's first bank commenced in 1770. Earlier people did not believe in banking system and banks were not got succeed. East India Company established three presidency banks - Bank of Bengal (1809), Bank of Bombay (1840), and Bank of Madras (1843). After the banking crisis 1913 government had made decision of merger of presidency banks. And India's first merged had been established with the name of Imperial bank of India in 1921 which is known as State Bank of India today. Merger and acquisition of banks plays a significant role in upgrade economy of scale, Synergy, profitability and productivity of bank.

In today's global market, organizations have greatly increased in size and complexity to face rapidly changing business environment. It has been realized globally that merger and acquisitions is one of the healthiest way to gain competitive advantage both domestically and internationally.

Mergers and acquisitions can take place by purchasing of assets, by purchasing shares, by exchange of shares for assets, by exchanging shares for shares. Whether the purchase of one company by another is a merger or acquisition depends on completely on the methodology adopted for its execution. If the purchase is done with the consent of board of directors then it is a friendly takeover or we can say that it is a merger and if it is without the consent of board of directors then it is forced takeover or acquisition.

Mergers of banks are a combination of two or more bank. It means when a bank combine with other bank and purchase its assets and ownership and create new one bank or start with existence of acquirer bank (buyer) bank. It is relevant of acquisition. And acquisition is also known as takeover. There are some difference between merger and acquisition is that acquisition means take control of majority target banks ownership. Most of the time stronger bank takeover of weaker bank. But here consolidation is designated as merger and acquisition.

1.2 REVIEW OF LITERATURE

Various research paper have been studied about the effect of merger and acquisition of bank in India and compared pre and post merger position of selected banks and quested advantage and dis advantages of merger and acquisition of banks. Here are some following related reviews.

- A. **Prof.Ritesh pastel and Dr.Dharmesh shah (2016)** compared the financial performance of before and after merger of banks through economic value added approach and through others financial parameters like mean score of net profit margin, return on net worth, return on assets, return on long term fund, interest earned and total assets and told that it's not necessary that EVA approach is common for all other bank. They concluded that financial performance of bank may be improved after merger.
- B. **Dr.Sangita Ghosh (2016)** researched on merger between Global Trust Bank and Oriental Bank of Commerce. She analyzed liquidity factor, efficiency factor, profitability factor and performance factor of oriental bank of commerce. And

found that after merging bank profitability and efficiency of acquirer bank has improved but there was no change in liquidity position of oriental bank of commerce.

- C. **Gurubaksh Singh and Sunil Gupta's (2015)** paper title "An impact of merger and acquisition on profitability of consolidation banking sector in India". Analyzed the performance of public and private sector bank with the data of last five year and evaluated pre and post merger positions of bank through financial parameters like arithmetic mean, standardization, t-test. They found that merger and acquisition have positively impacted on merged bank.
- D. **Prof.Ritesh Patel(2014)** examined finance and stock return of selected banks to know the effect after merger and concluded that merger and acquisition has positively impacted on Indian banks and told that some public sector banks is more advantageous rather than private sector bank.
- E. **Praveen Kumari (2014)** revealed in her paper merger and acquisition of bank as strategic approach and told that aim of the merger and acquisition of bank is increase credit creation and make progressive. According to gathered post merger data. She concluded that number of branches and ATM, net profit, deposits, net worth have increased.
- F. **Devarajapp S. (2012)** analyzed financial performance of HDFC Bank Limited and Centurion Bank of Punjab with the help of financial parameters and compared pre merger and post merger performance of banks on the basis of last 3 year data and the result of this analysis was that mean value of gross profit had increased but there is no change in net profit, return on capital and operating profit. And concluded that merger effect is helpful for surviving of weak Bank by merging in to larger banks.
- G. **Dr K.A.Goyal and Vijay Joshi (2012)** studied case of ICICI Bank Limited to be aware with the growth of ICICI Bank Limited. This bank amalgamated with nine finance entities like SCICL, ITC Classic Finance Ltd, Anagram Finance,

Bank of Madura, Bank of Sangali, ICICI Personal Finance Service Ltd and ICICI Capital Service Ltd, Standard of Chartered Grindlays Banks two branches, and Bank of Rajasthan Ltd. According to them merger and acquisition considered in three phases pre merger phase, acquisition phase and post merger phase. And concluded that there were many issues and challenges for ICICI Bank Limited but it accepted that challenges and became India's largest Private sector bank.

- H. Sinha Pankaj and Gupta Sushant (2011) studied a pre and post analysis of firms and concluded that it had positive effect as their profitability, in most of the cases deteriorated liquidity. After the period of few years of merger and acquisitions it came to the point that companies may have been able to leverage the synergies arising out of the merger and acquisition that have not been able to manage their liquidity. Study showed the comparison of pre and post analysis of the firms. It also indicated the positive effects on the basis of some financial parameter like Earnings before Interest and Tax (EBIT), Return on share holder funds, Profit margin, Interest Coverage, Current Ratio and Cost Efficiency etc.

1.3 STATEMENT OF THE PROBLEM

The problem selected for the study is to know the reasons for mergers and acquisitions in banking sector.

The topic is selected to study the reasons and what are the benefits after the mergers of the banks.

1.4 NEED FOR THE STUDY

The study for mergers and acquisitions is very important in banking sector. The purpose for an offer or company for acquiring another company shall be reflected in the corporate objectives.

The basic purpose of merger or business combination is to achieve faster growth of the corporate business. It helps to increasing the profit, financial strength, general gains, strategic purpose, and own developmental plans etc.

1.5 OBJECTIVES OF THE STUDY

- To understand the purpose of mergers and acquisitions.
 - To know about the benefits of mergers and acquisitions.
 - To examine the Impacts of mergers and acquisitions in Indian Banking Sector.
 - To study the reasons behind mergers and acquisitions.
-
- To analyze the performance of pre and post merger of banks.

1.6 SCOPE OF THE STUDY

The present study is limited to “Indian Banking Sector” covers a study on Mergers and Acquisition. The study is helpful to know the performance of pre and post mergers of the banks.

1.7 RESEARCH METHODOLOGY

Research Methodology includes a systematic way of collection of data. In research data collection is very important.

Tools for data collection:

1. Primary Data
2. Secondary Data

1. Primary Data:

It is the actual data collected by the research for self source of primary Data or it is first hand information.

2. Secondary Data:

It is a data which was already collected by someone or second hand data information.

The project study is based on only secondary Data, which is collected through: E-Journals, Websites and online resources.

1.8 LIMITATIONS OF THE STUDY

Indian banking sector have many merged banks, so it is not possible to study all the merged banks. The study of the topic has following limitations:

- The study is based on secondary data and is confined to banking sector, only hence no comparison with other sectors was made.
- The study of the topic is based on general topic, so no need to collect a data from any banks.
- The factors which affect the mergers and acquisitions performance may not be same for all banks.
- In the analysis of data and interpretation the collecting data is through internet.

1.9 CHAPTER SCHEME

Chapter 1- Introduction and Research Design

Introduction of the study, Review of literature, Statement of the problem, Need for the study, Objectives of the study, Scope of the study, Research methodology and Limitations of the study.

Chapter 2 - Conceptual Framework

It deals with introduction, meaning and definitions of mergers and acquisitions, Types of mergers and acquisitions, merits and demerits of mergers and acquisition, Challenges of mergers and acquisitions in Indian Banking Sector, Examine the impacts of mergers and acquisitions, Procedure of mergers and acquisitions in Indian Banking Sector.

Chapter -3 Study Area Profile

List of mergers and acquisitions in Indian Banking Sector, A Study on Recently merged banks in 2019 to 2021, RBI guidelines on mergers and acquisitions of Banks, Laws Regulating to mergers and acquisitions in India, Reasons behind mergers and acquisitions, Understand the purpose of mergers and acquisitions, Benefits of mergers and acquisitions.

Chapter 4 - Data Analysis and Interpretation

It deals with analysis and interpretation of collected data.

Chapter 5 – Findings, Suggestions and Conclusion

It deals with findings, suggestions and conclusions of the study.

CHAPTER 2

CONCEPTUAL FRAMEWORK

2.1 Introduction

2.2 Meaning, Definition and Types of Mergers.

2.3 Meaning, Definition and Types of Acquisitions.

2.4 Merits and Demerits of Mergers and Acquisitions.

2.5 Challenges of Mergers and Acquisitions in Indian Banking Sector.

2.6 Impacts of Mergers and Acquisitions in Indian Banking Sector.

2.7 Procedure of Mergers and Acquisitions in Indian Banking Sector.

CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

We have been learning about the companies coming together to form another company and companies taking over the existing companies to expand their business.

With recession taking toll of many Indian businesses and the feeling of insecurity surging over our businessmen, it is not surprising when we hear about the immense numbers of corporate restructurings taking place, especially in the last couple of years. Several companies have been taken over and several have undergone internal restructuring, where as certain companies in the same field of business has found it beneficial to merge together into one company.

Mergers and acquisitions are considered as a relatively fast and efficient approach to expand into new markets and incorporate new technologies. The motive behind using this strategy by firms is to strengthen and sustain their position in the market place. Mergers and acquisitions have played a major role for corporate restructuring and the financial services industry. Mergers and acquisitions have become a widely favoured or admired by different companies having different motives. Be it the survival issue, or the profit maximizations, or the strengthening of the economy of the business mergers and acquisitions are the most talking about topic in the competitive world. Mergers and acquisitions represent the ultimate in change for a business. No other event is more difficult and challenging as a mergers and acquisitions.

2.2 MEANING, DEFINITION AND TYPES OF MERGERS

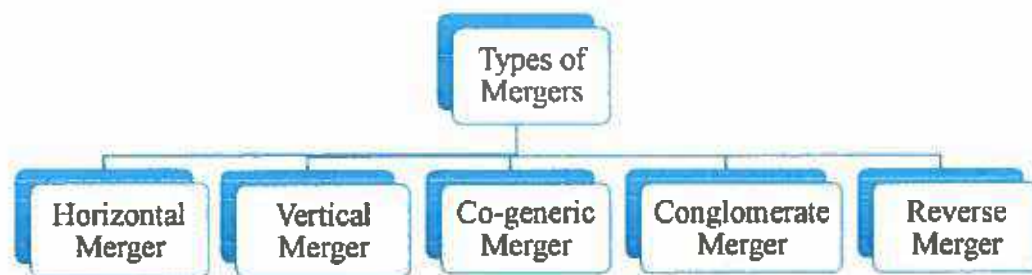
MEANING:

Merger is nothing but amalgamation of two groups in to single entity.

DEFINITION:

A merger is the combination of two companies into one by either closing the old entities into one new entity by one company absorbing the other. In other words two or more companies are consolidated in to one company.

TYPES OF MERGERS:



1. Horizontal Merger:

This kind of merger exists between two companies that compete in the same industry segment. The two companies combine their operations and gain strength in terms of improved performance, increased capital and enhanced profits.

The market share of the newly formed company is greater than the individual entities. It is aimed at reducing competition, increasing market share, economies of scale, research and development.

2. Vertical Merger:

A vertical merger is a kind in which two or more companies in the same industry but different fields combine in business.

It can be upstream or downstream. I.e. where the business takes over its suppliers, then it is on upstream merger while if the company extend to its distribution entities, the merger is termed as downstream.

In this form, the companies in the merger decide to combine all the operations and productions under one shelter. It is like encompassing all the requirements and products of a single industry segment.

3. Co-generic Merger:

Co-generic merger is a kind in which two or more companies in an association are some way or the other related to the production processes, business markets or basic required technologies.

It includes the extension of the product line or acquiring components that are all the way required in the daily operations.

4. Conglomerate Merger:

Conglomerate merger is a kind of venture in which two or more companies belonging to different industrial sectors combine their operations.

All the merged companies are no way related to their kind of business and product line, rather their operations overlap that of each other. This is just a verification of business from different verticals under one flagship enterprise or firm.

5. Reverse Merger:

A merger where in a publicly listed company is taken over by a privately held company and provides an opportunity, to the private company to go public, without going through the complex and lengthy process of getting listed on the stock exchange. In this type of amalgamation, the unlisted company acquires majority shares in the listed company.

2.3 MEANING, DEFINITION AND TYPES OF ACQUISITIONS

MEANING:

An acquisitions or takeover is the purchase of one business or company or other business entity.

DEFINITION:

Acquisitions may be defined as an act of one enterprise of acquiring, directly or indirectly of shares, assets or control over the management of another enterprise.

Acquisitions or takeovers occur between the bidding and the target company. There may be either hostile or friendly takeovers. An acquisition in general sense is acquiring the ownership in the property. In the context of business combinations, an acquisition is the purchase by one company of a controlling interest in the share capital of another existing company.

TYPES OF ACQUISITIONS:

There are four types of acquisitions or takeovers:



1. Friendly Takeover:

As the name suggests, a friendly takeover occurs when the target company is happy about the arrangement. In other words, its directors and shareholders have approved the offer.

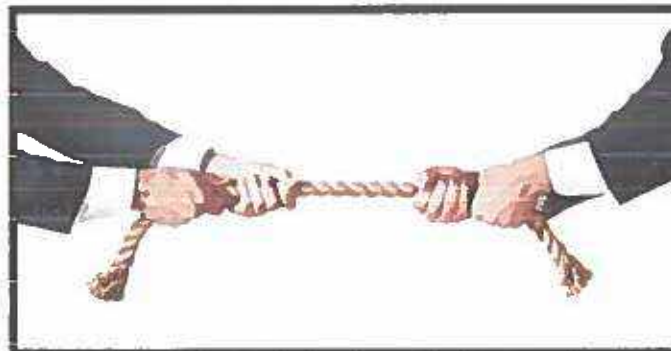
The bidder tells the targets board of directors about its intention and makes an offer. The board then advises its shareholders to accept the offer. Subsequently, the friendly takeover goes ahead.



A friendly takeover is an acquisition where the owners of both companies agree to the terms of the transaction. In the majority of private companies, takeovers tend to be friendly. This is because the board members are usually the main shareholders.

2. Hostile Takeover:

In a hostile takeover situation, the target company does not want the bidder to acquire it. This can only really happen in a publicly-listed company because the directors are not typically majority shareholders.



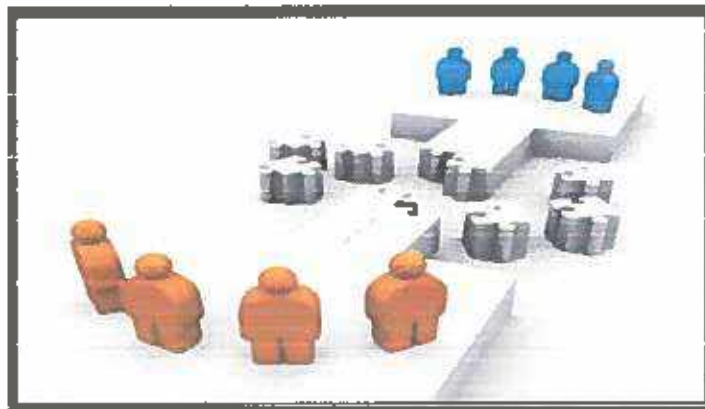
The bidder does not back always off if the board of a publicly-listed company rejects the offer. If the bidder still pursues the acquisition, it becomes a hostile takeover situation.

In the bidder can divide board and or shareholder opinion, it has a bitter chance of succeeding. There are five different ways that a hostile takeover situation can play out.

- **Tender offer:** The bidder may make a public offer at a fixed price above the current market price. In other words, it offers more per share than its current stock market value. We call this a tender offer.
- **Proxy fight:** The bidder can also engage in a proxy fight. In a proxy fight, it tries to persuade enough the majority of stockholders to replace the whole management. It may target just some key members.
- **Creeping offer:** Alternatively, the hostile bidder may discreetly buy enough stocks of the company in the open market. We call this a creeping offer. Eventually, it has enough shares to effect a change in management.

3. Reverse Takeover:

A reverse takeover occurs when a private company purchases a publicly-listed company.



In fact, it is an effective way for the private company to 'float' itself. In other words, it can go public without all the IPO (Initial Public Offering) expense and time.

4. Backflip Takeover:

A Backflip takeover bid occurs when the acquirer becomes the subsidiary of the target company. The takeover is termed a "Backflip" due to the fact that the target company is the surviving entity and the acquiring company becomes the subsidiary of the merged company.

2.4 MERITS AND DEMERITS OF MERGERS & ACQUISITIONS

Merits of Mergers and Acquisitions:

1. The main agenda for such a mergers and acquisitions is consolidation of banks, to control the rise in bad loans or non-performing assets, to robust financial health and ensure better scale efficiency.
2. It also helps in gaining a large number of new customers instantly or quickly.
3. A large capital base would be helping the acquirer banks to offer a large loan amount.
4. Service delivery can get improved.
5. Customers will have a wide array of products like mutual funds and insurance to choose from, in addition to the traditional loans and deposits.
6. It reduces the cost of operations.
7. It helps to improve the professional standards.
8. The merger would helps in better management of banking capital.

Demerits of mergers and acquisitions:

1. It would be tough to manage issues pertaining to human resource.
2. The local identity of small banks won't be that prominent.
3. Acquiring banks have to bear the burden of weaker banks.
4. Very challenging to manage the people and culture of different banks.
5. Chances of bank going Bankrupt.
6. No past experience, complications, strict assessment and risk of public debt.

2.5 CHALLENGES OF MERGERS AND ACQUISITIONS IN INDIAN BANKING SECTOR

Following are the challenges of mergers and acquisitions in Indian banking sectors:

- It's not an easy job indeed; merging two financial institutions is cumbersome in terms consolidating the accounts, infrastructure, HR management, policies, marketing etc. It will take more than one year to complete the merging process.
- It will take some time for customers to know that their banks are merged. Even though it's mandatory for banks to inform their entire customer about the merger (via SMS, Post, E-mail, Advertisements), some customer may miss the communication and get panic to see their Branch board is replaced with a new one.
- Merger sees the stronger banks coming under pressure because of the weaker banks.
- Merger could only give a temporary relief but not real remedies to problems like bad loans and bad governance in public sector banks.
- Coping with staffers disappointment could be another challenge for the governing board of the new bank. This could lead to employment issues.
- Managing cultural differences, managing manpower and branch rationalization.
- Technological integration and making geographically compatible banks.

2.6 IMPACTS OF MERGERS AND ACQUISITIONS IN INDIAN BANKING SECTORS

- 1. Growth:** Companies that desire rapid growth in size or market share or diversification in the range of their products may find that a merger can be used to fulfill the objective instead of going through the time consuming process of internal growth or diversification. The firm may achieve the same objective in a short period of time by merging with an existing firm.
- 2. Synergy:** The merged entity has better ability in terms of both revenue enhancement and cost reduction. Merger and acquisition allows firms to obtain efficiency gains through cost reductions (cost synergies) and revenue increases (revenue synergies).
- 3. Purchase of assets at bargain prices:** Mergers and acquisitions have the opportunity to acquire assets, particularly land mineral rights, plant and equipment, at lower cost than would be incurred if they were purchased or constructed at the current market prices.
- 4. Enhanced managerial skills:** Occasionally a firm with good potential finds it unable to develop fully because of deficiencies in certain areas of management or an absence of needed product or the production technology. If the firm cannot hire the management or the technology needs, it might combine with a compatible firm that has needed managerial, personnel or technical expertise.
- 5. Acquiring new technology:** To stay competitive, companies need to stay on top of technological developments and their business applications. By buying a smaller company with unique technologies, a large company can maintain or develop a competitive edge.

6. **Broader array of products:** when two firms merge they have diversified variety of products and after the merger each consumer in both the firms will be benefited with the range of products or services to choose from mergers and acquisitions helps firms to widen its consumer portfolio but it also leads to a more diversified range of services.
7. **Income tax advantages:** In some cases, income tax consideration may provide the financial synergy motivating a merger. Tax concessions act as a catalyst for a strong bank to acquire distressed banks that have accumulated losses and unclaimed depreciation benefits in their books.
8. **Own developmental plans:** The purpose of acquisition is backed by the acquirer companies own developmental plans.

A company thinks in terms of acquiring the order company only when it has arrived at its own development plan to expand its operation having examined its own internal strength. It has to aim at suitable combination where it could have opportunities to supplement its funds by issuance of securities; secure additional financial facilities eliminate competition and strengthen its market position.

9. **Strategic purpose:** The acquirer company view the merger to achieve strategic objectives through alternative type of combinations which may be horizontal, vertical, product expansion, market extensional or other specified unrelated objectives depending upon the corporate strategies
10. **Corporate friendliness:** Although is it rare but it is true that business houses exhibit degrees of cooperative spirit despite competitiveness in providing rescues to each other from hostile takeovers and cultivate situations of collaborations sharing goodwill of each other to achieve performance heights through business combinations.

2.7 PROCEDURE OF MERGERS AND ACQUISITIONS IN INDIAN BANKING SECTOR

Following are the procedure of mergers and acquisitions in Indian banking sector:

- The procedure of merger either voluntary or otherwise is printed within the several state statutes/the banking rules act. The registrars, being the authorities United Nations agency are unconditional with the responsibility of administering the provisions, are going to be guaranteeing that the due process of law prescribed within the statutes been complied with before they look for the approval of the run.
- While choosing the merger, the approved officers of the exploit bank and therefore the merging bank sit on and it discuss concerning the procedural modalities and financial terms. Once the discussion was finished, a theme was ready to include all the small print of each the banks and therefore the space terms and conditions. Once the theme was finished, it's been tabled among the meeting of board of administrators of banks. The board discusses concerning the theme and accords its confirmation if the proposal was found to be financially viable and useful in end of the day.
- After the board approval of the merger proposal, an additional normal general meeting of the shareholders of the several banks is converted to debate the proposal and look for their approval.
- After the board approval of the merger proposal, a registered appraiser is appointed to evaluate each the banks. The appraiser valuates the banks on the premise of its share capital, market capital, assets and liabilities, its reach and anticipated growth and seeks their approval.
- Once the valuation is accepted by the several banks, they send the proposal beside all relevant documents like board approval, shareholders approval, valuation report etc to Reserve Bank of India and alternative restrictive bodies such security and exchange board of India for his or her approval.

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- At last when getting approvals from all the establishments, approved officers of each the banks then they sit along to debate and settle share allocation proportion by the exploit bank to the shareholders of the merging banks.
 - After finishing higher than procedures then it will sign by the banks.
-

CHAPTER 3

STUDY AREA PROFILE

3.1 List of Mergers and Acquisitions in Indian Banking Sector.

3.2 A Study on Recently Merged Banks in 2019 to 2021.

3.3 RBI Guidelines on Mergers and Acquisitions of Banks.

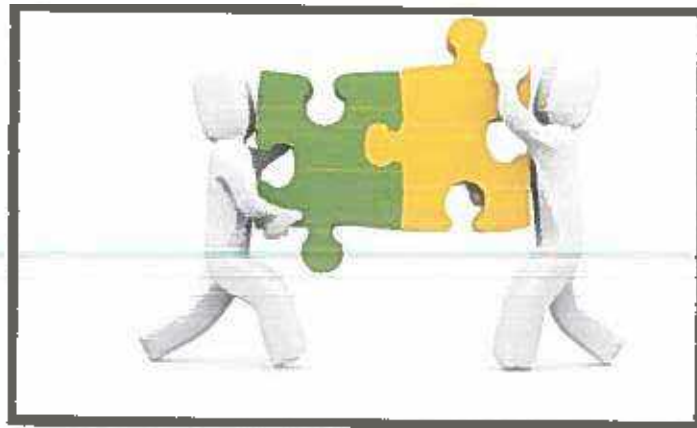
3.4 Laws Regulating to Mergers and Acquisitions in India.

3.5 Reasons Behind Mergers and Acquisitions in Banks.

3.6 Purpose of Mergers and Acquisitions.

3.7 Benefits of Mergers and Acquisitions in Banks.

STUDY AREA PROFILE



Mergers and acquisitions have played an important role in the transformations of industrial sector of India. A large number of public sector bank, private bank and other banks are engaged in mergers and acquisitions activities in India.

In 1960, the India banking industry had turned into an efficient tool of facilitates the development of the India economy. At the same time, it had emerged as a large employer and a debate had ensued about the nationalization of the banking industry.

In 1969, the Prime Minister Indira Gandhi initiated the process of nationalization of banks since then a number of mergers have taken place

The largest ever merger in the public sector banking space in India has taken place on Wednesday April 1, 2020 when six public sector banks were merged into four large banks in a bid to make them globally competitive.

3.1 LIST OF MERGERS AND ACQUISITIONS IN INDIAN BANKING SECTOR

Following are the list of mergers and acquisitions in Indian Banking Sector: Before 1990 to 2021.

BEFORE 1990		
Name of the Banks Acquired	Name of the Banks got Merged	Year of Merging happened
Allahabad Bank	United Industrial Bank Limited	1989
Bank of Baroda	Traders Bank Ltd.	1988
Punjab National Bank	Hindustan Commercial Bank Ltd.	1986
State Bank of India	Bank of Cochin Ltd.	1985
Canara Bank	Lakshmi Commercial Bank Ltd.	1985
Union Bank of India	Miraj State Bank Ltd.	1985
State Bank of India	National Bank of Lahore Ltd.	1970
State Bank of India	Bank of Bihar Ltd.	1969

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From 1990 to 1999		
Name of the Banks Acquired	Name of the Banks got Merged	Year of Merging happened
Bank of Baroda	Bareilly Corporation Bank Ltd.	1999
Union Bank of India	Sikkim Bank Ltd.	1999
Oriental Bank of Commerce	Bari Doab Bank Ltd.	1997
Oriental Bank of Commerce	Punjab Co-operative Bank Ltd.	1996
State Bank of India	Kashinath State Bank Ltd.	1995
Bank of India	Bank of Karad Ltd.	1994
Punjab National Bank	New Bank of India	1993
Bank of India	Parur Central Bank Ltd.	1990
Central Bank of India	Purbanchal Bank Ltd.	1990
Indian Bank	Bank of Thanjavur Ltd.	1990
Indian Overseas Bank	Bank of Tamilnadu Ltd.	1990

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From 2000 to 2009		
Name of the Banks Acquired	Name of the Banks got Merged	Year of Merging happened
HDFC Bank	Centurion Bank of Punjab	2008
ICICI Bank Ltd.	Sangli Bank	2007
Indian Overseas Bank	Bharat Overseas Bank	2007
Centurion Bank of Punjab	Lord Krishna Bank	2006
Federal Bank	Ganesh Bank of Kurundwad	2006
Nainital Bank	Bank of Baroda	2006
IDBI Ltd	United Western Bank	2006
IDBI Ltd	IDBI Bank	2005
Bank of Punjab	Centurion Bank	2005
Bank of Baroda	South Gujarat Local Area Bank	2004
Oriental Bank of Commerce	Global Trust Bank	2004
Punjab National Bank	Nedungadi Bank Ltd.	2003
ICICI Bank	ICICI Ltd.	2002
Bank of Baroda	Benares State Bank Ltd.	2002
ICICI Bank Ltd	Bank of Madura Ltd	2001
HDFC Bank Ltd	Times Bank Ltd.	2000

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From 2010 to 2017		
Name of the Banks Acquired	Name of the Banks got Merged	Year of Merging happened
State Bank of India	Bharatiya Mahila Bank	2017
State Bank of India	State Bank of Travancore	2017
State Bank of India	State Bank of Bikaner and Jaipur	2017
State Bank of India	State Bank of Hyderabad	2017
State Bank of India	State Bank of Mysore	2017
State Bank of India	State Bank of Patiala	2017
Kotak Mahindra Bank	ING Vyasa Bank	2014
ICICI Bank	Bank of Rajasthan Ltd.	2010

2018			
Anchor Bank	Amalgamated Bank	New Name	Business Size(in crore)
IDFC	Capital First	IDFC First Bank	Rs 1.03 lakh

IDFC First Bank: The non- banking financial company (NBFC) Capital first completely merged with IDFC bank on 18th December 2018 to form the IDFC First Bank. The announcement for the merger was made on 13th January 2018. The IDFC First Bank has a loan asset book of Rs 1.03 lakh crore.

MD & CEO: V Vaidyanathan, the founder and chairman of Capital First Ltd, has been appointed as the Managing Director (MD) and Chief Executive Officer(CEO) of the newly formed IDFC First Bank.

3.2 A STUDY ON RECENTLY MERGED BANKS IN 2019 TO 2021:

A Government of India has announced for merging of banks in 2019, in order to revive them from the 6 year low economy due to sudden slowed economic growth. The announcement of this mega-merger was made by Union Finance Minister Smt. Nirmala Sitharaman in 2019. However, RBI notified it in the late march through its circular to merge banks in the new financial year (1st April 2020).

As per the finance minister, the merger would help to manage the capital more efficiently. The amalgamation of the Public Sector Banks is based on bad loans intensity and regional Factors. The current finance minister Smt. Nirmala Sitharaman announced for of 10 Public Sector Banks into 4. After the mergers the country will have only 12 Public Sector Banks. The anchor banks for this merger are the Punjab National Bank, Canara Bank, Union Bank of India and Indian Bank. Prior to this announcement, in April 2019, Vijaya Bank and Dena Bank (amalgamating banks) were merged into Bank of Baroda.

Bank Merger 2019			
Anchor Bank	Amalgamating Banks	Net worth	Bank size after amalgamation
Punjab National Bank	Oriental Bank of Commerce and United Bank of India	Rs 17.94 lakh crore	Second largest bank in India
Canara Bank	Syndicate Bank	Rs 15.20 lakh crore	Fourth largest bank in India
Union Bank of India	Andhra Bank and Corporation Bank	Rs 14.59 lakh crore	Fifth largest bank in India
Indian Bank	Allahabad Bank	Rs 8.08 lakh crore	Seventh largest bank of India
Bank of Baroda	Vijaya Bank and Dena Bank	Rs 16.13 lakh crore	Third largest bank in India

Rank of banks after the above amalgamation:

Rank	Bank
1	State Bank of India
2	Punjab National Bank
3	Bank of Baroda
4	Canara Bank
5	Union Bank of India
6	Bank of India
7	Indian Bank
8	Central Bank of India
9	Indian Overseas Bank
10	UCO Bank
11	Bank of Maharashtra
12	Punjab and Sind Bank

The independent PSU banks in 2019: Currently in 2019, there are 6 Public Sector Unit (PSU) banks that remain independent without any merger with other banks. They are –

Sl.No	Bank
1	Indian Overseas Bank
2	United Commercial Bank (UCO Bank)
3	Bank of Maharashtra
4	Punjab and Sind Bank
5	Bank of India
6	Central Bank of India

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Capital infusion in PSU 2019: Finance Minister Smt.Nirmala Sitharaman announced capital infusion in the Public Sector Banks (PSB) with Rs 55250 Crore of capital in 2019.

Bank	Capital infusion
Punjab National Bank	RS 16,000 crore
Union Bank of India	RS 11,700 crore
Bank of Baroda	RS 7,000 crore
Canara Bank	RS 6,500 crore
Indian overseas Bank	RS 3,800 crore
Central Bank of India	RS 3,300 crore
Indian Bank	RS 2,500 crore
UCO Bank	RS 2,100 crore
United Bank of India	RS 1,600 crore
Punjab and Sind Bank	RS 750 crore

The following are the details of recently merged banks:

Sl.No	Acquirer Banks	Banks to be Merged
1.	Punjab National Bank	Oriental Bank of commerce and United Bank of India
2.	Indian Bank	Allahabad Bank
3.	Canara Bank	Syndicate Bank
4.	Union Bank of India	Andhra Bank and Corporation Bank

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1. Punjab National Bank:

Punjab National Bank+ Oriental Bank of Commerce+United Bank of India

	PNB	OBC	UBI	After Amalgamation
Total Business (Rs in crore)	11,82,224	4,04,194	2,08,106	17,94,526
Gross Advances (Rs in crore)	5,06,194	1,71,549	73,123	7,50,867
Deposits(Rs in crore)	6,76,030	2,32,645	1,34,983	10,43,659
CASA Ratio	42.16%	29.40%	51.45%	40.52%
Domestic Branches	6,992	2,390	2,055	11,437
PCR	61.72%	56.53%	51.17%	59.59%
CET-1 Ratio	6.21%	9.86%	10.14%	7.46%
CRAR Ratio	9.73%	12.73%	13.00%	10.77%
Net NPA Ratio	6.55%	5.93%	8.67%	6.61%
Employees	65,116	21,729	13,804	1,00,649

CASA Ratio : Current Account and Saving Account Ratio

PCR : Provisioning Coverage Ratio

CET-1 Ratio : Common Equity Tier-1 Ratio

CRAR Ratio : Capital Adequacy Ratio

NPA Ratio : Non- Performing Asset Ratio

- 2nd largest Public Sector Bank (PSB) with business of Rs 17,95 lakh crore (1.5 times PNB).
- 2nd largest branch network in India, with 11,437 branches.
- Same CBS platform (Core Banking Solution) (Finacle) in all three banks to enable quick realization of gains.
- High CASA and lending capacity combined in consolidated bank.
- Large cost reduction potential due to network overlaps.
- Cost saving and income opportunities for joint ventures and subsidiaries.
- After the merger the shares of PNB will dropped by 5.72%.

2. Indian Bank:**Indian Bank+Allahabad Bank**

	Indian Bank	Allahabad Bank	After Amalgamation
Total Business (Rs in crore)	4,29,972	3,77,887	8,07,859
Gross Advances (Rs in crore)	1,87,896	1,63,552	3,51,448
Deposits(Rs in crore)	2,42,076	2,14,335	4,56,411
CASA Ratio	34.71%	49.49%	41.65%
Domestic Branches	2,875	3,229	6,104
PCR	49.13%	74.15%	66.21%
CET-1 Ratio	10.96%	9.65%	10.36%
CRAR Ratio	13.21%	12.51%	12.89%
Net NPA Ratio	3.75%	5.22%	4.39%
Employees	19,604	23,210	42,814

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- 7th largest PSB with business of Rs 8.08 lakh crore (1.9 times Indian Bank).
- Nationwide presence with strong networks in the South, North and East.
- Same CBS platform (BaNCS) in both banks to enable quick realization of gains.
- Size of business would get doubled which would increase their global competitiveness.
- Major scaling up of reach due to complementary networks.
- High CASA and lending capacity in consolidated bank.
- After the merger the shares of Indian Bank gained 1.86%.

3. Canara Bank:

Canara Bank+Syndicate Bank

	Canara Bank	Syndicate Bank	After Amalgamation
Total Business (Rs in crore)	10,43,249	4,77,046	15,20,295
Gross Advances (Rs in crore)	4,44,216	2,17,149	6,61,365
Deposits(Rs in crore)	5,99,033	2,59,897	8,58,930
CASA Ratio	29.18%	32.58%	30.21%
Domestic Branches	6,310	4,032	10,342
PCR	41.48%	48.83%	44.32%
CET-1 Ratio	8.31%	9.31%	8.62%
CRAR Ratio	11.90%	14.23%	12.63%
Net NPA Ratio	5.37%	6.16%	5.62%
Employees	58,350	31,535	89,885

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- 4th largest PSB with business of Rs 15.20 lakh crore (1.5 times Canara Bank).
 - 3rd largest branch network in India, with 10,342 branches.
 - Large cost reduction potential due to network overlaps.
 - Similar culture to enable smooth consolidation.
-
- Cost saving and income opportunities for joint ventures and subsidiaries.
 - Same CBS platform (iFlex) in both banks to enable quick realization gains.
 - After the merger the shares of Canara Bank fell marginally by 0.17% on the BSE.

4. Union Bank of India:

Union Bank of India+Andhra Bank+Corporation Bank

	Union Bank of India	Andhra Bank	Corporation Bank	After Amalgamation
Total Business (Rs in crore)	7,41,307	3,98,511	3,19,616	14,59,434
Gross Advances (Rs in crore)	3,25,392	1,78,690	1,35,048	6,39,130
Deposits(Rs in crore)	4,15,915	2,19,821	1,84,568	8,20,304
CASA Ratio	36.10%	31.39%	31.59%	33.82%
Domestic Branches	4,292	2,885	2,432	9,609
PCR	58.27%	68.62%	66.60%	63.07%
CET-1 Ratio	8.02%	8.43%	10.39%	8.63%
CRAR Ratio	11.78%	13.69%	12.30%	12.39%
Net NPA Ratio	6.85%	5.73%	5.71%	6.30%
Employees	37,262	20,346	17,776	75,384

- 5th largest PSB with business of Rs 14.59 lakh crore (2 times Union Bank of India).
- 4th largest branch network in India, with 9,609 branches.
- Same CBS platform (Finacle) in all three banks to enable quick realization of gains.
- It will be double the current size of Union Bank.
- Business to become twice to 4.5 times existing bank business.
- Large cost reduction potential due to network overlaps.
- Cost saving and opportunities for joint ventures and subsidiaries.
- After the merger the shares of Union Bank of India will rise marginally by 0.17%.

3.3 RBI GUIDELINES ON MERGERS AND ACQUISITIONS OF BANKS:

- With a view of facilitating consolidation and emergence of strong entities and providing an avenue for non disruptive exit of weak/unviable entities in the banking sector, it has been decided to frame guidelines to encourage merger/amalgamation in the sector.
- Although the Banking Regulation Act,1949 (BARS) does not empower Reserve Bank to formulate a scheme with regard to merger and amalgamation of banks, the state Governments have incorporated in their respective Acts a provision for obtaining prior sanction in writing, of RBI for an order, inter alia, for sanctioning a scheme of amalgamation or reconstruction.
- The request for merger can emanate from banks registered under the same State Act or from banks registered under the Multi State Co-operative Societies Act (Central Act) for takeover of a banks/registered under State Act. While the State Acts specifically provide for merger of co-operative societies registered under them, the position with regard to take over of a co-operative bank registered under the State Act by a co-operative bank registered under the central.

- Although there are no specific provisions in the State Acts or the Central Act for the merger of a co-operative society under the State Acts with that under the Central Act, it is felt that, if all concerned including administrators of the concerned Acts are agreeable to order merger/amalgamation, RBI may consider proposals on merits leaving the question of compliance with relevant statutes to the administrators of the Acts. In other words, Reserve Bank will confine its examination only to financial aspects and to the interests of depositors as well as the stability of the financial system while considering such proposals.

3.4 LAWS REGULATING TO MERGERS AND ACQUISITIONS IN INDIA:

Amalgamation of two banking companies is under the provisions of section 44 of the Banking Regulation act, 1949.

1. Amalgamation of a banking company with a non-banking company is governed by sections 391 to 394 of the companies Act, 1956.
2. The competition Act, 2002.
3. Foreign Exchange Management Act, 1999.
4. SEBI Takeover code 1994.
5. The Indian Income Tax Act, 1961.
6. Mandatory permission by the courts.
7. Section 35 states acquisition of business of other banks by State Bank of India under SBI Act, 1955.
8. Section 230 and 232 of the companies Act, 2013 relates with the mergers and amalgamations.

3.5 REASONS BEHIND MERGERS AND ACQUISITIONS IN BANKS:

Mergers and acquisitions have molded the Indian Banking Sector in a perfect manner. Though there seems to be diverse opinions on this particular material, yet there is always hope for an improvement in the current condition after bank mergers. The following are the reasons for the mergers to take place in banks.

1. **Merger of weaker bank:** The exercise of weaker banks with stronger banks was encouraged in order to weak banks but Narasimhan committee conflicted with this practice. They said that merger can diversify risk management.
2. **Rise and market competition:** Invention of new financial products and merging of regional financial system are the reasons for merger. Markets industrialized and became more competitive and because of this, market share of all individual firms condensed and hence, mergers and acquisition started.
3. **Economies of scale:** Ability of producing economies of scale when firms are merged.
4. **Skill and Talent:** Allocation of skill takes place between two organizations which helps them to progress and become more competitive.
5. **Technology and Products:** Introduction of e-banking and some monetary instruments/Derivatives. Removal of admission barrier opened the gates for new banks with high technology and old banks can't compete with them and hence they decide to merge.
6. **Positive Synergies:** When two companies merge their sole motive is to create a positive result which is higher than the shared effect of two individual companies working alone. Two features of it are cost synergy and revenue synergy.
7. **Ill performing banks survived after merger and enhanced branch network geologically.**

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8. Larger customer base i.e., through rural reach and increased market share.
9. Achievement of infrastructure and restrict competition and prevent congestion of banks and utilize underutilized resources so that the banks can contest with the foreign banks in a global era.[12]
10. A key reason for the merger is the weight of mounting bad loans over the years.
11. Ostensibly aimed at improving operating efficiency, governance and accountability and facilitate effective monitoring.
12. Creating globally stronger banks, doing away with needless overlaps in operations in operations and infrastructure, and ushering in economies of scale to bring down costs have always been at the heart of any consolidation drive.
13. The move was aimed at creating next-generation banks with a strong national presence and global outreach accompanied with enhanced capacity to increase credit to the various important sectors of the economy.
14. Increasing profitability, Gaining market share, Cross-selling, Improved market reach, Industry visibility and Taxation.
15. Avoid excessive competition and increase the diversification of business.

3.6 PURPOSE OF MERGERS AND ACQUISITIONS:

The purpose for an offeror company for acquiring another company shall be reflected in the corporate objectives. It has to decide the specific objectives to be achieved through acquisition. The basic purpose of merger or business combination is to achieve faster growth of the corporate business. Faster growth may be had through product improvement and competitive position.

Other possible purpose for mergers and acquisitions are short listed below:

1. Procurement of supplies:

- i. To safeguard the source of supplies of raw materials or intermediary product.
- ii. To obtain economies of purchase in the form of discount, savings in transportation costs, overhead costs in buying department etc.
- iii. To share the benefits of suppliers economies by standardizing the materials.

2. Revamping production facilities:

- i. To achieve economies of scale by amalgamating production facilities through more intensive utilization of plant and resources.
- ii. To standardize product specifications, improvement of quality of product and expanding.
- iii. Market and aiming at consumer's satisfaction through strengthening after sale services.
- iv. To obtain improved production technology and know-how from the offered company.
- v. To reduce cost, improve quality and produce competitive products to retain and improve market share.

3. Market expansion and strategy:

- i. To eliminate competition and protect existing market.
- ii. To obtain a new market outlets in possession of the offeree.

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- iii. To obtain new product for diversification or substitution of existing products and to enhance the product range.
- iv. Strengthening retail outlets and sale the goods to rationalize distribution.
- v. To reduce advertising cost and improve public image of the offeree company.
- vi. Strategic control of patents and copyrights.

4. Financial strength:

- i. To improve liquidity and have direct access to cash resource.
- ii. To dispose of surplus and outdated assets for cash out of combined enterprise.
- iii. To enhance gearing capacity, borrow on better strength and the greater assets backing.
- iv. To avail tax benefits.
- v. To improve EPS (Earning Per Share).

5. General gains:

- i. To improve its own image and attract superior managerial talents to manage its affairs.
- ii. To offer better satisfaction to consumers or users of the product.

6. Own developmental plans:

The purpose of acquisitions is backed by the offeror company's own developmental plans.

A company thinks in terms of acquiring the other company only when it has arrived at its own development plan to expand its operation having examined its own internal strength where it might not have any problem of taxation, accounting, valuation etc. but might feel resource constraints with limitations of funds and lack of skill managerial personnel's. It has to aim at suitable combination where it could have opportunities to supplement its funds by issuance of securities; secure additional financial facilities; eliminate competition and strengthen its market position.

7. Strategic purpose:

The acquirer company views the merger to achieve strategic objectives through alternative type of combinations which may be horizontal, vertical, product expansion, market extensional or other specified unrelated objectives depending upon the corporate strategies. Thus, various types of combinations distinct with each other in nature are adopted to pursue these objectives like vertical or horizontal combination.

8. Corporate friendliness:

Although it is rare but it is true those business houses exhibit degrees of cooperative spirit despite competitiveness in providing rescues to each other from hostile takeovers and cultivate situations of collaborations sharing goodwill of each other to achieve performance heights through business combinations. These combined corporate aim at circular combinations by pursuing these objectives.

3.7 BENEFITS OF MERGERS AND ACQUISITIONS:

The basic purpose or benefits of mergers and acquisitions are following:

1. **Synergy:** It is the idea that by combining business activities performance will decrease. It means a business will attempt to merge with another business that has complementary strengths and weaknesses.
2. **Growth:** merger can give the acquiring company an opportunity to grow market share without having to really earn it by doing the work themselves and expand two companies marketing and distribution providing them new business opportunities.
3. **Eliminate competition:** many mergers and acquisitions deals allow the purchasing firm to eliminate future competition and gain a large market share in its product's market

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4. **Diversification of risk:** companies go in for merger to get the benefits of diversification. A company acquires another company dealing in different products and service to reduce the uncertainty of its earnings.
5. **Improved management:** For instance, a business with good management and process systems will be useful to a buyer who wants to improve their own.
6. It is also helps in gaining a large number of new customers instantly or quickly.
7. It will also help in up gradation of technology, increase in profit and raise the standard of living.
8. It will bring better efficiency ratio to the business, banking operations and minimize the risk factor ratio by merging into one.
9. It also helps to fill the business gap, to empower the business to fill product or technology gaps and bring acquired by the big business firm, it will help to upgrade its technology platform efficiently.
10. Increased opportunities, credibility, reduced financial risk and increases goodwill.
11. After these mergers, the lending capacity of the public sector banks will increase and their balance sheet would also be strong.
12. It increases in market share and tax benefits.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

Table and Graph No 4.1 shows Gross Advances of Pre and Post Merger of Banks.

Table and Graph No 4.2 shows Total Business of Pre and Post Merger of Banks.

Table and Graph No 4.3 shows Deposits of Pre and Post Merger of Banks.

Table and Graph No 4.4 shows Current Account and Saving Account Ratio of Pre and Post Merger of Banks.

Table and Graph No 4.5 shows Provisioning Coverage Ratio of Pre and Post Merger of Banks.

Table and Graph No 4.6 shows Common Equity Tier-1 Ratio of Pre and Post Merger of Banks.

Table and Graph No 4.7 shows Capital Adequacy Ratio of Pre and Post Merger of Banks.

Table and Graph No 4.8 show Non – Performing Asset of Pre and Post Merger of Banks.

Table and Graph No 4.9 shows Employees of Pre and Post Merger of Banks.

Table and Graph No 4.10 shows Domestic Branches of Pre and Post Merger of Banks.

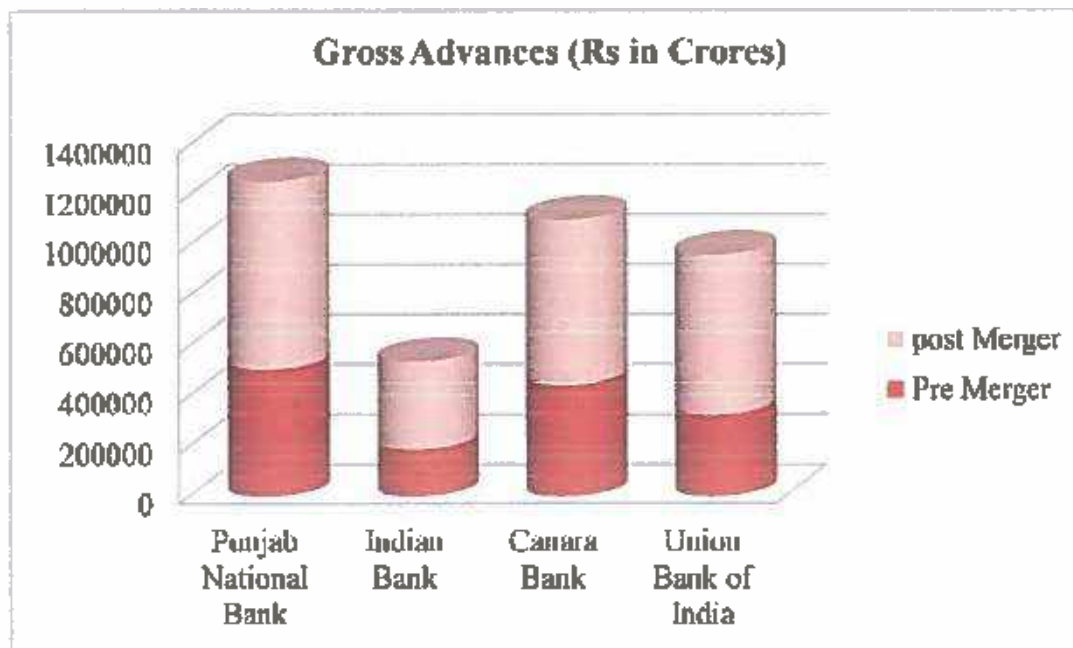
Table and Chart No 4.11 show Market Share of Post Merger of Banks.

DATA ANALYSIS AND INTERPRETATION

Table 4.1 Shows Gross Advances of Pre and Post Merger of Banks.

Banks	Pre Merger (Rs in crore)	Post Merger (Rs in Crore)
Punjab National Bank	5,06,194	7,50,867
Indian Bank	1,87,896	3,51,448
Canara Bank	4,44,216	6,61,365
Union Bank of India	3,25,392	6,39,130

Graph 4.1 Shows Gross Advances of Pre and Post Merger of Banks.

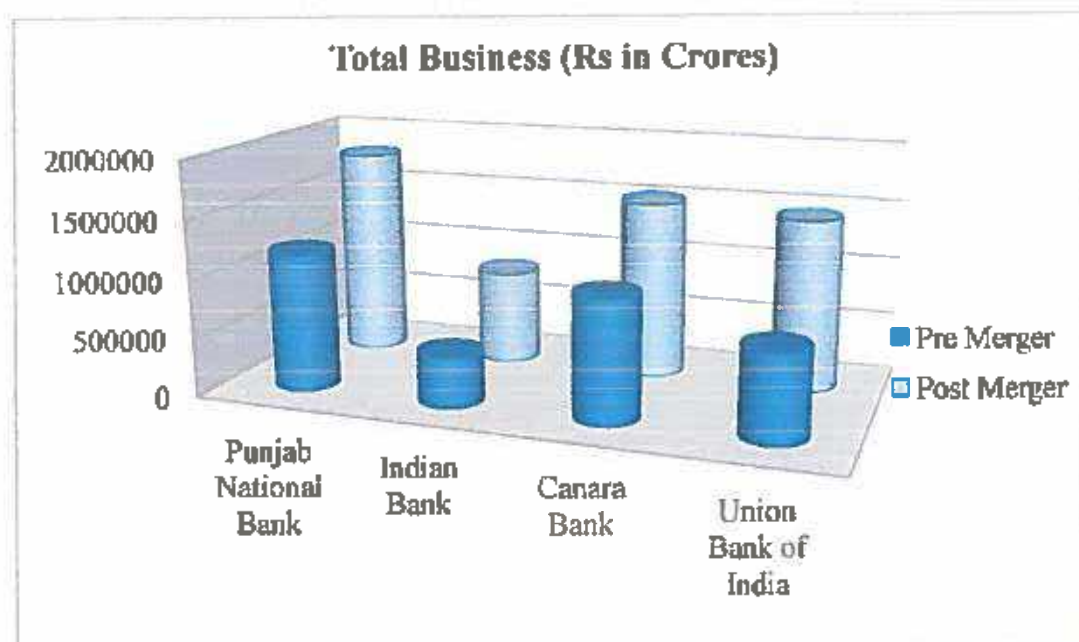


INTERPRETATION:

The above table and graph shows the advances of pre merger of Punjab National Bank is 5, 06,194 crore and post merger is 7, 50,867 crore. The pre merger of Indian Bank is 1, 87,896 crore and post merger is 3, 51,448 crore. The pre merger of Canara Bank is 4, 44,216 crore and post merger is 6, 61,365 crore and the pre merger of Union Bank of India is 3, 25,392 crore and post merger is 6, 39,130 crore. It is clear that after merger the gross advances of above banks are increased.

Table 4.2 Shows Total Business of Pre and Post Merger of Banks.

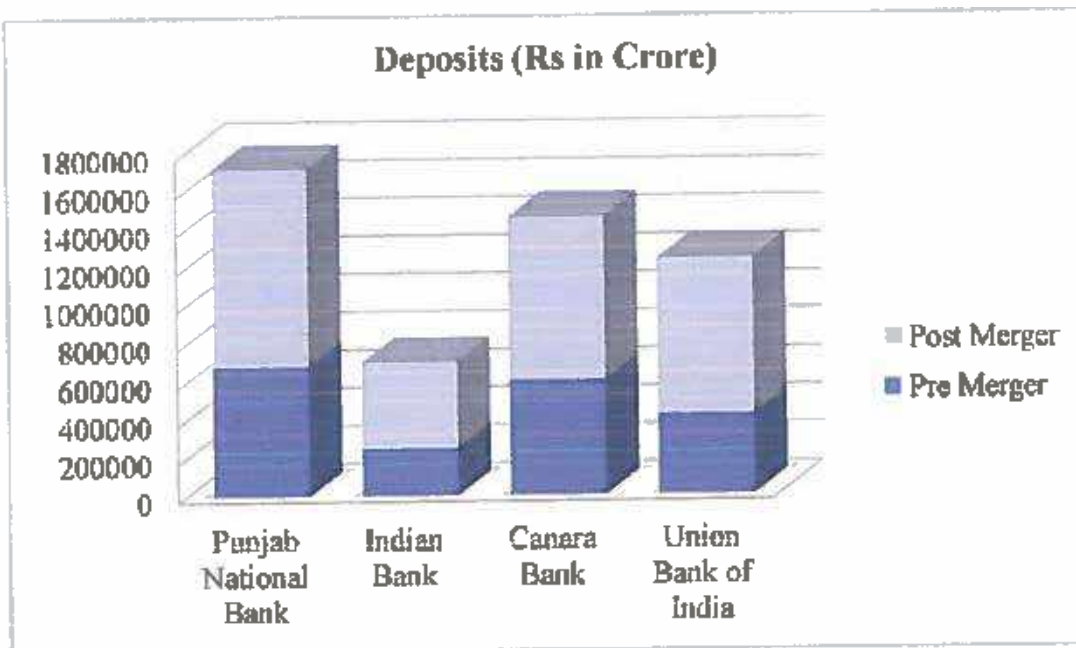
Banks	Pre Merger (Rs in crore)	Post Merger (Rs in Crore)
Punjab National Bank	11,82,224	17,94,526
Indian Bank	4,29,972	8,07,859
Canara Bank	10,43,249	15,20,295
Union Bank of India	7,41,307	14,59,434

Graph 4.2 Shows Total Business of Pre and Post Merger of Banks.**INTERPRETATION:**

The above table and graph shows the total business of pre merger of Punjab National bank is 11, 82,224 crore and post merger is 17, 94,526 crore. The pre merger of Indian Bank is 4, 29,972 crore and post merger is 8, 07,859 crore. The pre merger of Canara Bank is 10, 43,249 crore and post merger is 15, 20,295 crore and pre merger of Union Bank of India is 7, 41,307 crore and post merger is 14, 59,434 crore. It is clear that after amalgamation or after merger the total business of above banks are increased.

Table 4.3 Shows Deposits of Pre and Post Merger of Banks.

Banks	Pre Merger (Rs in crore)	Post Merger (Rs in Crore)
Punjab National Bank	6,76,030	10,43,659
Indian Bank	2,42,076	4,56,411
Canara Bank	5,99,033	8,58,930
Union Bank of India	4,15,915	8,20,304

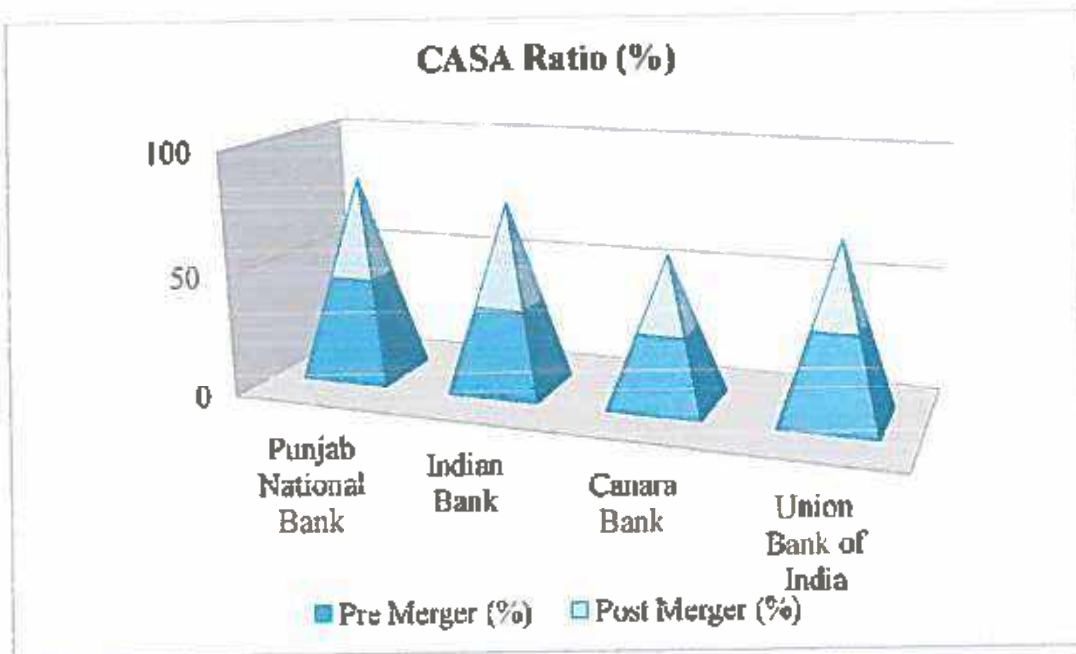
Graph 4.3 Shows Deposits of Pre and Post Merger of Banks.**INTERPRETATION:**

The above table and graph shows the deposits of pre merger of Punjab National Bank is 6, 76,030 crore and post merger is 10, 43,659 crore. The pre merger of Indian Bank is 2, 42,076 crore and post merger is 4, 56,411 crore. The pre merger of Canara Bank is 5, 99,033 crore and post merger is 8, 58,930 crore and pre merger of Union Bank of India is 4, 15,915 crore and post merger is 8, 20,304 crore. It is clear that after merger the deposits of above banks are increased.

Table 4.4 Shows Current Account and Saving Account Ratio of Pre and Post Merger of Banks.

Banks	Pre Merger (%)	Post Merger (%)
Punjab National Bank	42.16	40.52
Indian Bank	34.71	41.65
Canara Bank	29.18	30.21
Union Bank of India	36.10	33.82

Graph 4.4 Shows Current Account and Saving Account Ratio of Pre and Post Merger of Banks.

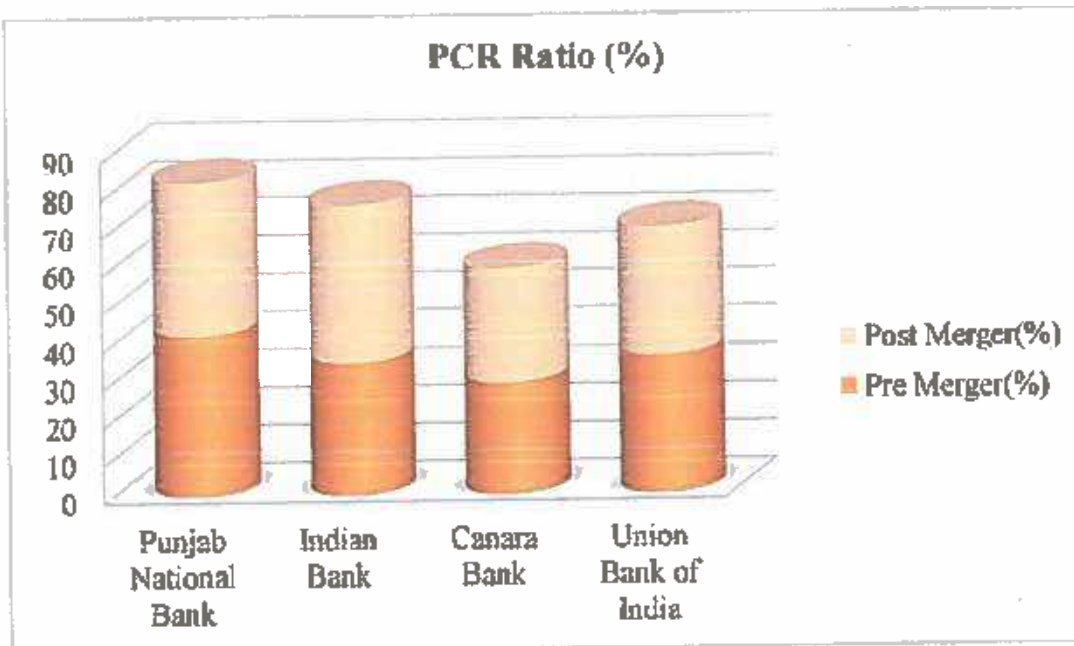


INTERPRETATION:

The above table and graph shows the Current Account and Saving Account Ratio of pre merger of Punjab National Bank is 42.16% and post merger is 40.52%, after merger it was decreased 1.64%. The pre merger of Indian Bank is 34.71% and post merger is 41.65%, after merger it was increased 6.94%. The pre merger of Canara Bank is 29.18% and post merger is 30.21%, after merger it was increased 1.03%. The pre merger of Union Bank of India is 36.10% and post merger is 33.82%, after merger it was decreased 2.28%.

Table 4.5 Shows Provisioning Coverage Ratio of Pre and Post Merger of Banks.

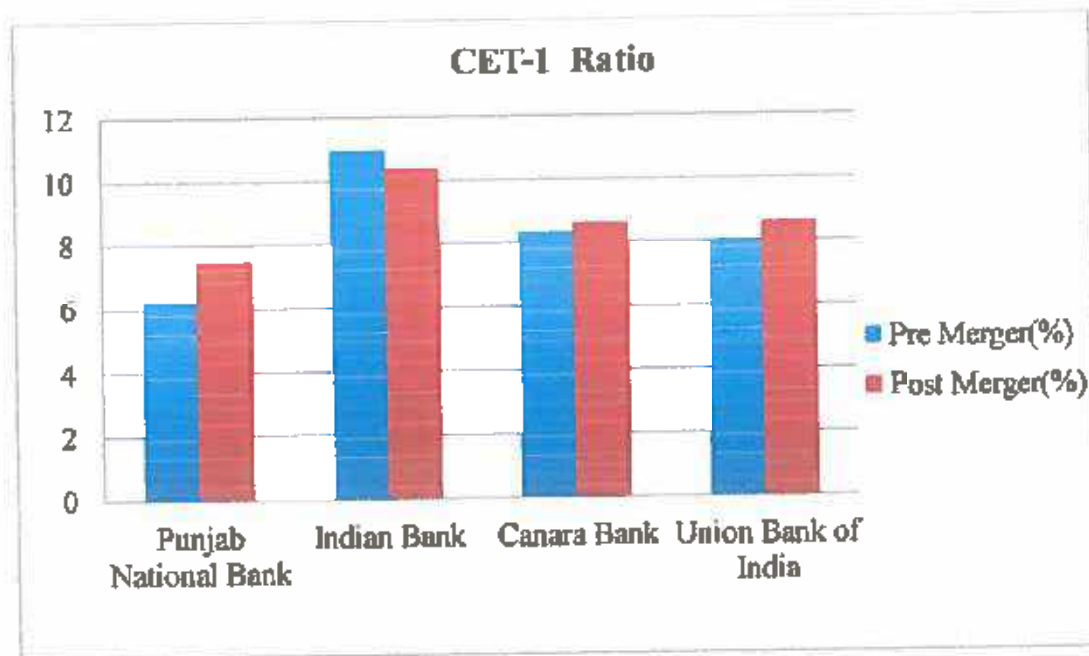
Banks	Pre Merger (%)	Post Merger (%)
Punjab National Bank	42.16	40.52
Indian Bank	34.71	41.65
Canara Bank	29.18	30.21
Union Bank of India	36.10	33.82

Graph 4.5 Shows Provisioning Coverage Ratio of Pre and Post Merger of Banks.**INTERPRETATION:**

The above table and graph shows the Provisioning Coverage Ratio of pre merger of Punjab National Bank is 61.72% and post merger is 59.59%, after merger it was decreased 2.13%. The pre merger of Indian Bank is 49.13% and post merger is 66.21%, after merger it was increased 17.08%. The pre merger of Canara Bank is 41.48% and post merger is 44.32%, after merger it was increased 2.84%. The pre merger of Union Bank of India is 58.27% and post merger is 63.07%, after merger it was increased 4.8%.

Table 4.6 Shows Common Equity Tier-1 Ratio of Pre and Post Merger of Banks.

Banks	Pre Merger (%)	Post Merger (%)
Punjab National Bank	6.21	7.46
Indian Bank	10.96	10.36
Canara Bank	8.31	8.62
Union Bank of India	8.02	8.63

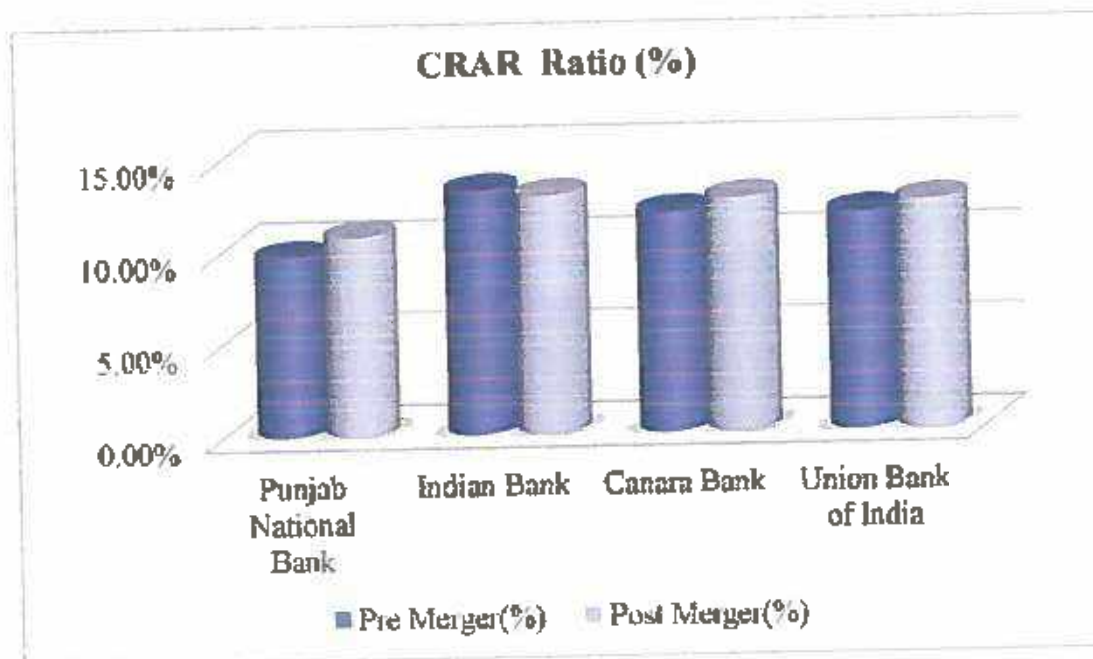
Graph 4.6 Shows Common Equity Tier-1 Ratio of Pre and Post Merger of Banks.**INTERPRETATION:**

The above table and graph shows the Common Equity Tier-1 Ratio of pre merger of Punjab National Bank is 6.21% and post merger is 7.46%, after merger it was increased 1.25%. The pre merger of Indian Bank is 10.96% and post merger is 10.36%, after merger it was decreased 0.6%. The pre merger of Canara Bank is 8.31% and post merger is 8.62%, after merger it was increased 0.31%. The pre merger of Union Bank of India is 8.02% and post merger is 8.63%, after merger it was increased 0.61%.

Table 4.7 Shows Capital Adequacy Ratio of Pre and Post Merger of Banks.

Banks	Pre Merger (%)	Post Merger (%)
Punjab National Bank	9.73	10.77
Indian Bank	13.21	12.89
Canara Bank	11.90	12.63
Union Bank of India	11.78	12.39

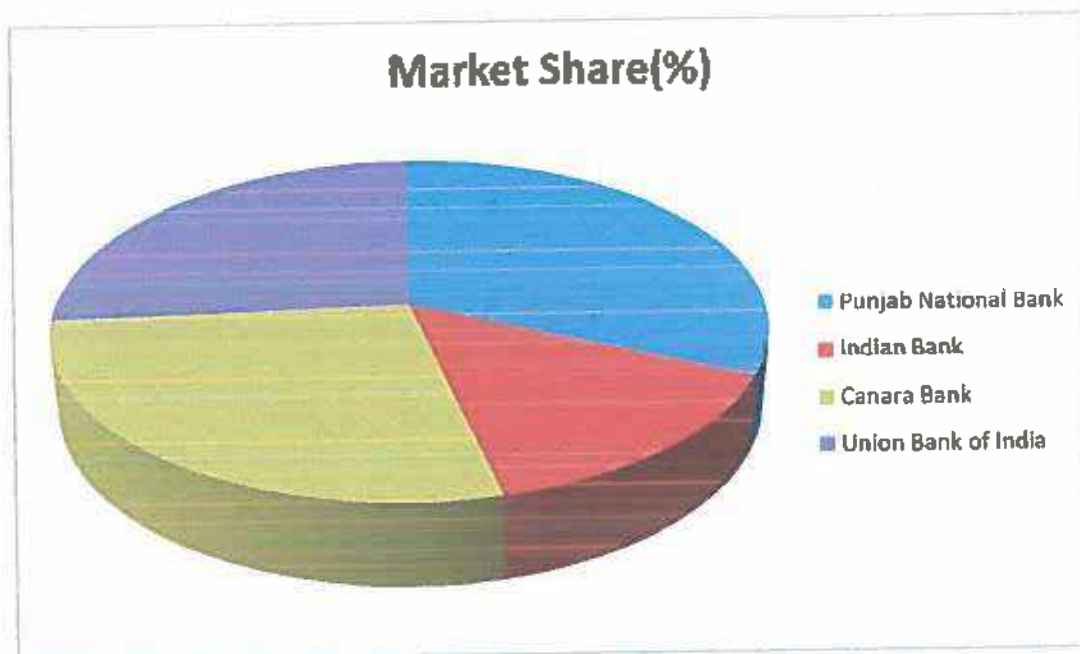
Graph 4.7 Shows Capital Adequacy Ratio of Pre and Post Merger of Banks.

**INTERPRETATION:**

The above table and graph shows the Capital Adequacy Ratio of pre merger of Punjab National Bank is 9.73% and post merger is 10.77%, after merger it was increased 1.04%. The pre merger of Indian Bank is 13.21% and post merger is 12.89%, after merger it was decreased 0.32%. The pre merger of Canara Bank is 11.90% and post merger is 12.63%, after merger it was increased 0.73%. The pre merger of Union Bank of India is 11.78% and post merger is 12.39%, after merger it was increased 0.61%.

Table 4.11 Shows Market share after Merger of Banks.

Banks	Total Business (Rs in crore)	Market share (%)
Punjab National Bank	17,94,526	7.7
Indian Bank	8,07,859	3.5
Canara Bank	15,20,295	6.6
Union Bank of India	14,59,434	6.3

Chart 4.11 Shows Market share after Merger of Banks.**INTERPRETATION:**

The above table and chart shows the total business of Punjab National Bank is 17, 94,526 crore and its market share is 7.7%. The Indian Bank is 8, 07,859 crore and its market share is 3.5%. The Canara Bank is 15, 20,295 crore and its market share is 6.6%. The Union Bank of India is 14, 59,434 crore and its market share is 6.3%. The above bank Punjab National Bank is highest Market share and Indian Bank is lowest market share.

CHAPTER 5

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 Findings

5.2 Suggestions

5.3 Conclusion

FINDINGS, SUGGESTIONS AND CONCLUSIONS

5.1 FINDINGS:

Previously, the Reserve Bank of India advocated mergers amongst banks only to protect the interests of the stakeholders but after globalization voluntary mergers have gained prominence in the Indian banking industry with the primary aim of achieving synergistic gains.

1. The study reveals that there is significant increase in gross advance after Merger.
2. The Study reveals that there is a significant increase in total business after merger.
3. The study reveals that there is a significant increase in deposits after merger.
4. The study reveals that after the merger Current Account and Saving Account Ratio of Indian Bank and Canara Banks are increased but after merger Punjab national Bank and Union Bank of India are decreased.
5. The study reveals that after the merger Provisioning Coverage Ratio of Indian Bank, Canara Bank and Union Bank of India are increased but Punjab National Bank is decreased.
6. The study reveals that after the merger Common Equity Tier-1 Ratio of Punjab National Bank, Canara Bank and Union Bank of India are increased but Indian Bank is decreased.
7. The study reveals that after the merger Capital Adequacy Ratio of Punjab National Bank, Canara Bank and Union Bank of India are increased but Indian Bank is decreased.
8. The study reveals that after the merger Non- Performing Asset of Punjab National Bank, Indian Bank and Canara Bank are increased but Union Bank of India is decreased.

9. The study reveals that there is a significant increase in employees after merger.
10. The study reveals that there is a significant increase in domestic branches after merger.
11. The study reveals that total business of Punjab National Bank is highest market share and Indian Bank is lowest market share.

5.2 SUGGESTIONS:

The following are the suggestions for the study of Merger and Acquisition in India banking sectors.

1. It made a recommendation for the merger of the large banks in India, with an attempt to make them stronger, so they stand mighty fine in international trade.
2. To enhance size as well as operational strength for each of the banks.
3. Mergers are beneficial for the economic development of the Country and Reserve Bank of India can issue guidelines or make rules as to when the banks should initiate appropriate steps for the merger.
4. The government should not go for Merger and Acquisition as a means of bailing out of weak banks the strong banks should not be merged with weak banks as it will have adverse affect upon the asset quality of the stronger bank.
5. It lay stressed that bank mergers must take place among entities of similar size This implies that weak banks merge with the weak ones while large banks with larger and competitive ones.

5.3 CONCLUSION:

The banking industry has been undergoing major Mergers and Acquisitions in the recent years, with a number of global players emerging through successive. Mergers and Acquisitions in all the sectors are including banking. The present study indicates that the pre and post Mergers and Acquisitions of selected banks in India have no greater changes in probability ratio; a few banks are satisfactory during the study period. Similar decline in performance is observed in matching firms. Thus, the decline in the performance of merging firms cannot be attributed to mergers alone. But in future, there are strong prospects of improvements in profitability. But, overall, results indicate that mergers led to higher level of cost efficiencies for the merging banks. Merger between distressed and strong bank did not yield any significant efficiency gains to participating banks. However, the forced merger among these banks succeeded in protecting the interest of depositors of weak banks but stakeholders of these banks have not exhibited any gains from mergers.

The empirical findings of this study suggest that trend of merger in Indian banking sector has so far been restricted to restructuring of weak and financially distressed banks. The Indian financial system requires very large banks to absorb various risks that have been emerged from operating in local and global. The prime factors for future mergers in Indian banking industry included the challenges of free convertibility and requirement of large investment banks. Therefore, the government and policy makers should be more cautious in promoting merger as a way to reap economies of scale and scope.

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**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



A PROJECT REPORT ENTITLED

**“Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other
Stock Broker House”**

AT

Goodwill Wealth Management Pvt Ltd, Hubli

Submitted to

RANI CHANNAMMA UNIVERSITY, BELAGAVI



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

Mr. Santosh Bandi

M.COM-IV SEMESTER

REGISTER NO: MC191615

UNDER THE GUIDANCE OF

SHRI. V. S. KHOT

**K.L.E. SOCIETY'S
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CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that Mr. Santosh Bandi has satisfactorily completed the Project Report Entitled "A Study on Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House" At Goodwill Wealth Management Pvt Ltd, Hubli

for the partial fulfilment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year 2020-2021.

SHRI. V. S. KHOT

PROJECT GUIDE

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CERTIFICATE

This is to certify that Mr. Santosh Bandi M.COM 4th Semester, Student of K.L.E. SOCIETY'S BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE, CHIKODI-591201, has successfully completed his concurrent project in our organization from 20th June 2021 to 20th August 2021.

The project has been carried by him on the topic "A study on Comparative analysis of Goodwill Wealth Management Pvt Ltd and other stock broker House" and his performance during this project was satisfactory.

We wish him every success in his future endeavors.



Branch Manger

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DECLARATION

I declare that the project report entitled "A Study on Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House" is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. V. S. Khat, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 31/08/2021

Place: Chikodi


Mr. Santosh Bandi

Register No: MC191615

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Manager, Goodwill Wealth Management Pvt Ltd, Hubli

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Mr. Santosh Bandi

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CHAPTER-1

INTRODUCTION AND RESEARCH DESIGN

- 1.1) INTRODUCTION
- 1.2) REVIEW OF LITERATURE
- 1.3) STATEMENT OF THE PROBLEM
- 1.4) NEED FOR THE STUDY
- 1.5) OBJECTIVES OF THE STUDY
- 1.6) SCOPE OF THE STUDY
- 1.7) RESEARCH METHODOLOGY
- 1.8) LIMITATIONS OF THE STUDY
- 1.9) CHAPTER SCHEME

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INTERUDUCTION AND RESEARCH DESIGN

1.1 INRUDUCTION

In most industrialized countries, a substantial part of financial wealth is not managed directly by savers, but through a financial intermediary, which implies the existence of an agency contract between the investor and a broker or portfolio manager. Therefore, delegated brokerage management is arguably one of the most important agency relationships intervening in the economy, with a possible impact on financial market and economic developments at a macro level. In most of the metros, people like to put their money in stock options instead of dumping it in the bank-lockers. Now, this trend pick pace in small but fast developing cities like hubli Dharwad etc. My research is based on the residents of hubli and its nearby areas. As the per-capita-income of the city is on the higher side, so it is quite obvious that they want to invest their money in profitable ventures. On the other hand, a number of brokerage houses make sure the hassle-free investment in stocks.

1.2 Review Of Literature

- A) Rakesh H.M (2014)The paper proposes to study the behaviour of individual investors in the stock markets and the factors that influence their investment decisions, which include awareness level, investment duration etc. The research was based on the primary data collected from the city of Mysore of 150 respondents, being stock market investors. The research paper observes that only 10 % of the respondents intended to stay invested into the stock market for a period of more than 5 years. In other words, the research paper observed that people do not want to stay committed for longer period of time into the stock market despite it giving better returns. The paper analyses that annual income and annual savings are given importance by investors, but the level of savings are decided by their level of income. He states that "investors are fully aware about the stock market and they feel that market movements also affect the investment pattern of investors in the stock market." The paper however remains silent on its observation about the uneducated investors who are not aware of the market conditions, with market trends and the stock price movements. It focuses on the factors influencing savings and sources of information

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for decision making. The income level of an individual, also decide the investment pattern of the investor. The investor's income level does determine the type of investment avenues the investor prefers.

- B) Reena Rai (2014) The paper under study aims to study the factors influencing an investors decision making behaviour on basis of related studies. It states that the various factors that influence include various demographic factors such as gender, age, education. It is known that men are more overconfident than women. Age plays a role on the mindset of the individual and the propensity to take risk. It also explains sometimes, the precautionous attitude and conservatism. On the firm level the decision of the investors depends on capital structure average pricing, political and media exposure, trend analysis, past performance of company's stocks, expected dividend and EPS etc. Finally, it concludes that out of the various factors affecting behaviour of investors some factors have a slight role while some majorly impact investor behaviour. The general factors being gender, age, confidence levels, cognitive bias, risk factors, company's performance.
- C) Anju Bala (2013) explained the logistics involved into the working of the stock market and the investors preferences of selecting stock market as a tool of investment. The paper studies the different asset class and other financial alternative available to investors covering all age groups depending on their requirements such as : - NON MARKETABLE FINANCIAL ASSETS (Bank Deposits, Company Deposits) - EQUITY SHARES (Blue Chips shares, Growth shares) - BONDS (Government Securities, PSU Bonds) - MONEY MARKET INSTRUMENTS (Treasury Bills, Certificates of Deposit) - MUTUAL FUNDS (Balanced Schemes, Debt Schemes) - LIFE INSURANCE (Money back policy, Whole Back policy) - REAL ESTATE (Agricultural Land, Commercial Property) - PRECIOUS OBJECT (Gold & Silver) - FINANCIAL DERIVATIVES (Future & Option warrants) It has recommended a list of measures for the improvement of investor participation into the stock market. It has recommended the listing of stock prices on multiple stock exchanges to improve liquidity and gain investor confidence. It has also observed that speculation is widespread into the Indian stock market system and thereby it causes volatility into the prices of shares. This volatility creates insecurity. It has further observed that investors use technical analysis and fundamental analysis for

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selecting their investment into the stock market and the low cost of operations into the derivatives market has made it a preferred choice of investment

- D) Kaushal A. Bhatt (2013) The paper aims at studying the literacy and awareness of capital markets among investors regarding various investment avenues. To find and identify segments preferred more by the people and the influencing force behind the decision making, while investing in currently available options including stock markets. It concludes that investors are moving to new investment avenues such as equity market, mutual funds, bonds, and others like gold, land etc. This is due to the decreasing trend of bank rates. This also increases the scope of business for the investment companies. The investors are also risk sensitive. They want more safety and security. The stock markets have become very popular due to high rate of return but due to uncertainty and risk many people do not invest in equity markets. This stands true due to the lack of stability in the current market scenarios. The risk related to investment also defines the amount invested by people in the particular stock. The factors like age, occupation and income level are key factors in investment decision making of people. The other major factors being considered were market scenario, risk involved and other investment opportunities.
- E) Bing Zhu (2012) The study aims at understanding the performance of arbitrage pricing theory (APT) in the Shanghai Stock Exchange. In finance, arbitrage pricing theory (APT) is a general theory of asset pricing that holds that the expected return of a financial asset. The research points out the fact that factors such as foreign reserve, exports, exchange rates, and unemployment rate have an impact on the returns of energy sector. As the foreign reserve increases by 1 point, the stock return of energy sector increases by 2.142004. This shows that foreign reserves have a positive direct impact on the returns of energy sector.
- F) Domenico Celenza and Fabrizio Rossi (2012) providing a relation between the intellectual capital (IC) and returns of a company. It also aims at evaluating the value of IC. The accounting records are still incomplete inspite of the regulatory accounting standard. It is limited in transmitting information that is slowly reflected in the prices of securities of listed companies to the stock market. As the information arrives into the market, it becomes old. Compared to the degree of circulation of information in the market, the

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financial indicators appear to be static. The beta factor does not explain the market value of firms and changes in stock prices. The conclusions stand true as, the financial statements, made at the end of the year; fail to inform the value of the firm. The speculation in the market also affects the investor's sentiment. The beta index indicates the systematic risks associated with the stocks and fails to elaborate the reason for changes in stock prices and market value of firms.

1.3 STATEMENT OF PROBLEM

The problem selected for the study is to comparative analysis of goodwill wealth management Pvt ltd and other stock broker house. Any investor would you like to know trend of the stock market before investing in the stock and know about brokerage, margin and brokerage firm.

1.4 NEED FOR THE STUDY

The study of Comparative Analysis of Goodwill Wealth Management Pvt Ltd and other Stock Broker House is important for Brokerage houses as they can understand the expectations of investors regarding their preference for choosing broker firm to trading of securities.

1.5 OBJECTIVES OF STUDY

- To know about the awareness towards stock brokers and share market
- To study about the competitive position of goodwill Wealth Management Private Limited in competitive market
- To study about the effectiveness and efficiency of goodwill wealth management private limited in relation to its competitors
- To suggest the need of improvement in existing trading system to goodwill wealth management private limited

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1.6 SCOPE OF THE STUDY

The Present Study Comparative analysis of goodwill wealth management Pvt ltd and other stock broker house. This study helps in finding out the analysis of different brokerage firms. Like as the data for last 1 years is studied for the purpose of analysis.

1.7 Research methodology

Methodology is a systematic approach to the given problem. In other words, it is a way in which we go for data collection off the data. Therefore, better way for collecting data is more important than the data collected, because ultimately data collected is depend upon how we approach the data. The data has been collected enter following ways.

Tools for data collection: The tools for data collection divided into two parts i.e

- Primary data
- Secondary data

1.6.1 Primary Data

It is actual data collected by research for the self source of primary data

- Discussion and observation
- Tele-calling
- Questionaries

1.6.2 Secondary Data

It is the data which has already been collected by someone or an organization for some other purpose or research study. The data for my study has been collected from various sources.

- Journals
- Internets
- News papers
- Pamphlets
- Magazines

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1.6.3 Sampling Design

- Population: Investors
- Sample size: 30
- Method of Sampling: -Simple random sampling

1.8 Limitations of Study

- Lack of awareness of capital market.
- Some people are comfortable with traditional system.
- Lack of Techno Savvy people and poor internet penetration.
- Respondents show reluctance towards giving correct information.

1.9 Chapter Scheme

Chapter 1 Introduction and Research design

This chapter consists of the type of research carried out which include objective of the study, scope of the study, limitations of the study, techniques or tools for data collection and statistical tools used for analyzing the data.

Chapter2 Conceptual Framework

This chapter consists introduction, what is share, what is stock market, what is a stock exchange, who is a broker. what is a demat a/c, buying and selling of dematerialized securities, investment decisions.

Chapter 3 Company Profile

It gives profile of goodwill wealth management Pvt, ltd. Where the project is conducted. It also explain about competitors.

Chapter 4 Data Analysis and Interpretation

This chapter consists of the analysis and interpretation of the study based on the findings of the survey.

Chapter 5 Findings, Suggestions, Conclusions

This chapter gives a review of the findings of the study from the analysis of the preceding chapters and suggestions are given based on the findings and overall conclusions of the study.

CHAPTER-2

CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

2.1.1 WHAT IS SHARES?

2.1.2 WHAT IS STOCK MARKET?

2.1.3 WHAT IS A STOCK EXCHANGE?

2.1.4 WHO IS A BROKER?

2.1.5 WHAT IS A DEMAT A/C?

2.1.6 BUYING AND SELLING OF DE MATERIALISED SECURITIES

2.1.7 HOW TO RECEIVE INCOME FROM SHARE?

2.1.8 HOW TO MAKE INVESTMENT DECISIONS?

2.2 STOCK EXCHANGE

2.2.1 ROLE OF STOCK EXCHANGE

2.2.2 VARIOUS EXCHANGE IN INDIA

2.2.3 SOME FOREIGN STOCK EXCHANGE

2.3 LEADING STOCK EXCHANGE IN INDIA

2.4 SENEX

2.4.1 MARKETING TIMINGS

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CONCEPTUAL FRAMEWORK

2.1 Introduction

The Indian Stock Market Overview. The Bombay Stock Exchange (BSE) and the National Stock Exchange of India Limited (NSE) are the two primary exchanges in India. In addition, there are 22 Regional Stock Exchanges. However, established themselves as the two leading exchanges and account for about 80% of the equity volume traded in India. The NSE and BSE are equal in size in terms of daily traded volume. The average daily turnover at the exchanges has increased from Rs851crore in 1997-98 to Rs1284crore in 1998-99 and further Rs2273crore in 1999-2000. NSE has around 1500 shares listed with the total market capitalization of around Rs9, 21,500crore. The BSE has over 6000 stocks listed and has a market capitalization of around Rs9, 68,000crore. Most key stocks are traded on both the exchanges and hence the investor could buy on either of the exchanges. Both exchanges have a different.

settlement cycle. which allows position the bourses. The primary index of BSE is BSE Sensex comprises 30 stocks. NSE has the S&P NSE 50 Index (Nifty). which consists of fifty stocks. The BSE Sensex is the older and most widely followed index. Both these indices are calculated on the basis of market capitalization and contain heavily traded shares from key sectors.

The markets are closed on Saturday and Sundays: Both the exchanges have switched over from the open outcry trading system to a fully automated computerized mode of trading known BOLT (BSE on Line Trading) and Exchange Trading) system. It facilitates more efficient processing, automatic order matching, faster execution of trades and transparency. The scrip traded on the BSE has been classified into A', "B1", B2', C, F', and Z groups. The A' group shares represent those, which are in the carry forward system (Badla). 'F' group represents the dept market (fixed securities) segment. The 'Z' group scrip is the blacklisted companies. The C" group covers the odd lot securities in 'A, B1", & "B2' groups and Rights renunciations. The key regulator governing Stock Exchanges, Brokers, Depositories, Depository participants, Mutual Funds, FIIs and other participants in Indian secondary and primary market is the Securities and Exchange (SEBI) Limited we should know is to know are the basic of share market.

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2.1.1 WHAT IS SHARES?

A Share or stock is a document issued by a company which entitles its holder to be one of the owners of the company. A share is directly issued by a company through IPO or can be purchased from the stock market. By owning a share, you can earn a portion of the company's profit called dividend.

Also, by buying and selling the shares you get capital gain. So, your return is the dividend plus the capital gain. However, you also run a risk of making a capital loss if you have sold the share at a price below your buying price.

2.1.2 WHAT IS STOCK MARKET?

Stock Market is an organized set-up with a regulatory body and the members who trade in shares are registered with the stock market and regulatory body SEBI. A stock market is a market for the trading of company stocks, share and derivatives. Thus, the shares listed in the Bombay Stock Exchange (BSE) will be different from those in the Delhi Stock Exchange (DSE), because a company may not want to be listed in a particular stock exchange or may not fit the eligibility requirements of the particular exchange. The stock market is also called the secondary market as it involves trading between two investors.

- Primary markets the primary markets is that part of the capital markets that deals with the issuance of new securities are bought by way of the public issue directly from the company.
- Secondary markets the secondary marking is the financial market for trading of securities that have already been issued in an initial private or public offering. In the secondary market, securities are sold by and transferred from one investor or speculator to another.

2.1.3 WHAT IS A STOCK EXCHANGE?

A stock exchange, share market or bourse is a corporation or mutual organization which provides facilities for stock brokers and traders, to trade company stock and other securities. The Bombay stock exchange limited or BSE has a nation-wide reach with a presence in 417 cities and towns of India. Its index or market indicator is known as the Sensex. The S&P CNX NIFTY or simply

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NIFTY is the leading for large companies on the National Stock Exchange of India. It consists of 50 companies representing 24 sectors of the economy, and representing approximately 47% of the traded value of all stocks on the National Stock Exchange of India

2.1.4 WHO IS A BROKER?

A stockbroker is person who is licensed to trade in share in shares. Broker also have direct access to the share market and can act as your agent in share transactions. For this service they charge a fee. They can also offer additional serves like advice on debentures, government bonds and listed property trusts and non-listed investment options (cash management trusts, property and equity trusts.

2.1.5 WHAT IS A DEMAT A/C?

Investor who wishes to trade in the market need to have a dematerialized, or de-mat account. In India, the government has mandated two entities National Securities Depository, or NSDL and Central Depository Services (India), or CDSL –to be the custodian of dematerialized securities.

2.1.6 BUYING AND SELLING OF DE MATERIALISED SECURITIES

What is the procedure for selling dematerialized securities? The procedure for selling dematerialized securities is very simple. After you have sold the securities, you would instruct your DP to debit your account with the number of securities sold by you and credit your broker's clearing account. This delivery instruction has to be given to your DP using the delivery instruction slips given to you by your DP at the time of opening the account.

- How can I purchase dematerialized securities? For receiving de-mat securities, you may give a one-time standing instruction to your DP. This standing instruction can be given at the time of account opening or later, alternatively, you may choose to give separate receipt instruction every time some securities are to be received.

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2.1.7 HOW TO RECEIVE INCOME FROM SHARE?

We invest in share to make money- either through a share's capital growth, i.e., the amount by which the share price increase in value over time, or through the dividend it pays to its shar holders. Dividends are payments made by companies to shar holders from their profits.

2.1.8 HOW TO MAKE INVESTMENT DECISIONS?

The stock market has, perhaps, the most exciting investment opportunities for the investor community. At the same time, it could be unnerving and scary. In fact, equity investment has always remained a big challenge, not only for retail but institutional investors too. In short, investing in equities can be a difficult proposition for retail investors. However, equity must from a part of every investor's age, monetary requirement, risk appetite etc. To cope with volatility, it is important to have a disciplined and systematic approach to equity investment. Set your own rules and more importantly, follow them religiously, indeed, the mantra for successful equity investment is a well thought-out, disciplined investment and decisions based on company fundamental are essential ingredients for successful investment. Securities available for trading. The capital market (equities) segment of nse facilities trading in the following instruments:

- ❖ Share
 - Equity share
 - Preference share

- ❖ Debentures
 - Partly convertible debentures
 - Fully convertible debentures
 - Nonconvertible debentures
 - Warrants/coupons/secured premium notes/another hybrid
 - Bonds

- ❖ Units of mutual funds
 - Open ended
 - Close ended

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2.2 STOCK EXCHANGE

The stock exchange in India, under the overall supervision of the regulatory authority, the securities and exchange Broad of India (SEBI), provide a trading platform, where buyers and sellers can meet to transact in securities.

2.2.1 ROLE OF STOCK EXCHANGE

- Facilities listing of securities
- Register members stock brokers, and sub brokers
- Make and enforce bylaws
- Provides trading platform to investors
- Manage risk in securities transactions
- Provide indices

2.2.2 VARIOUS EXCHANGE IN INDIA

- Ahmadabad Stock Exchange
- Bangalore Stock Exchange
- Bombay Stock Exchange
- Calcutta Stock Exchange
- Delhi Stock Exchange
- Association Hyderabad stock exchange
- Inter-connected stock.
- Jaipur stock exchange
- Ludhiana stock exchange association
- Mumbai stock exchange
- National stock exchange of India (NSE)
- OTC exchange of India

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2.2.3 SOME FOREIGN STOCK EXCHANGE

- NASDAQ
- HANG SANG
- S&P 500
- DOWJONES

2.3 LEADING STOCK EXCHANGE IN INDIA

NATIONAL STOCK EXCHANGE

NSE, promoted by leading financial institution, was incorporated in 1992 as a corporate entity. Trading in equity and debt market commenced in 1994.

It's largest exchange in the country in terms of trading volumes.

The stock exchange, Mumbai, popularly known as "BSE" was established in 1875 as the "Native Share and Stock Brokers association"

❖ NIFTY

Nifty is an indicator of all the major companies of NSE.

The Nifty index is a composite of the top 50 stocks listed on the National stock exchange. It is a simplified tool which helps investors & ordinary people alike, understand what happen in the stock market by extension, the economy.

BOMBAY EXCHANGE STOCK

The BSE or Bombay stock exchange sensitive Index is a value weighted index. It consists of the 30 largest and most actively traded stocks, representative of various sectors, on the BSE. These companies account for around one fifth of the market capitalization of the BSE

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2.4 SENEX

Sensex is an index, an index is basically indicator. It gives you a general idea about whether most of the stock share gone up or most of the stocks have gone down. The sensex is an indicator of all the prices of the major companies of the BSE (Bombay stock exchange).

2.4.1 MARKETING TIMINGS

Trading on the equities segment takes place on all days of the week (except Saturday and Sunday holiday declared by the exchange in advance).

The market timing of the equities segment is

Normal market timings (NSE & BSE): 09.55pm to 03.30pm

Post closing timings (NSE)-03.50pm to 04.00pm Post closing timing (BSE)- 03.40pm to 04.00pm. After market close, NSE and BSE both have introduction

CHAPTER-3

COMPANY PROFILE

3.1 COMPANY PROFILE

3.2 BACKGROUND & INCEPTION OF THE COMPANY

3.3 NATURE OF BUSINESS CARRIED

3.4 WORKFLOW MODEL

3.5 PRODUCTS & SERVICES

3.6 ACHIEVEMENTS AND AWARDS ACHIEVEMENTS

3.7 PROCESS ON ACCOUNT OPENING

3.8 VISION, MISSION, QUALITY POLICY

3.9 COMPETITORS INFORMATION

3.10 COMPARATIVE ANALYSIS

3.11 SWOT ANALYSIS

**A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And
Other Stock Broker House**

COMPANY PROFILE

3.1 COMPANY PROFILE



**A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And
Other Stock Broker House**

Name of the company:	GOODWILL WEALTH MANAGEMENT PVT. LTD.
Year of establishment:	2008
Headquarter:	New No #9 (Old No 4/1) 2ND Floor, Masha Allah building. Bheema Sena Garden Street, off Royapettah High Road, (Near Thiruvalluvar statue), Mylapore Chennai. TamilNadu-600004
Nature of business:	service provider
Services:	Equity, Commodity. mutual funds, ICEX, currency, derivatives, and exchange-traded funds. Financial product distribution
The number of employees:	650
Customers:	80000
Website:	www.gweindia.in
Slogan:	Think goodwill, Make goodwill yours
The number of branches:	70
GST No:	33AAECG9766E1Z
CIN No:	U67190TN2012PTCO8858
SEBI REG No:	INZ260006739

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3.2 BACKGROUND & INCEPTION OF THE COMPANY

Goodwill Com. trade was established in the year 2008 as a start-up venture by an experienced Professional an entrepreneur of par excellence initially as a Proprietorship firm in the name of Goodwill Commodities, with the membership of Multi-Commodity Exchange (MCX). Then in the year 2016, the same was converted into a Private Limited Company with the name of Goodwill wealth management Pvt, Ltd. Similarly, in the year 2012 Goodwill Wealth Management Pvt Ltd was registered with the membership of MSE and becomes a member of NSE, BSE and ICEX in the year 2016-17 to facilitate trading in Equity, Futures & Options, and Currency and Diamond. It is classified as Nongovernment Company and, at the Registrar of Companies, Chennai. Its authorized share capital is Rs. 8,500.000 and its, capital is Rs. 8,500.000. It is involved in Activities auxiliary to financial intermediation, except insurance and pension funding. [The group includes activities involved in or closely related to financial intermediation other than insurance and pension funding, but not themselves involving financial inter-mediation]. Goodwill wealth management Pvt. Ltd. provides all support to the Investors in the form of research-based recommendations by an experienced Research Team and Live Charts & Updated Market information, Robust Trading Platform. Mobile trading App etc., for Equity, Futures & Options, commodities and Currency trading, apart from Live Webinar, Free Training and awareness programs to empower and enable the Investors for making informed decisions. The Management team comprises of people of eminence and professional experience with impeccable credibility and track record. The key people at the helm of affairs, who are committed to operational efficiency and excellence, are all with over 10 years of hands-on experience in the Financial Services/Capital markets. Several awards from MCX and BSE have been bagged by Goodwill in the past for their professional excellence in client servicing. Now Goodwill wealth management Pvt. Ltd. expands its Mutual Fund operations, business through a dedicated website with all technical tools and well-researched recommendations, reports, and analysis by a band of Qualified and experienced professionals. Goodwill wealth management Pvt. Ltd. has over 70 Branches with its Head Office located at Chennai and presence in over 1000 places across the country and with over 1.35 Lakh satisfied customers.

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3.3 NATURE OF BUSINESS CARRIED

Broking firm means it's an organization or company which gives better services to investors. Following are some basic services or offers by the firm

- Facilitating the investor in buying and selling shares. Providing valued advice.
- Making the right portfolio. Act as a depository participant and facilitating online trading.

3.4 WORKFLOW MODEL

Accounts pay in / pay sales compliance out risk management system customer back-office care
KYC its admin research / humanures dealing advisory race

- **Step 1: Sales Acquiring accounts (Demat Account and Trading account) for a company is the function of sales. It can be done in two ways. By finding potential client's sales and another way of acquiring accounts for the company by clients approaching company marketing., This process is carried out in Branch offices. This is the primary function of the company as without acquiring accounts, no other service can be rendered by the company.**
- **Step 2: Back-office Verification After acquiring accounts the filled application forms are verified in primary level to check the clarity and completeness of the information received. Primary level verification is done in branch offices. After verification, these forms are sent to head office for further verification and account activation.**
- **Step 3: Know Your Customer After the primary verification is done by the Branch office the posted applications from Branch offices are verified in Head Office. The Goodwill wealth management Pvt. Ltd. Head Office is in Chennai. In Chennai Head Office they**

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will verify the KYC forms. If all the information provided is authenticated, then it is sent to SEBI for registration. Welcome mail along with an activation link is sent to customer's provided email id from Head office Chennai.

- Step 4: IT department is in Head Office i.e., in Chennai. They take care of the technical part of the company. It provides necessary software's and platforms required for trading, storage and maintenance of the database. It also solves technical issues raised in company branches and also clients. The software's used are ODIN/ NEST as a trading platform for laptop/ desktop. The supportive software required is Amy, Admin 3.4 and Team Viewer. The two mobile apps of Goodwill wealth management are GIGA and GAMA, using these two apps, clients can do trading in their smartphones.
- Step 5: Dealing is the department dealers trade on behalf of clients using their client code and password both online/ offline, but trade is done only as per the instruction is given by clients. The order is taken from clients when they call through telephone it is recorded in Voice loggers. It is used as proof if the situation demands
- Step 6: Research/ Advisory Research and Advisory service provided in Goodwill wealth management is Super trend software. Technical Analysis experts and Finance Advisors analyse the Commodity market of different countries in the world. The trend is analysed and graphs are also provided so that clients can easily understand the trends. Experts also provide a signal through WhatsApp calls by giving hints about buying, selling, target price, etc.
- Step 7: Risk Management System Risk Management System is very sensitive and challenging department. One can choose this career that is very good at logical and analytical decision making. As Goodwill wealth management Pvt. Ltd provides 20 times of exposure for Intraday. More funds to clients are provided by the company for example, if a client is having 10000 Rupees in his account, he can take the position of 2 Lakhs Rupees. Once the Risk Management Department in the Head office finds out that the client is about to cross loss of 80% of the principal amount. Dealers in Head office will take control and square off on behalf of clients. So, the limit is set for 80% of the principal amount and also if the client does not sell the stocks within 3.30 pm then dealers will sell them.

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- **Step 8: Accounts Pay-in/ Pay-out Account Pay-in/ Pay-out** is carried both in branches office. This is the department which completely responsible for handling funds. It accepts money from the client for the commodities bought by them i.e., is paid in and also credits money in the account, In Goodwill wealth management Pvt. Ltd, there are 4 modes of money transfer they are as follows Cheque, RTGS, Net Banking, and ATOM Fund Transfer i.e., Automatic Fund Transfer. For Pay in fund transfer through RTGS/ NEFT, there are three bank accounts in different banks, they are as follows ICICI Bank, HDFC Bank, and AXIS Bank. The banks that are associated with Goodwill in net banking are IIDFC Bank, ICICI Bank, Axis Bank, State Bank of India, Karur Vishay Bank, Bank of India, Yes Bank, Kotak Mahindra, IDBI Bank, Indus land Bank. State Bank of Mysore, Bank of Maharashtra, Lakshmi Vilas Bank, State Bank of Hyderabad. State Bank of Travancore, Federal Bank, State Bank of Bikaner & Jaipur, City Union Bank, Catholic Syrian Bank, & K Bank, Indian Overseas Bank, Deutsche Bank, Karnataka Bank Ltd. and State Bank Patiala. The ATOM Fund transfer system is Instant Online Fund transfer system used by the maximum number of existing clients.
- **Step 9: Compliance department** will clear the complaints registered by the clients, Complaints can be related to dealings and Account pay-in/ payout. They check all the data, verify them from everyone's perspective. They find a solution sometimes by themselves discussing and settlement with clients, The refund sometimes if the mistake is from the company side. If it won't settle by discussing themselves, then they will find a solution by thoroughly analysing issue coordinating along with SEBI.
- **Step 10: Customer Care** Customer Care in Goodwill in two ways through email and telecommunication. They register queries attend them and resolve it. It can be both technical and non-technical issues. Queries are resolved as soon as possible and within the time promised to clients.
- **Step 11: Admin** is responsible keeping track of smooth workflow of the company. They do spot inspections and check the system workflow. The governance and problems in terms of branches or higher authority are resolved by admin. The whole system workflow and queries are monitored and controlled by them.

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- **Step 12: Human Resource** The human resource department is responsible for Human resource management. required human resource, welfare, promotion, demotions, salary structure, maintaining discipline, rewards and awards all these are planned, processed and controlled by the HR Department.

3.5 PRODUCTS & SERVICES

- ❖ Goodwill makes it absolutely easy to open an account for trading, and DEMAT is absolutely free.
- ❖ Our experts will guide you all the way - in trading. Knowledge acquisition, and training.

Products & Services Need of Goodwill:

- Goodwill makes it absolutely easy to open an account for trading, and DEMAT is absolutely free.
- Our experts will guide you all the way - in trading. Knowledge acquisition, and training.
- We bring you the best technology to enable trading anywhere anytime, mobile trading, browser base, ODIN, Nest and call, and trade facility without any charges.
- Hassle-free, on-time support system guaranteed for clients.
- Tailor-made products with extensive research and fundamental training @ all goodwill branches as well as webinars and live trading seminars and YouTube tutorials.

Equity

An equity investment generally refers to the buying and holding of shares of stock on a stock market by individuals and firms in anticipation of income from dividends and capital gains.

Equity investors enjoy a part of the ownership of the company and they are entitled to the company's assets/ dividends/right shares/ bonus shares.

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Need of equities:

- Equity investments belong to an asset class that offers broadly diversified exposure along with a rate of return that is higher than what you can get from instruments that have a lower level of risk.
- They are short- and long-term investments for investors who look for an alternative to fixed deposits and investment in gold
- They can be converted into cash at any time.
- Investors have an array of sector-oriented options to choose for

Derivatives

Derivatives are Futures and Options contracts. They are called derivatives because their price depends upon a certain underlying asset that could be a stock, currency, and commodity.

Importance of Derivatives

- As often is the case in trading, the greater the risk, the bigger the reward. Derivatives can be used on both sides of the equation, to either reduce risk or assume risk with the possibility of a commensurate reward.
- Derivatives are often used as an instrument to hedge risk for one party of a contract while offering the potential for high returns for the other party.
- Futures have more leverage than cash (Equity).
- Intraday traders get twin benefits - these contracts are very liquid, plus the costs such as basis expense and brokerage are less as compared to the cash market.
- A great risk management tool, derivatives can produce good results, if dealt with judiciously

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Commodities

For those who want to diversify their portfolios beyond shares, bonds and real estate, commodities present the best option. Commodities actually offer immense potential to become a separate asset class for market-savvy investors, arbitrageurs and speculators, and retail investors.

Need commodities

- Investments are widely considered as a hedge against inflation. This implies that commodities be held for the longer term.
- Diversified Investment Portfolio An ideal asset allocation plan means having a diversified portfolio. Commodities are an important component of having a diversified investment portfolio. If you are already investing in stocks and bonds, it is suggested that you consider investing in raw materials simultaneously. This way, whenever there is a stock market crash, you are not putting all your eggs in a single basket.
- Liquidity Unlike investment vehicles like real estate, investments in commodity futures offer high liquidity. It is equally easy to both buy and sell futures and an investor can easily liquidate his position whenever required.
- Lower margin (5 to 10%) to trade in commodity futures contracts which is considerably lower than any other market.
- Fewer segments to choose from - like bullion, energy, base metals, and Agri products.
- Advantage of timing 9 is to 11.30 pm
- MCX tradings will be revised on account of change in us daylight saving timings. Please refer exchange circular for further update.
- Internationally trading commodities give excellent price fluctuation and liquidity provides chances for small and mega investors to take speculate, hedge and investment options

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Currency

Currency Derivatives are Future and Options contracts by which you can buy or sell a specific quantity of a particular currency pair at a future date. It is similar to the Stock Futures and Options but the underlying asset happens to be currency pair (i.e., USDINR, EURINR, JPYINR OR GBPINR) instead of Stocks.

Need Currency Trading:

A market that attracts more than 4 trillion \$ in daily volume, recognized as the world's largest market, accessible globally 24 hours a day.

The advantage of small margin requirements and lower entry barriers makes it an important part of a retail investor's portfolio. Currency derivatives are a contract between the seller and buyer, whose value is to be derived from the underlying asset, the currency value.

- It is a new asset class for diversification of investments for all resident Indians.
- It gives hedging opportunities too.
- Importers and exporters can hedge their future payables and receivables.
- Borrowers can hedge foreign currency (FCY) loans for interest and principal payments.
- It gives arbitrage opportunities.

Mutual funds

A mutual fund is an investment vehicle, which pools money from with common investment objectives. It then invests their money in multiple assets, in accordance with the stated objective of the scheme. The investments are made by an asset management company or AMC.

Need of mutual funds:

Liquidity:

In open-ended schemes, you can get your money back at any point in time at the prevailing NAV (Net Asset Value) from the Mutual Fund itself. Mutual fund investments are highly liquid. Compare that with a fixed deposit or a bond which has a fixed investment duration.

Variety:

While investing in mutual funds, you are spoilt for choice. You have a number of mutual fund schemes to choose from, which may invest in a whole range of industries and sectors. different

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kinds of assets, and so on. You can find a mutual fund that matches just about any investment strategy you select.

Transparency:

SEBI regulations for mutual funds have made the industry very transparent. You can track the investments that have been made on your behalf to know the sectors and stocks being invested in. In addition to this, you get regular information on the value of your investment. Mutual funds are mandated to publish the details of their portfolio regularly.

Services provided by Goodwill wealth Management Pvt Ltd.

Admin/ Surveillance services Pay in & pay out (atom payment gateway). Trading Limit Settings. Trading Function. Support team Customer Support. Multilingual Support. Immediate action on queries,

Back office

- Services Back-office Functions. Account Status. Brokerage Structure.
- IT/Trading Support Services ODIN Setup/ NEST. Back office. Mobile Trading Support.
- Business Development Services Partner Registration. Business development. Business support
- Support team
- Customer Support. Multilingual Support. Immediate action on queries,
- Call & Trade Services Trade Confirmation Order placing Live Market Rate
- Promotion Services
- Live Chat. Technical Training. Live Market Rate
- Research Support Service
- Morning Research report. Advanced Trading Levels. Evening Technical Levels. Live Calls Support

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- SENDIND ACCOUNT OPNING KIT TO CUSTOMER
- TRADING

3.8 VISION, MISSION, QUALITY POLICY

VISION

To be seen by the trader and investor communities as a reliable, efficient, trustworthy partner in their endeavour to prepare for and enjoy a secure, comfortable and prosperous future various stages in their life.

MISSION

To deploy all the resources, human and technological, at the disposal of our customers and help them create and preserve wealth through consistently intelligent investment decisions.

QUALITY POLICY

Goodwill will at all times have a full-fledged team of experts and support personnel, dedicated to acting customers' goals and available 24x7 for advice and direction.

3.9 COMPETITORS INFORMATION

There are many competitors in the north region like

KARVY,
HDFC SECURITIES,
INDIABULL,
ICICI DIRECT,
SPAISE.COM,
INDIA INFORLINE,
AND KOTAK.

But I have selected above mention5 companies to compares with share khan ltd. The selected five companies are follows

1. Spaisa.com
2. Kodak Street
3. India Bull
4. ICICI Direct

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5. HDFC Security

5PAISE.COM

Company Background India info line was founded in 1995 and was positioned as a research firm in 2000 e-broking was started under the brand name of 5paisa.com. Apart from offering online trading in stock market the company offers mutual funds online. It also acts as a distributor of various financial services i.e. GOI securities, Company Fixed Deposits, Insurance, Limited ground network, present in 20 Cities.

Online account types

1. Investor terminal

Account opening: 500 De-mat 1st year 250 Initial margin: 2500(compulsory) Min margin retainable: 1000

Brokerage: Intraday- 0.10% + ST Delivery – 0.50% + ST 2.

2. Trader Terminal

A/c opening: 500 De-mat: 250 Initial Margin: 5000(compulsory) Min margin retainable: 1000

Brokerage

Intraday- 0.10% + ST Delivery - 0.50% + ST

Account access charges Monthly: Rs. 800

Downtime

Recent past 5 paisa trader terminal is experiencing high frequency downtime between 3:00 to 3:30 pm due to server load

Manual accounting

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The 5 paise accounting system is manual, online fund transfer through bank is not credited unstably. Limit is provided EOD for shares sold from DP, or call. Similarly limit released for shares sold under BTST is manual. Delay in receiving pay out of clear funds from trading to bank account.

Min account balance

Min Rs.1000 is to be maintained in form of cash/securities to keep account active. This can be withdrawn only on closure of account.

KOTAK STREET

Company Background

Kotak Street is the retail arm of kotak securities. Kotak Securities limited is a joint venture between Kotak Mahindra Bank and Goldman Sachs.

Online account type

Twin advantage/ green signal: 2 DP's, limit against shares. Free way: flat Rs 999 cover charge p.m. 0.03% per transaction. High traders: 6 times exposure cash and derivatives, auto so off 2:55 Cash expressway: spot payment, additional 0.5% charges. For Kotak fast lane/ kea lite/ kept desktop are trading interfaces kept desktop with advanced tools comes at a charge of Rs. 500 non refundable

Pricing of kotak

A.O. 500, De-mat 22.5 per month, Initial margin: Rs 5000, Min margin retainable: Rs. 100
 Brokerage slab wise: - Higher the volume, lower the brokerage. Even older customers (on 0.25% and 0.40%) have been moved to the slab wise structure.

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INDIABULLS

Company Background

India Bulls has retail financial Services Company present in 70 locations Covering 62 cities. It offers a full range of financial services and Products ranging from Equities to Insurance. 450 + Relationship Managers who act as personal financial advisors

Online account type

Signature account: Plain vanilla account with focus on equity analysis. The equity analysis is a paid service even for account holders. **Power India bulls:** Account with sophisticated trading tools, low commissions and priority access to R.M.

Pricing of India bulls accounts:

Signature account:

Account opening: 250/= De-mat Rs. 200 if POA is signed, No AMC for this DP Initial Margin Nil Brokerage: negotiable

Power India bulls:

Account opening: 750/=

De-mat Rs. 200 if POA is signed, No AMC for this DP Initial Margin Nil

Brokerage: negotiable

Paid Research

Scheme	Facility
Web based 1 month	View and print on website
Web based 1 year 6000	View and print on website
Print report 1 month	View and print on website + 10 reports delivered
Print report 1 year 9000	View and print on website + 10 reports delivered

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Online account type

Signature account: Plain vanilla account with focus on equity analysis. The equity analysis is a paid service even for account holders. **Power India bulls:** Account with sophisticated trading tools, low commissions and priority access to R.M.

Pricing of India bulls accounts:

Signature account:

Account opening: 250/= De-mat Rs. 200 if POA is signed, No AMC for this DP Initial Margin Nil
Brokerage: negotiable

Power India bulls:

Account opening: 750/-

De-mat Rs. 200 if POA is signed, No AMC for this DP Initial Margin Nil

Brokerage: negotiable

Paid Research

Scheme	Facility
Web based 1 month	View and print on website
Web based 1 year 6000	View and print on website
Print report 1 month	View and print on website + 10 reports delivered
Print report 1 year 9000	View and print on website + 10 reports delivered

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Deal clinchers V/S India bulls.

POA for Clients DMAT

All shares held by client trading with IB are moved to IB Pool Account and the same is shown as a reflection in client DP account. Charges are levied to move shares from IB pool Account to client DP account

Paid research services

Access to a research even for and IB trading account hold is charges a min. of Rs 500 a month.

Margin funding hoax

The interest on funding starts on leveraged delivery trades from T + 1 day itself @ 21 % p.a., on a daily basis.

The role of relationship manager

Each RM is looked upon as revenue generator and he gets a % on business generator from client. This can lead to over leveraged (interest) & high frequency (brokerage) trading, which may not be in the best interest of the client.

ICICI DIRECT

Company Background

ICICI Web Trade Limited (IWTL) maintains ICICIdirect.com. IWTL is an Affiliate of ICICI Bank Limited and the Website is owned by ICICI Bank Limited.

Account opening: Rs. 750/=

Schemes:

For short periods Rs 750 is refundable against brokerage generated in a qtr. These schemes are introduced 3-4 times a year. De-mat nil 1st year charges included in account opening plus a facility open additional 4 DP's Without 1st year AMC. Initial margin nil

Brokerage:

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Delivery vol. per qtr.	Brokerage
<10lakhs	0.85%
10 lakhs- 25 lakhs	0.75%
25 lakhs – 50 lakhs	0.60%
50 lakhs – 1 cr.	0.40%
1 cr. – 2 cr.	0.35%
2 cr. – 5 cr.	0.30%

Poor online interface

Slow website interface with no real time quotes crates dissatisfaction among high frequency traders.

Margin trading restriction

The margin trading system is available 1 up to 2:45 p.m., with outstanding net positions under margin segment automatically squared off at any time between 2:45 – 3:30 pm. Thus, no control of squared off price.

Morning trades issue

Being one of the websites with larger no. of after hour orders which are pushed 1st thing in the morning, creates a choking of orders to the exchange, causes delay of confirmation for new order placed during the early morning trades

Restriction of BTST

Sale of shares purchased is restricted to T + 1 day and is not permitted on T + 2 day.

Deal clinchers V/S ICICI direct

No leverages for delivery trades

Delivery is restricted to the total money allotted into the trading account.

No flexibility on leverage on intraday trades.

The leverage of 4 times is available for intraday trades.

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Restriction of bank account

The choice of bank is restricted to ICICI bank.

Higher brokerage rates with slabs

The delivery brokerage is pegged at 0.85% and trading at 0.15% each side, this makes is very unviable for customers dealing in large volumes. Although progressively the delivery and trading brokerage reduce as volume go up.

HDFC SECURITIES: -

Company Background

The HDFC BANK, HDFC and Chase Capital Partners and their associates promote HDFC SECURITIES LTD. Pioneers in setting up Dial-a-share services with the largest team of Tele-brokers.

De-mat account with HDFC securities: -

It is conversion of physical shares into electronic form.

Dematerialization charges

Rs. 3 per share certificate

Rs. 35 per request. Folio charges are Rs.150 per annum.

Buying and selling transaction through brokers –Charges are 0.05% of transaction value

Off market transactions charges - 0.04% of transaction value

Online account type

HDFC online trading A/C: - plain vanilla account with focus on 3 in 1 advantage.

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HDFC securities pricing of HDFC account

Account opening: 750

De-mat: 1st year charges included in account opening

Initial margin: Rs. 5000 for non HDFC bank customers

AMC: first year nil and Rs. 450 per year from 2nd year onwards.

Brokerages

Trading 0.15% Delivery 0.50%

Deal clinchers V/S HDFC securities

Poor online interface

A part from having no product to cater to day – traders the HDFC securities online website is plagued with downtime. The same is currently being revamped.

Lack of focus on broking

The core business of HDFC is housing finance.

Broking as a business is a small part of the portfolio of financial services and hence the commitment to resources is limited

No leverage

No leverage is available to clients even for intraday trades, effectively all clients are on cash and carry system.

No flexibility in commercial terms

The delivery brokerage is pegged at 0.5% and trading and 0.15% side, this makes it unviable for customers dealing in large volume.

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3.10 COMPARATIVE ANALYSIS

	ICICI direct	HDFC sec.	Kotak street	Goodwill wealth mgmt. pvt, ltd.	India bulls	5 paisa
A/C opening fee	750	700	550	0	500	675
Recurring fee for trading A/C	0	0	0	0	0	375
De-mat AMC	500	500	360	0	0	375
Delivery brokerage	75p	50p	0.20p	50p	50p	60p
Intraday brokerage	0.15	0.15	0.10	0.10	0.10	0.15
Initial margin required	0	5000 (for non HDFC custom er)	5000	0	0	2500

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3.11 SWOT ANALYSIS

SWOT investigation (or SWOT network) key arranging system used to support an individual or association distinguish qualities, shortcomings, openings, and dangers identified with business task arranging. It is proposed to indicate the goals of the business adventure or venture and distinguish the inside and outside elements that are ideal and troublesome to accomplishing those targets.

Strengths Of Goodwill Wealth Management

- Wide range of financial products.
- Online portal and successful branding.
- Have 75 branches all over India,
- Least Brokerage.
- Strong Research Team.
- Technical analysis training provided to clients.

Mobile apps and trading platforms. First Indian brokerage to get continuous MCX award
 Goodwill management has been awarded the best broker, India, most improved brokerage India, fastest growing equity broking house in India.

Weakness Of Goodwill Wealth Management

- High exposure so more risk has to bear by the company.
- Less advertisement so brand visibility is less.

Opportunities Of Goodwill Wealth Management

- High-income urban families are target customers for commodity.
- More penetration into growing cities.
- Digitalization helps in online trading.

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THREATS OF GOODWILL WEALTH MANAGEMENT

- Large competitors with different and attractive plans.
- Similar offers provided by few stocks broking companies.
- Market dependence.
- Economic slowdown
- Increase or decrease in the interest rates can affect the debt income fund mobilization. • Future tax rules can affect investor's investment decisions

CHAPTER-4

DATA ANALYSIS AND INTERPRETATION

Table 4.1 Shows respondents awareness about share market and online trading.

Table 4.2 Shows that respondent's preference for investment.

Table 4.3 Show purpose of your investment.

Table 4.4 Shows Respondents of response towards having demat and Trading account.

Table 4.5 Shows Source of news of broking firm.

Table 4.6 Shows response towards providing large no of product and services.

Table 4.7 shows interest of investor to invest in goodwill wealth management Pvt ltd.

Table 4.8 Shows factors considered by respondents while making investment.

Table 4.9 Shows frequency of trading.

Table 4.10 Shows mode of trading used by respondents.

Table 4.11 shows response towards considering low brokerage for choosing a broking firm.

Table 4.12 Shows response towards considering brand loyalty for choosing a broking firm.

Table 4.13 Shows response towards considering margin money for choosing a broking firm.

Table 4.14 Shows response towards considering good trading tips choosing a broking firm.

Table 4.15 Shows Best broking firm.

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

DATA ANALYSIS AND INTERPRETATION

- **Data Analysis:**

The process of evaluating data using analytical and logical reasoning to examine each component of the data provided. This form of analysis is just one of the many steps that must be completed when conducting a research experiment. Data from various sources are gathered, reviewed and then analyzed to form some sort of findings or conclusion.

- **Interpretation:**

The act of result of explaining or interpreting something the way something is explained or understood. A particular way of performing something. Or a particular adoption or version of a work, method or style.

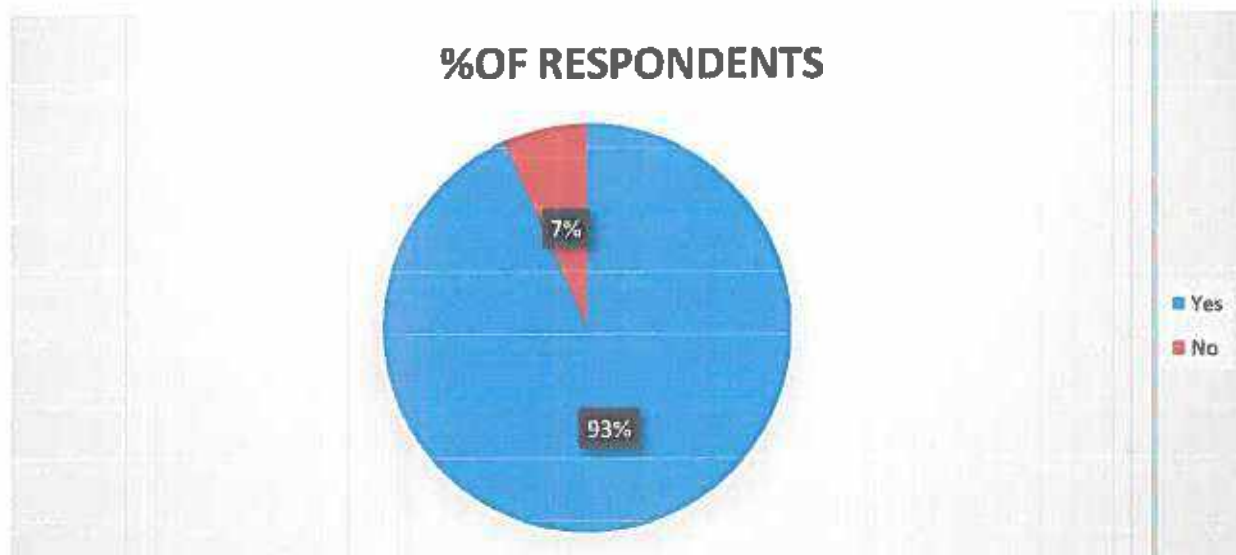
This project was undertaken to study On Comparative Analysis of Goodwill wealth management Pvt Ltd and other Stock Broker House'. The data was collected using Questionnaires which is analyzed and presented below.

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

Table 4.1 Shows respondents awareness about share market and online trading

Particular	No. of Respondents	Percentage (%)
Yes	28	93.33
No	2	6.67

Chart 4.1 Shows respondents awareness about share market and online trading



Interpretation:

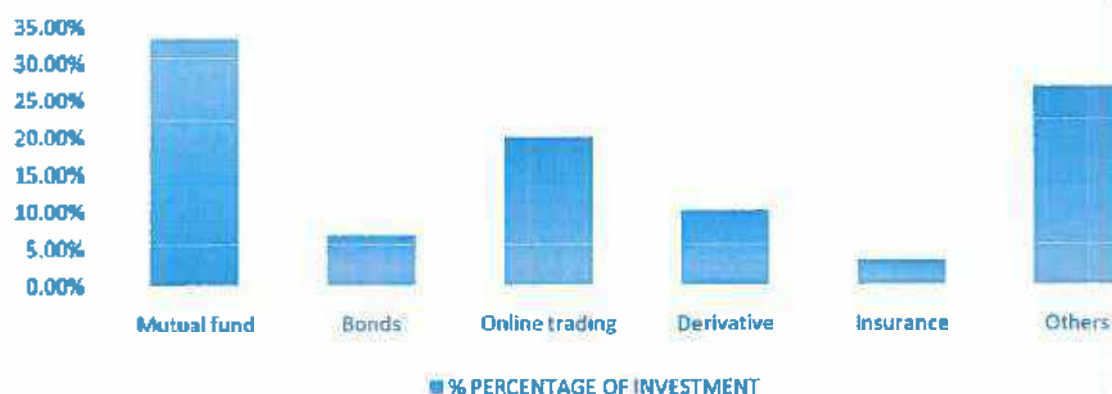
It can be observed from the above table that out of 30 respondents 93.33% of the respondents are aware about share market and online trading. And 7.67% of the respondents are not aware about share market and online trading. Majority of the respondents i.e., 93.33% are aware about share market and online trading.

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

Table 4.2 Shows that respondent's preference for investment.

Particular	No. of Respondents	Percentage (%)
Mutual fund	10	33.33
Bonds	2	6.67
Online trading	6	20
Derivative	3	10
Insurance	1	3.36
Others	8	26.67

Graph 4.2 Shows that respondent's preference for investment



Interpretations:

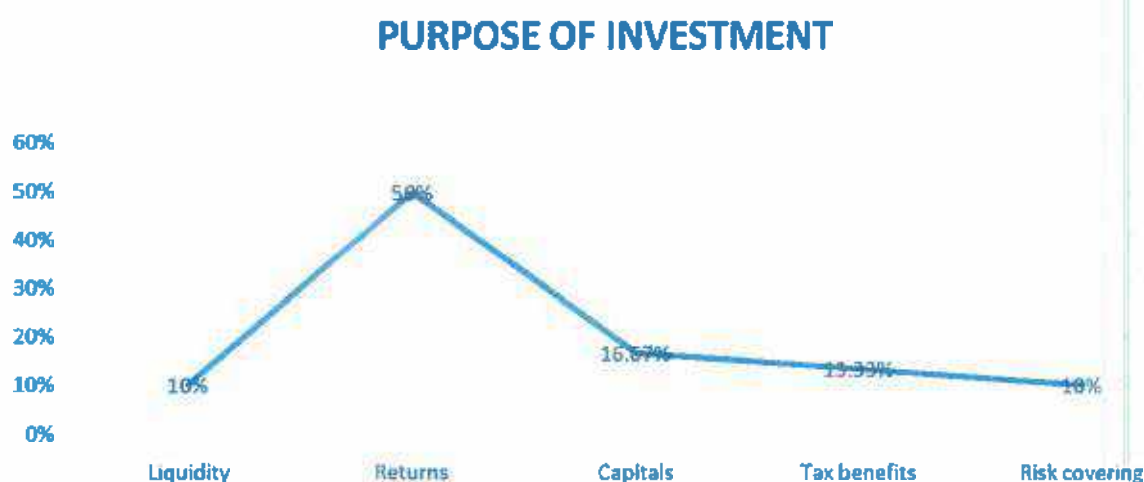
It can be observed from the above table that out of 30 respondents 33.33% of respondents prefer mutual fund, 6.67% prefer bonds, 20% prefer online trading 10% prefer derivative and 3.36% prefer insurance and 26.67% prefer others for investment. Majority of respondents i.e., 33.33% are preferring for Mutual Fund for Investment.

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

Table 4.3 Show purpose of investment.

Particular	No. of Respondents	Percentage (%)
Liquidity	3	10
Returns	15	50
Capitals	5	16.67
Tax benefits	4	13.33
Risk covering	3	10

Chart 4.3 Show purpose of investment.



Interpretation:

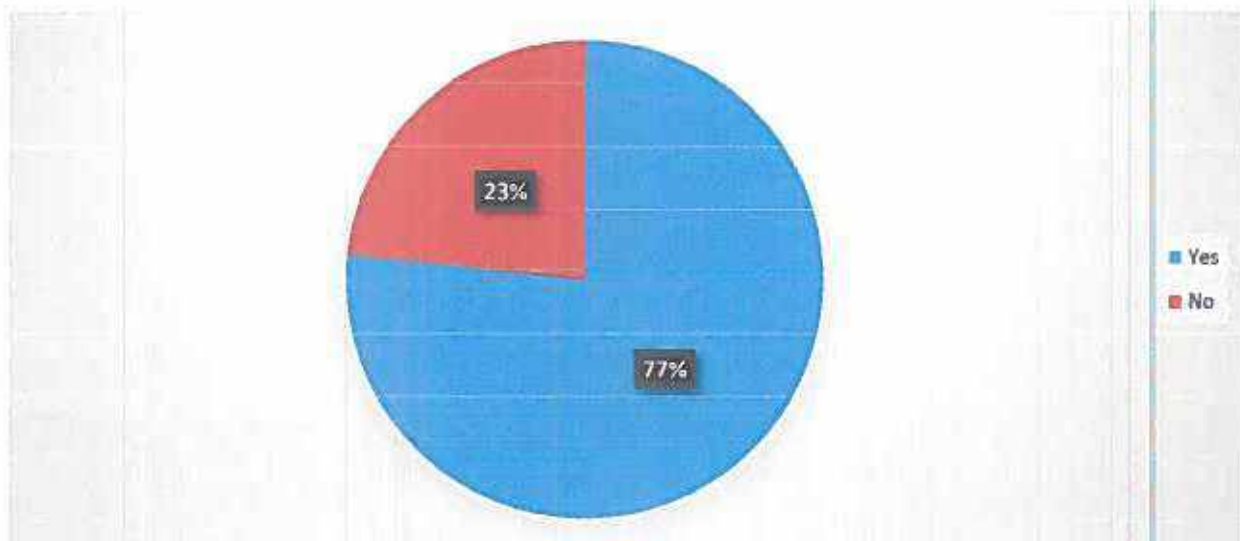
It can be observed from the above table that out of 30 respondents 10% of the respondents are investing for the purpose of liquidity, 50% of respondents are investing for the purpose of return, 16.67% of respondents are investing for the purpose of capitals and 13% of respondents are investing for the purpose of tax benefits and 10% of respondents are investing for the purpose of risk covering. Majority of respondents i.e 50% are investing for the purpose of returns.

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

Table 4.4 Shows Respondents response towards having demat and Trading account.

Particular	No. of Respondents	Percentage (%)
Yes	23	76.67
No	7	23.33

Chart 4.4 Shows Respondents response towards having demat and Trading account



Interpretation:

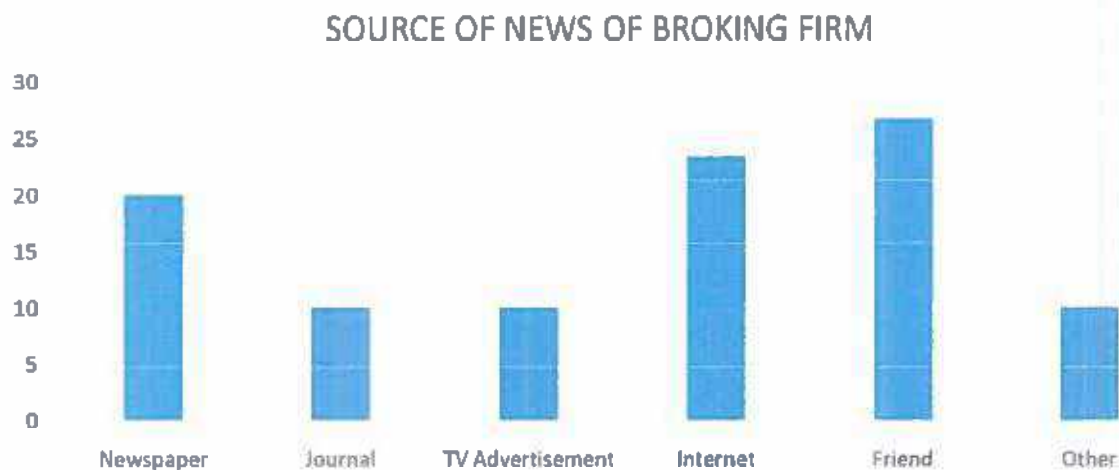
It can be observed from the above that out of 30 respondents 77% of respondents are having a demat and trading account and 23% of respondents are not having a demat and trading account. Majority of respondents i.e. 77% of the respondents are having demat and trading account.

**A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And
Other Stock Broker House**

Table 4.5 Shows Source of news about broking firm.

Particular	No. of Respondents	Percentage (%)
Newspaper	6	20
Journal	3	10
TV Advertisement	3	10
Internet	7	23.33
Friend	8	26.67
Other	3	10

Graph4.5 Shows Source of news about broking firm.



Interpretations:

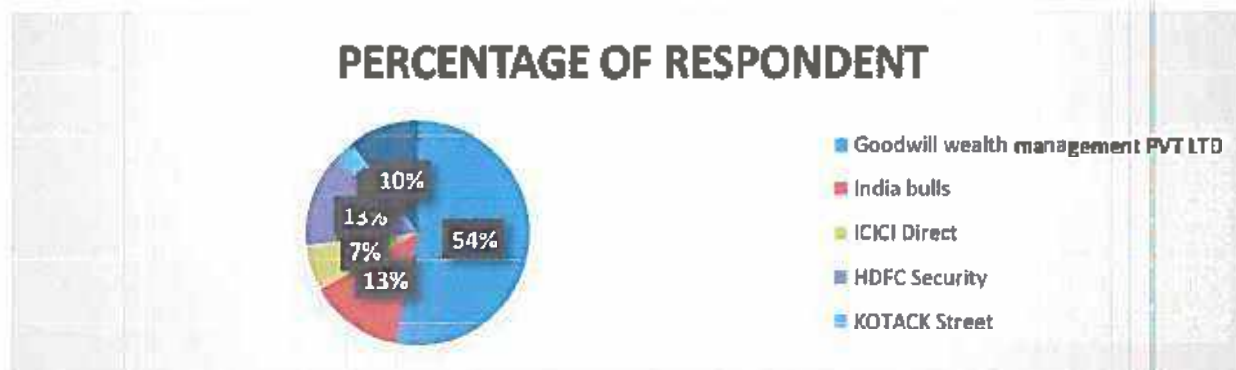
It can be observed from the above that out of 30 respondents 20% of respondents know about broking firm through newspaper, 10% of respondents of journal 10% of respondents tv advertisement 23.33% of respondent's internet and 26.67% of respondents friend and 10% other. Majority of respondents i.e. 26.67% of respondents know about broking firm through friends.

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

Table 4.6 Shows response towards providing large no of product and services.

Particular	No. of Respondent	Percentage (%)
Goodwill wealth management PVT LTD	16	53.33
India bulls	4	13.33
ICICI Direct	2	6.67
HDFC Security	4	13.33
KOTACK Street	1	3.33
5paisa.com	0	0
Other	3	10

Chart 4.6 Shows response towards providing large no of product and services.



Interpretations:

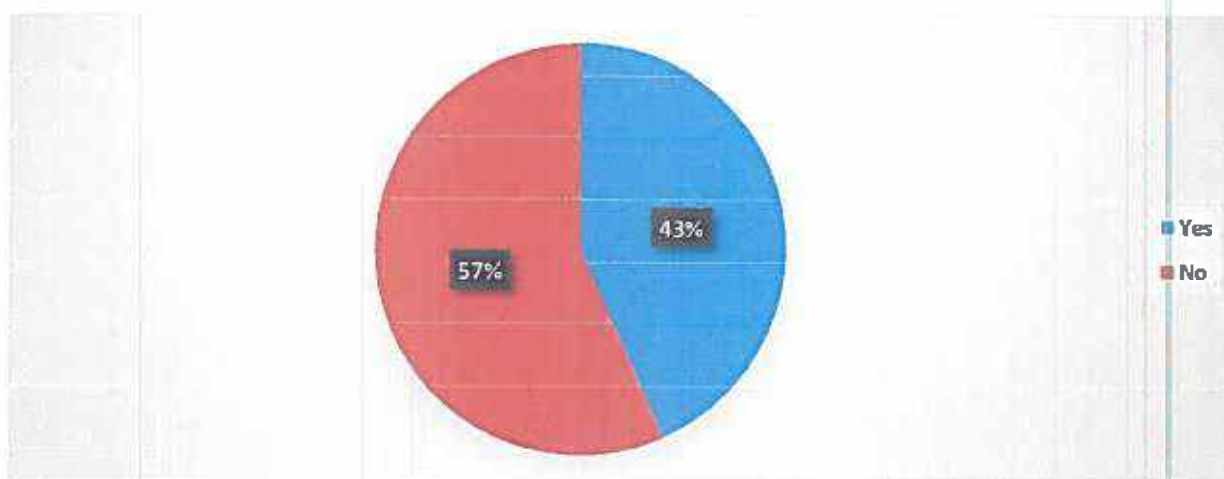
It can be observed from the above that out of 30 respondents 53.33% of respondents agreeing Goodwill wealth management Pvt Ltd, 13.33% of respondents agreeing India bulls, 6.67% respondents agreeing ICICI direct, 13.33% of respondents agreeing HDFC security, 3.33% of respondents agreeing KOTACK street, 0% of respondent agreeing 5paisa.com, and 10% of respondent agreeing Other. Majority of respondents i.e. 53.33% of respondent agreeing Goodwill wealth management Pvt Ltd.

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

Table 4.7 shows interest of investor to invest in goodwill wealth management Pvt ltd.

Particular	No.ofRespondents	Percentage (%)
Yes	13	57.67
No	17	43.33

Chart 4.7 shows interest of investor to invest in goodwill wealth management Pvt ltd.



Interpretation:

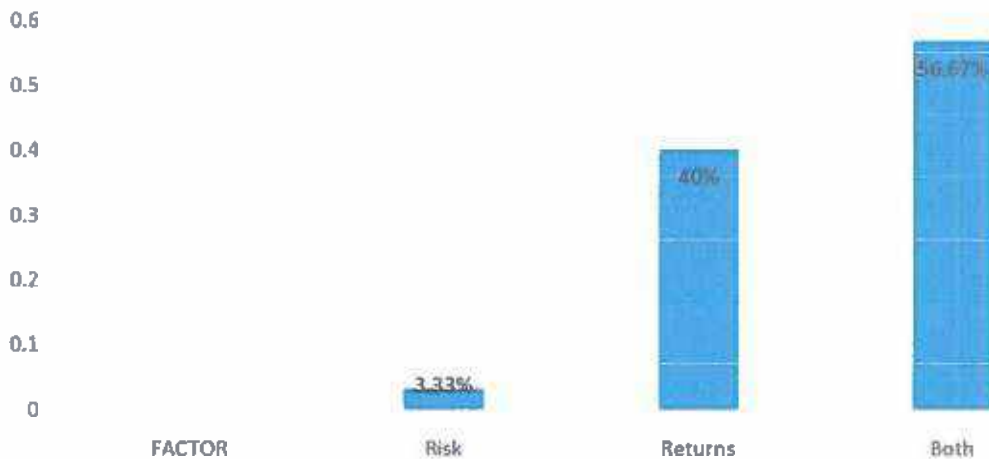
It can be observed from the above that out of 30 respondents 43.33% of respondents interest towards goodwill wealth management Pvt ltd, 56.67% of respondents not interest towards goodwill wealth management Pvt ltd. Majority of respondents i.e., 43.33% respondents' interest towards goodwill wealth management Pvt ltd.

**A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And
Other Stock Broker House**

Table 4.8 Shows factors considered by respondents while making investment.

Particular	No. of Respondents	Percentage (%)
Risk	1	3.33
Returns	12	40
Both	17	56.67

Graph4.8 Shows factors considered by respondents while making investment.



Interpretation:

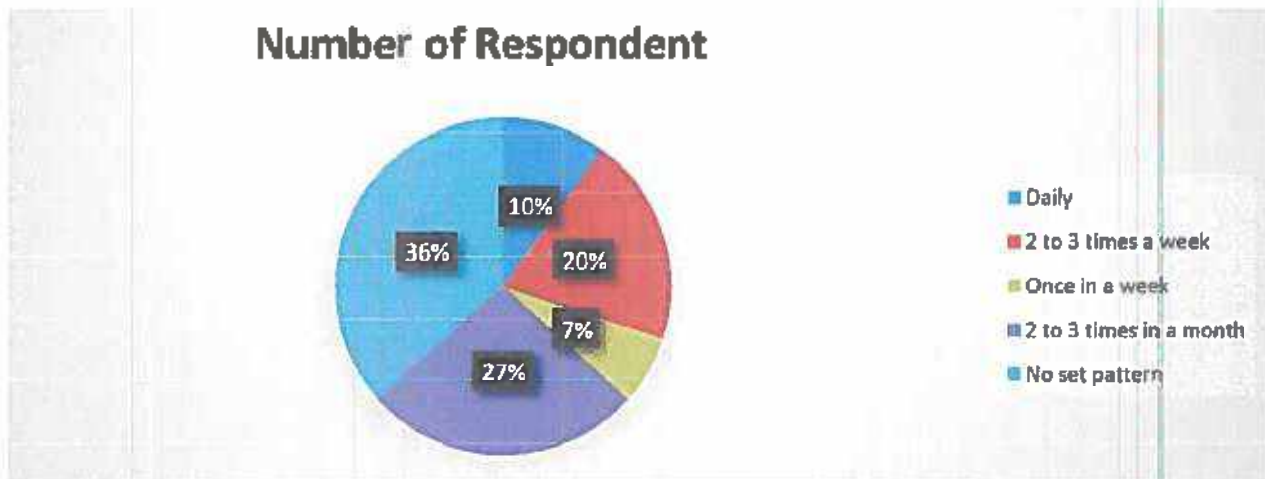
It can be observed from the above that out of 30 respondents consider risk factor by while making before investment 3.33% of respondents risk and 40% of respondents return 56.67% of respondents both. Majority 56.67% of respondents considered both for risk and return while making before investment.

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

Table 4.9 Shows frequency of trading.

Particular	No. of Respondent	Percentage (%)
Daily	3	10
2 to 3 times a week	6	20
Once in a week	2	7
2 to 3 times in a month	8	27
No set pattern	11	36

Chart 4.9 Shows frequency of trading.



Interpretation:

It can observe from the above table that out 30 respondents 10% of respondents are trading daily 20% of respondents are trading 2 to 3 times a week. And 7% of respondents are trading once in a week 27% of respondents are trading 2 to 3 times in a month and 36% of respondents are trading no pattern set. Majority of respondents i.e., 36% respondents are trading no pattern.

**A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And
Other Stock Broker House**

Table 4.10 Shows mode of trading used by respondents.

Particular	Respondents	Percentage (%)
Online	25	95
Offline	5	10

Graph4.10 Shows mode of trading used by respondents.



Interpretation:

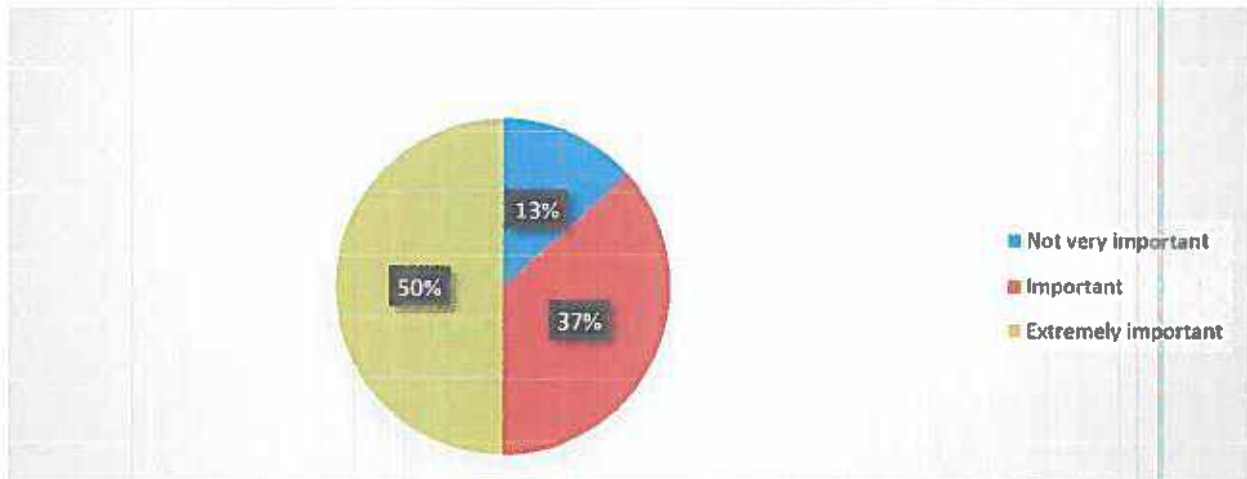
It can be observed from the above table that out of 30 respondents 95% of respondents online trading mode prefer and 5% of respondents offline trading mode prefer. The majority of respondents i.e., 95% of respondents online prefer.

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

Table 4.11 shows response towards considering low brokerage for choosing a brokerage firm.

Particular	No. of Respondents	Percentage (%)
Not very important	4	13
Important	11	37
Extremely important	15	50

Chart 4.11 shows response towards considering low brokerage for choosing a brokerage firm.



Interpretation:

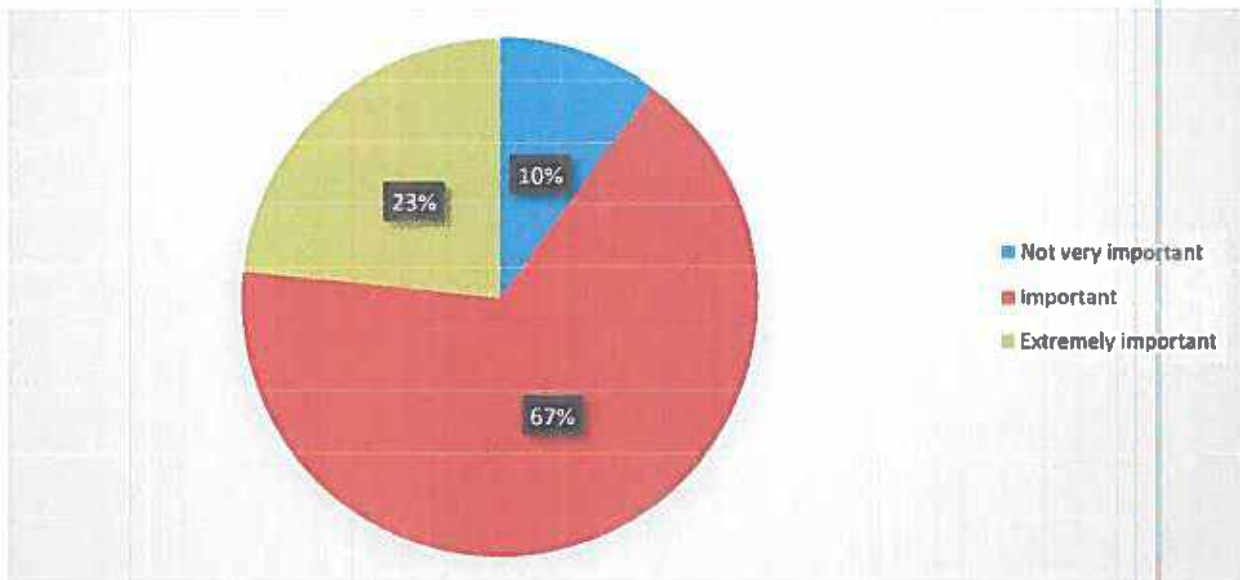
It can be observed from the above table that out of 30 respondents 13% of are not considering low brokerage firm 37% of respondents are considering low brokerage firm and 50% of respondents are giving importance for choosing brokering firm. Majority of respondents i.e., 50% of respondents are considering factor of low brokerage for choosing brokering firm.

**A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And
Other Stock Broker House**

Table 4.12 Shows response towards considering brand loyalty for choosing a broking firm.

Particular	No. of Respondents	Percentage (%)
Not very important	3	10
Important	20	67
Extremely important	7	23

Chart 4.12 Shows response towards considering brand loyalty for choosing a broking firm.



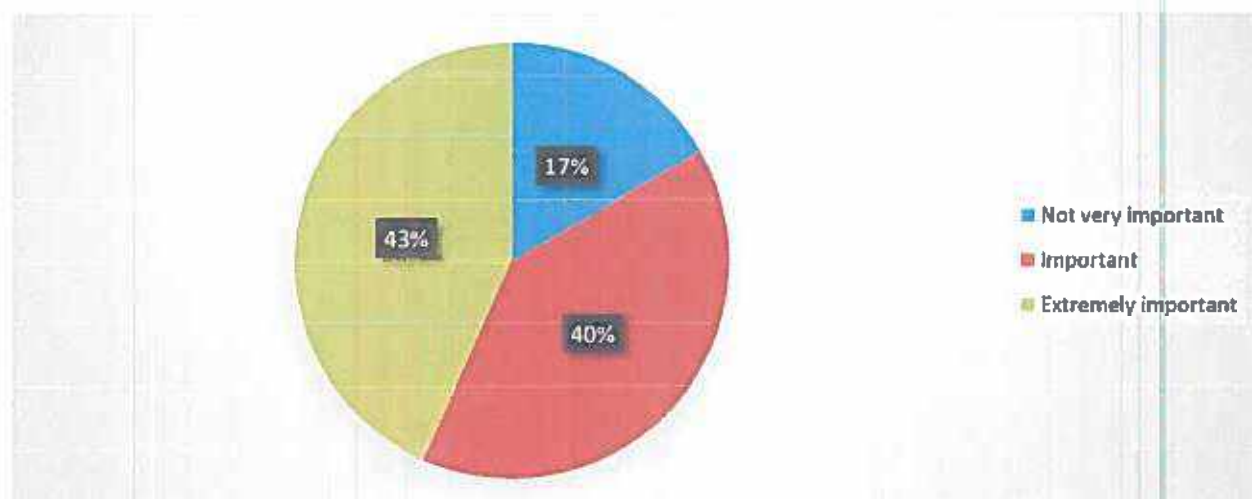
Interpretation:

It can be observed from the above table that out of 30 respondents of 10% of respondents are not considering brand loyalty 67% of respondents are considering brand loyalty and 23% of respondents giving importance. Majority of respondents i.e., 67% of respondents are considering brand loyalty for choosing brokerage firm.

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

Table 4.13 Shows response towards considering margin money for choosing a broking firm.

Particular	No. of Respondents	Percentage (%)
Not very important	5	17
Important	12	40
Extremely important	13	43



Interpretation:

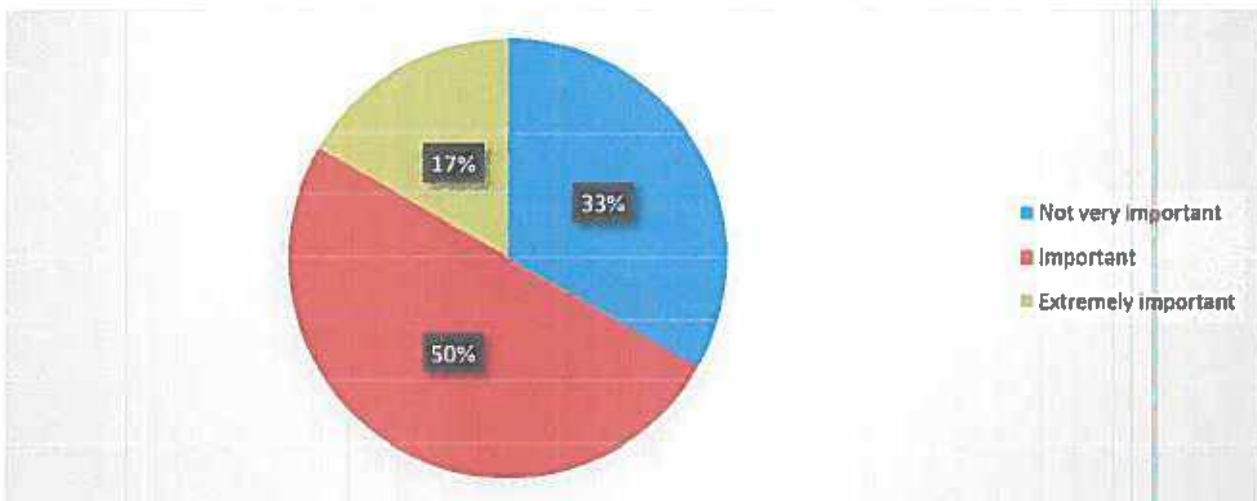
It can be observed from the above table that out of 30 respondents 17% of respondents are margin money is not important choosing a broking 43% of respondents are important and also 40% of respondents important. Majority of respondents i.e 43% of respondents said that margin of money very important for choosing brokerage firm.

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

Table 4.14 Shows response towards considering good trading tips choosing a broking firm.

Particular	No. of Respondents	Percentage (%)
Not very important	10	33
Important	15	50
Extremely important	5	17

Chart 4.14 Shows response towards considering good trading tips choosing a broking firm.



Interpretation:

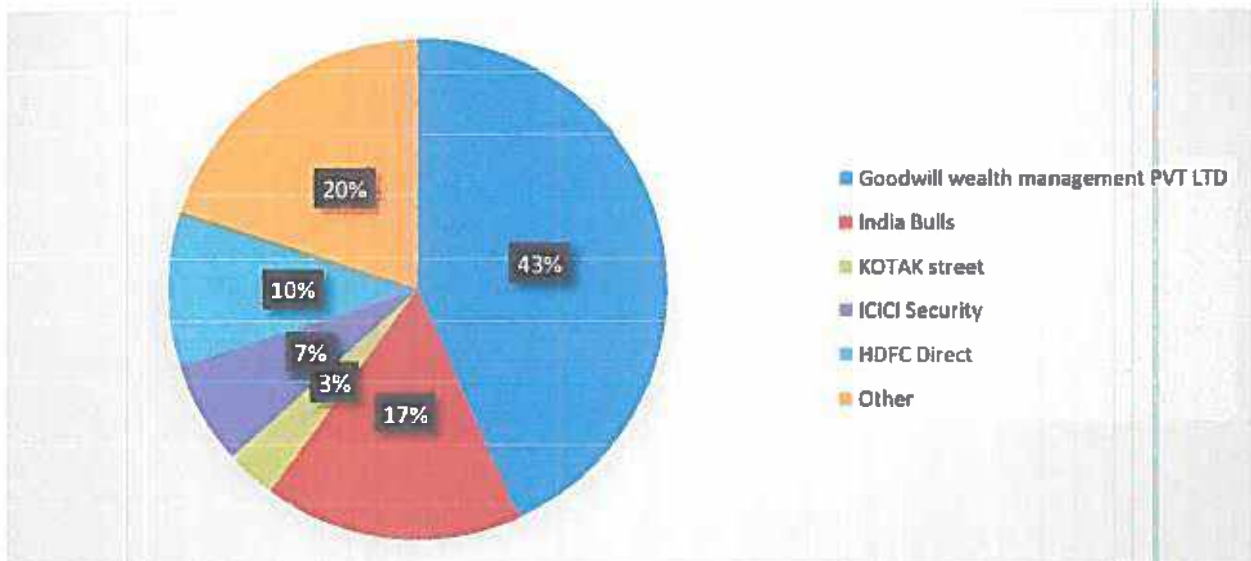
It can be observed from the above table that out of 30 respondents 33% of respondents are not considering the trading tips and 50% of respondents are considering the trading tips and also 17% of respondents considering trading tips. Majority of respondents i.e. 50% of respondents considering the trading tips.

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

Table 4.15 Shows Best broking firm.

Particular	No. of Respondents	Percentage
Goodwill wealth management Pvt ltd	13	43.33%
India Bulls	5	16.67%
KOTAK street	1	3.33%
ICICI Security	2	6.67%
HDFC Direct	3	10%
Other	6	20%

Chart4.15 Shows Best broking firm.



Interpretation:

It can be observed from the above that out of 30 respondents 43.33% of respondents says Goodwill wealth management Pvt ltd best firm and 16.67% of respondents India bulls 3.33% of respondents kotak street 6.67% of respondents Icici security 10% of respondents Hdfc direct and 20% of respondents other. Majority 43.33% of Goodwill wealth management Pvt ltd is best broking firm.

CHAPTER-5

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

5.2 SUGGESTIONS

5.3 CONCLUSION

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

FINDINGS, SUGGESTION AND CONCLUSION

5.1 FINDINGS

- From the study we can see that out of 30 respondents maximum 93.33% of awareness about share market and online trading.
- The study revealed that out of 30 respondents maximum 33.33% of the respondents preferring mutual fund for investment.
- It can be observed from study out of 30 respondents maximum 50% of preferring for return.
- The study revealed that out of 30 respondents 76.67% of having demat and Trading account.
- It can be observed from study out of 30 Maximum 26.67% Aware about brokering firm through friends.
- The study revealed that out of 30 respondents 53.33% of respondents says goodwill wealth management Pvt ltd providing large no of product and services.
- It can be observed from study out of 30 respondents maximum 43.33% of investor to invest in goodwill wealth management.
- The study divulged that out of 30 respondents 56.57% of investor considering the both return and risk for investment.
- It can be observed from study out of 30 respondents Maximum 36% of respondents are no set pattern use for trading.
- The study divulged that out of 30 respondents Maximum 95% of respondents online trading.
- From the study we can see that out of 30 respondents Maximum 50% of respondents says low brokerage is best for choosing a broking.
- The study divulged that out of 30 respondents Maximum 67% of respondents says brand loyalty is best for choosing a broking firm.
- The study divulged that out of 30 respondents Maximum 43% of respondents says margin money is best for choosing a broking firm.

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

- It can be observed from study out of 30 respondents maximum 50% of respondents says good trading tips are important.
- It can be observed from study out of 30 respondents Maximum 43.33% are opined the goodwill Wealth Management company is best broking firm.

5.2 SUGGESTIONS

The study was conducted on comparative analysis of goodwill wealth management pvt ltd and other stock broker house

On the based on the observation and personal discussion with investor and management of goodwill wealth management Pvt ltd, as researcher I would like to give some suggestions for working of goodwill wealth management Pvt ltd.

- There should be a limited number of clients under the relationship manger. So that he handle new as well as old customer properly
- Some promotional activities are required to create awareness to the customer
- People at young age should be encouraged to invest in stock market for that brokerages house should undertake investors awareness programs

A Study On Comparative Analysis of Goodwill Wealth Management Pvt Ltd And Other Stock Broker House

5.3 CONCLUSION

The study was concluded on comparative analysis of goodwill wealth management Pvt ltd and other stock broker house with the increases in cyber education awareness toward share market and share trading has leaps and bounds; the awareness is expected to increase future with the increase in internet education.

On the basis of the study, it is found that goodwill wealth management Pvt ltd is better services provider than the other share brokers because of their study and research and personalized advice on what stocks to buy and sell. goodwill wealth management Pvt ltd provides trade tiger as well as relationship manager the facility for encouragement and protect the interest of the investors. It also provides the information through the mail and mobile alerts that what IPOs are coming in the market and it also provides its research on the future prospect of the IPOs.

goodwill wealth management Pvt ltd is looked upon revenue generated and he gets a 100 % on business generated from client. This can lead to over leverage and high frequency trading which may in best interest of the customer.

Study also concludes that people are not much aware of commodity market and while it's going to be biggest market in India.

The company should also organize seminars and similar activities to enhance the knowledge of prospective, and existing customers, so that they feel more comfortable while investing in the stock market.

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Newspaper

Economic times

times of India

ANNEXURE

Questionaries

Dear Sir/Madam

It is matter of great pleasure to introduce myself Mr. Santosh Bandi studying M.com in KLE's Basavaprabhu Kore College Chikodi, as per the course requirement we need to undergo a major concurrent project entitled "A study on Comparative Analysis of Goodwill wealth management Pvt ltd and other Stock Broker House".

I am requesting you to please share your valuable time provide in information and opinion by filling this questionnaire. Your co-operation will be highly appreciated and also this will helpful to us to serve you better in future.

(NOTE): the information provided by you will be strictly kept confidential and used for academic purpose only.

1. Are you aware about share market and online trading?

Yes

No

2. In which of these financial instruments do you invest?

- Mutual fund
- Bonds
- Online trading
- Derivative
- Insurance
- Other

3. What is the basic purpose of your investment?

- Liquidity
- Returns
- Capitals
- Tax benefits
- Risk covering

4. Do you have a D-mat and Trading account?

Yes

NO

5. How did you come to know about the broking firm?

- Newspaper
- Journal
- TV Advertisement
- Internet
- Friend
- Other

6. Which company provides you large no. of product and services?

- Goodwill wealth management pvt ltd
- India bulls
- ICICI Direct
- HDFC Security
- KOTAK Street
- 5Paisa.com
- Other

7. How important do you think these factors influence in choosing a broking firm?

- Low brokerage :- (Not important) (Important) (Extremely important)
- Better customer service: - (Not important) (Important) (Extremely important)
- Brand loyalty: - (Not important) (Important) (Extremely important)
- Good trading tips: - (Not important) (Important) (Extremely important)
- Margin money: - (Not important) (Important) (Extremely important)
- Timely research report: - (Not important) (Important) (Extremely important)
- Friend recommendations: - (Not important) (Important) (Extremely important)

8. Are you interested to invest through goodwill wealth management Pvt ltd. in feature?

Yes

No

9. Most important things you take into your mind while making investments?

- Risk
- Return
- Both

10. Which mode of trading would you prefer?

Online

Offline

11. Low brokerage [How important do you think these factors influence in choosing a broking firm?]

- Not very important
- Important
- Extremely important

12. Brand loyalty [How important do you think these factors influence in choosing a broking firm?]

- Not very important
- Important
- Extremely important

13. Margin Money [How important do you think these factors influence in choosing a broking firm?]

- Not very important
- Important
- Extremely important

14. Good trading tips [How important do you think these factors influence in choosing a broking firm?]

- Not very important
- Important
- Extremely

15. Best company according to you?

- Goodwill wealth management Pvt Ltd
- India bulls
- ICICI Direct
- HDFC Security
- KOTAK Street
- 5Paisa.com

Any other comments/suggestions

Signature

**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON NON PERFORMING ASSESTS"
AT
JANATA CO-OPERATIVE SOCIETY, SADALAGA
Submitted to
RANI CHANNAMMA UNIVERSITY, BELAGAVI**



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

**Miss. Sarojani Khot
M.COM-IV SEMESTER**

REGISTER NO: MC191616

UNDER THE GUIDANCE OF

SHRI. V. S. KHOT

**K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that **Miss. Sarojani Khot** has satisfactorily completed the Project Report Entitled **"A Study on Non Performing Assets"** At **Janata Co-Operative, Sadalaga** for the partial fulfilment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year 2020-2021.

SHRI V. S. KHOT

PROJECT GUIDE

SHRI LAXMIKANTHA NAYAKA TO

COORDINATOR
P.G. Department of Commerce
B.K. College Chikodi

SHRI UDAYSINGH RAJPUT

PRINCIPAL
KLES'S Basavaprabhu Kore
Arts, Science and Commerce College
CHIKODI - 591 201



R.No. : 4983

Estd. : 02-08-1976

ದಿ ಜನತಾ ಕೋ - ಆಪರೇಟಿವ್ ಬ್ಯಾಂಕ್ ಲಿ.,
ಅಧಿಕಾರ ಕಛೇರಿ : ಸದಲಗಾ - 591 239 ಜಿ : ಬೆಳಗಾವಿ.

The Janata Co-operative Bank Ltd.,
Adm. Office : SADALGA - 591 239 Dist : Belagavi.

☎ : (08338) 251650. Fax : (08338) 251550 E-mail : janatabanksdg@yahoo.in

Ref. No

196 / ADM / 2021-22

Date 11 4 SEP 2021

CERTIFICATE

This is to certify that, Miss. Sarojani Mahadev Khot student of the Rani Channamma University, Belagavi with Reg. No. MC191516 of Master of Commerce has successfully completed her project on "A study on Non Performing Assets" at The Janata Co-operative Bank Ltd., Sadalga from 21st June 2021 to 20th August 2021.

During the project, she was found sincere and hardworking. We wish her all the success in her future best of luck.

Yours faithfully.

For The Janata Co-op.
Bank Ltd., Sadalga


General Manager



BRANCHES

MAIN BRANCH

☎ : (08338) 251650

YADUR

☎ : (08338) 258650

MANGUR

☎ : (08338) 268338

AINAPUR

☎ : (08339) 254441

BENADI

☎ : (08338) 267550

DECLARATION

I declare that the project report entitled "A Study on Non Performing Assets" At Janata Co-operative, Sadalagais a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. V. S.Khot, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 21/09/2021
Place: Chikodi



Miss. Sarojani Khot
Register No: MC191616

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

I sincerely express my deep sense of gratitude and appreciation to Internal Guide **Shri. V. S. Khot**, for his careful and valuable guidance, never ending patience and constant encouragement throughout the project.

I am beholden to **Shri. Laxmikantha Nayaka T O**, Co-Ordinator of PG Department of Commerce and Management for constant interest evidenced by him in my academic pursuits.

I express my deep intelligence of appreciation to **Shri. Udaysingh Rajput**, Principal of our college for his valuable suggestions and encouragement.

I express my sincere gratitude to **Shri. Sanju Majannavar**, Manager, Janata Co-operative, Sadalaga for providing me an opportunity to do a project in their organization.

At the outset, I would like to thank all the teaching faculty of PG Department of Commerce and Management for their valuable suggestions during project work.

My thanks are also to library staff for their cooperation during the course of project work and I am also thankful to Printers for their skillful printing of this project.

Finally I owe my deep sense of gratitude to my parents, friends and relatives for their constant encouragement and support.

Miss. Sarojani Khot

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CHAPTER 1

INTRODUCTION AND RESEARCH DESIGN

1.1 Introduction

1.2 Literature Review

1.3: Statement of The Problem

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INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION :

Management is becoming inevitable for every manager in today's corporate world. From a traditional aspect of raising funds whenever needed the importance has shifted to day to day financial decision making and problem solving. When initially the stress was on the internal analysis of the firm, procurement of funds, management of assets and allocation of capital, the present importance has shifted to decision making within the firm. With the modern aspect of finance function the responsibilities of the finance manager has also increased. In the process of optional decision, he makes use of certain analytical tools in the analysis, planning and control activities of the firm. Financial analysis is an essential prerequisite for making financial decisions.

The magnitude of NPAs have a direct impact on banks profitability legally they are not allowed to book income on such accounts and at the same time banks are forced to make provisions on such assets as per RBI guidelines The RBI has advised all State Co-operative Banks as well as the Central Co-operative Banks in the country to adopt prudential norms from the year ending 31-03-1997. These have been amended a number of times since 1997. As per their guidelines the meaning of NPAs, the norms regarding assets classification and provisioning is now very known that the banks and financial institutions in India face the problem of amplification of non-performing assets (NPAs) and the issue is becoming more and more unmanageable. In order to bring the situation under control, various steps have been taken. Among all other steps most important one was the introduction of Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 by Parliament, which was an important step towards elimination or reduction of NPAs. An asset is

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classified as non-performing asset (NPAs) If dues in the form of principal and interest are not paid by the borrower for a period of 180 days, however with effect from March 2004, default status would be given to a borrower if dues are not paid for 90 days. If any advance or credit facility granted by bank to a borrower becomes non-performing, then the bank will have to treat all the advances/credit facilities granted to that borrower as non-performing without having any regard to the fact that there may still exist certain advances or credit facilities having performing status. The NPA level of our banks is way high then international standards. One cannot ignore the fact that a part of the reduction in NPA's is due to the writing off bad loans by banks. Indian banks should take care to ensure that they give loans to credit worthy customers. In this context the dictum "Prevention is always better than cure acts as the golden rule to reduce NPAs.

1.2 LITERATURE REVIEW

A) Rao, M (2015) " A Study On Non Performing Assets Management With Reference to Public Sector Banks, Private Sector Banks and Foreign Banks In India" Author Try to give overview of NPA, Types of NPA and causes of NPA and Various Npa related ratio & use of square method to find out estimating Gross NPA, in the year 2014 and apply Annova test to judge the present difference between gross NPA to Gross Advance .

B) Shanmugasundaram V & S. N. Selvaraj (2015), As the Trend Line suggests that the NPAs of public sector banks will decline marginally both in terms of Gross and Net figures over next three years. A strong banking sector is important for a flourishing economy. The failure of the banking sector may have an adverse impact on other sectors. There is also a general perception that the prescription of 40% of net bank credit to priority sectors have led to higher NPAs. Managers of rural and semi-urban branches generally sanction these loans. In the changed context of new prudential norms and emphasis on quality lending and profitability, managers should

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make and attempt to find out the potential borrowers. The banks resources are scarce and these are meant to finance viable ventures for productivity purpose..

C)Mondal S (2015) “A Study on Non-Performing Assets of Foreign Banks in India”
The study seeks to observe the volume and trend of NPA of Foreign Banks in India in comparison to gross and net advances. For this study, data have been collected from secondary sources and simple statistical tools, tables have been applied. The results show that during the study period, i.e. from the year 2001-02 to 2012-13, percentage Non-Performing Assets to total assets and percentage of Non-Performing Assets to Gross & Net Advances of Foreign Banks in India has been decreasing

D)Narula and Singla (2014) evaluate the non – performing assets of Punjab National Bank and its impact on profitability & to see the relation between total advances, Net Profits, Gross & Net NPA. The study uses the annual reports of Punjab National Bank for the period of six years from 2006-07 to 2011-12. These papers conclude that there is a positive relation between Net Profits and NPA of PNB. It is because of the mismanagement on the side of bank.

E)Arora and Ostwal (2014) conducted study on “Unearthing the Epidemic of NonPerforming Assets: A Study of Public and Private Sector Banks” which deals with the concept of Non-performing assets and analyze the classification of loan assets of public and private sector banks. It also explores the comparison of loan assets of Public sector and private sector banks. The study concluded that private sectors improving due to decline in NPAs ratio compare to Public sector banks due to recovery management done in NPAs and suggest that there is need to check the NPAs of public sector banks so that Indian banking system becomes efficient

F)Hosmani H. (2013) conducted study on “Unearthing the Epidemic of Non Performing Assets with Reference to Public Sector Banks in India” an empirical and descriptive in nature which shows the magnitude and trend of Public Sector banks in India and found that there is a slight improvement in the asset quality reflected by decline in the diverse NPA percentage. The study concluded that NPA is an important parameter for assessing financial performance of banks in terms of profitability,

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liquidity and economies of scale in operation and banks has to take timely action against degradation of good performing assets.

G)Kavitha. N (2012), emphasized on the assessment of nonperforming assets on profitability its magnitude and impact. Credit of total advances was in the form of doubtful assets in the past and has an adverse impact on profitability of all Public Sector Banks affected at very large extent when non-performing assets work with other banking and also affect productivity and efficiency of the banking groups. The study observed that there is increase in advances over the period of the study. However, the decline in ratio of Non-performing Assets indicates improvement in the assets quality of SBI groups, Nationalized Banks and Private Sector Banks.

1.3: STATEMENT OF THE PROBLEM:

Study intends to problem in to the critical analysis of Non Performing Assets (NPA) of The Janata Co-Op. Bank Ltd, Sadaiga. Therefore It Is Entitled as the Critical Analysis of Non Performing Assets – A Case Study Of The Janata Co-Op. Bank Ltd. Sadaiga.

1.4: NEED FOR THE STUDY:

The study of non performing assets is the most important for bankers to understand the NPA of the bank. A high level of NPA's suggests high probability of large number of credit defaults that affect the profitability and network of banks and also erodes the value of the assets.

1.5: OBJECTIVE OF STUDY

1)To reveal Non Performing Assets of the bank and their quality.

2)To make necessary suggestions for improving management NPA.

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- 3) To identify and analyse the trends of NPA in co-operative banks
- 4) To suggest improvements in monitoring and reducing the NPA
- 5) To make policy suggestions for better management of NPA

1.6 SCOPE OF THE STUDY:

For the purpose of the proposed study only the Janata co-operative society is taken the study will cover a period of 4 years and examines the management of NPAs of the co-operative banks.

1.7 METHODOLOGY OF THE STUDY

Methodology of the research indicates the tools and techniques used for undertaking the research study for the purpose of evaluating the NPAs of Janata co-operative bank of Sadalga. Techniques of statistics and financial analysis will be used.

Collection of data:

Primary: here primary data has been collected from the bank's internal guide and personal

observations and discussion with various departmental heads and the employees.

2) **Secondary:** the proposed study will be mainly supported by secondary data which will be collected from the ;

- annual report of bank
- news papers
- journals

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- magazines
- websites

1.8 LIMITATIONS OF THE STUDY:

- a) The study is based only on NPAs with respect to loans.
- b) The study is based on the given by the officials and reports of the bank. The confidentiality of some facts and figures is a limitation.
- c) Availability of relevant information is one of the limitations.
- d) This study is only for the limited period of 4 years.

1.9 CHAPTER SCHEME:

Chapter 1 Introduction and Research Design

This chapter deals with the introduction, background of the study, objectives of study, literature of review, methodology of data and limitations of study.

Chapter 2 Conceptual Framework

This chapter deals with Overall banking and NPA, Narshimham committee, reforms in the role of RBI, emerging banking trends, a brief history of NPA, Indian banking of NPA, classification of assets, RBI guidelines for classification of assets provision requirements, measures for NPA containment, risk management.

Chapter 3 Banking Profile

This chapter deals with bank profile, board of directors, history of the bank, role of the bank, working structure, style, staff, aims and objectives of the bank, conduct of the meeting.

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Chapter 4 Data Analysis and Interpretation

This chapter deals with Data Analysis and Interpretation of collected data

Chapter 5 Finding Suggestions and Conclusion

This chapter deals with Finding Suggestions and Conclusion

CHAPTER 2

CONCEPTUAL FRAMEWORK:

- 2.1. Meaning of Bank
- 2.2 Meaning of Banking
- 2.3 Bank History
- 2.4 Functions of Bank
- 2.5 Structure of Indian Banking System
- 2.6. Co-Operative Banks In India
- 2.7 History of Co-Operative Banking In Karnataka
- 2.8Narashimham Committee
- 2.9 Emerging Banking Trends
- 2.10 A Brief History of NPA
- 2.11Classification of Assets:
- 2.12 RBI Guidelines for Classification Of Assets
- 2.13 Provisioning Requirements
- 2.14 Masers for NPA Containment
- 2.15 Risk Management
- 2.16Problems Loans Identification
- 2.17 Reasons for Non Performance in Loan Assets

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CONCEPTUAL FRAMEWORK

2.1. MEANING OF BANK:

A Bank is an institution which deals in money and credit. In other words, a bank is an institution accepting money as deposit for

lending. In Other Words, a bank is Tank of Money.

Definition of Bank:

An establishment authorized by a government to accept deposits, pay interest, clear checks make loans, act as an intermediary in financial transactions, and provide other financial services to its customers.

2.2 MEANING OF BANKING:

Banking means accepting for the purpose of lending or deposit of money from the public, repayable on demand or otherwise withdraw able check/draft or otherwise.

Definition of Banking:

Banking can be defined as the business activity of accepting and safeguarding money owned by other individuals and entities, and then lending out this money in order to earn a profit.

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2.3 BANK HISTORY:

Banking in India has its origin as far as the Vedic period. During the days of East India Company it was to turn off the agency houses to carry a banking business. The general bank of India was the first joint stock Bank to be established in the year 1786. The others which followed were the Bank of Hindustan and the Bengal Bank. The Bank of Hindustan is reported to have continued till 1906, while the other to fail in the meantime. In the first half of the 19th century the East India Company established free banks; The Bank of Bengal in 1809. The Bank of Mumbai in 1840 and the Bank of Madras in 1843. These 3 banks also known as presidency banks and were independent units and functioned well. These 3 banks were amalgamated in 1920 and the Imperial Bank of India was established on the 27th January 1921, with passing of the SBI Act in 1955, the undertaking of the Imperial Bank of India was taken over by the newly constituted SBI.

The Reserve Bank of India (RBI) which is the Central Bank, was created in 1935 by passing of RBI Act 1934, in the wake of Swadeshi Movement, a number of banks with Indian management were established in the country namely, Panjab National Bank Ltd, Bank of India Ltd. The Bank of Baroda Ltd. Central Bank of India Ltd. On July 19th 1969, 14 major banks of the country were nationalized and 15th April 1980, 6 more commercial private sector banks were also taken over by the government.

The Indian Banking Industry, which is governed by the Regulation Act of India 1949, can be broadly classified into two major categories, non-scheduled banks and scheduled banks. Scheduled banks comprise commercial banks and the co-operative societies. The first phase of financial reforms resulted in the nationalization of 14 major banks in 1969 and resulted in a shift from class banking to mass banking. This in turn resulted in the significant growth in the geographical coverage of banks. The next wave of reforms saw the nationalization of 6 more commercial banks in 1980. Since the number of scheduled commercial banks increased four-fold and the number of bank branches increased to eight fold. After the second phase of financial sector reforms and liberalization of the sector in the early nineties. The public found it extremely difficult to compete with the new private sector banks and the foreign

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banks. The new private sector first made their appearance, after the guidelines permitting them was issued in January 1993.

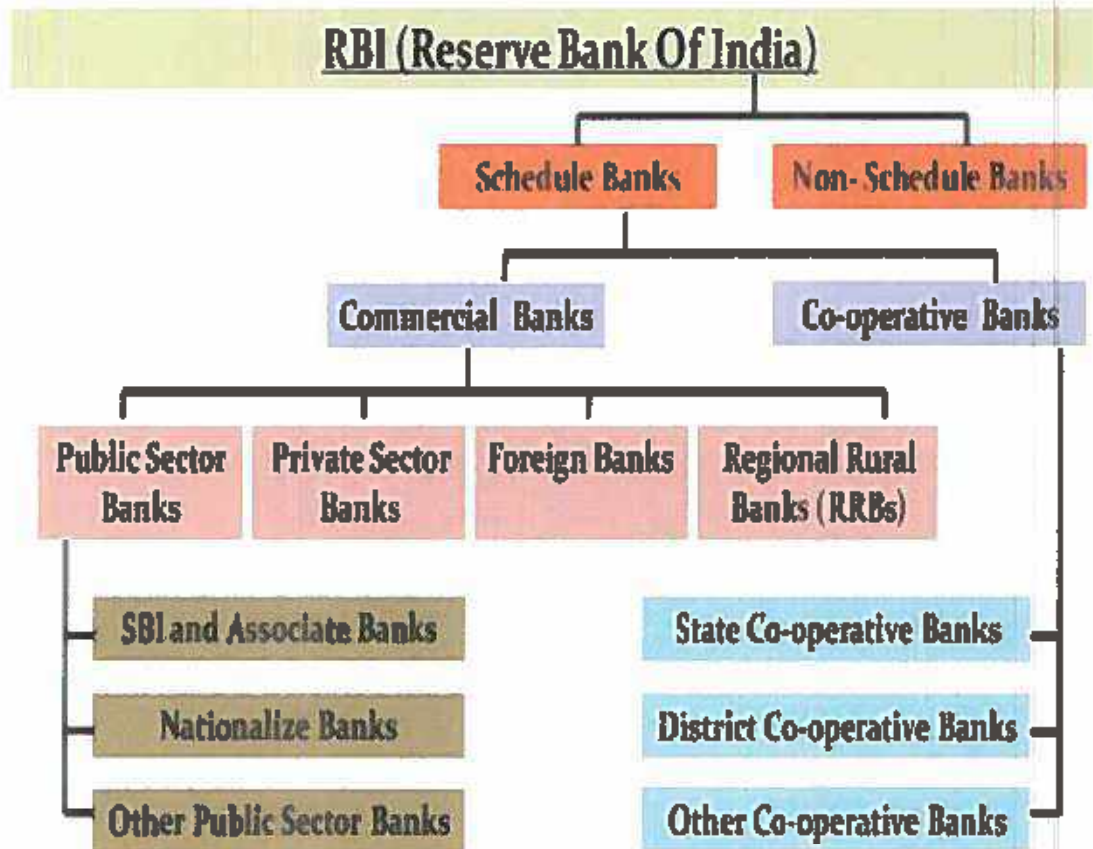
2.4 FUNCTIONS OF BANK:

- A bank accepts deposits from the public in the form of the savings, current and or term deposits.
- It accepts, on behalf of government, tax payments.
- It lends money for business, agriculture, purchase of house, purchase of vehicle etc.
- It accepts instructions from the members and makes, on their behalf, payment for utilities such as electricity bill, school fees etc.
- It offers safe deposits vault facilities for safe keeping of the member's valuables.
- It offers credit/debit card facilities which helps members make payments for their purchase. It is also possible to borrow money by using credit cards.
- Bank also sales insurance products.

The above list would show the importance role played by the bank in our day to day life. Banks are able to do all the above activities because they are financially intermediaries. It is important to note that the primary function of a bank is acceptance of money in the form of deposits and lending it to borrowers. A part of the deposits collected by the banks are also invested in the bonds and securities thus, deposits taking, lending and investment are the basic functions of the bank. The other activities above could be treated as other functions of a bank.

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2.5 STRUCTURE OF INDIAN BANKING SYSTEM:



2.6. CO-OPERATIVE BANKS IN INDIA:

Co-operative banks are organized group of people and jointly managed and democratically controlled enterprises.

They exist to serve their members and depositors and produce better benefits and service for them. Professionalism in co-operative banks reflects the co-existence of high level of skills and standards in performing, duties interested to an individual. Co-operative banks need current future development. In information technology. It is indeed necessary for co-operative banks to devote adequate attention to maximizing their returns on every unit of recourses. In Indian, they play a very important role in the financial system. The co-operative banks in India from the integral part of our

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money market today. Therefore, a brief resume of their development should be taken into account. The history of co-operative banks goes back to the 1904. In 1904, the co-operative credit society act was enacted to encourage movement in India. But the development of co-operative banks from 1904 to 1951 was the most disappointing one.

The first phase of co-operative bank development was the formation and regulation of co-operative society. The constitutional reforms which led to the passing of the government of India act in 1919. Transferred the subject of "co-operative" from government of India to the provincial government. The government of Bombay passed the first co-operative societies act in 1925 "which not only gave the movement, its size and shape but was a pace setter of co-operative activities and stressed the basic concept of thrift, self help mutual aid". This marked the beginning of the second phase in the history of co-operative credit institutions.

The India central banking enquiry committee (1931) felt. That urban bank has a duty to help the small business and middle class peoples. The Mehta-Bhansali committee [1939] recommended that those societies which had full filled the criteria of banking should be allowed to work as banks and recommended an association for these banks. The co-operative planning committee [1946] went on record to say that urban banks have the best agencies for small people in whom joint stock banks are not generally interested, the rural banking equity committee[1950], impressed by the law of establishment and operations recommended the establishment of development of co-operative banks took place only after the recommendations of all Indian rural credit survey committee [AIRCSC], which were made with the view to faster the growth of co-operative banks.

The co-operative banks are accepted to perform some duties normally, extend all type of credit facilities, to customer in cash, advances consumption loans, extend banking facilities, in rural areas, mobilize deposit, supervise the use of loans etc. Co-operative banks needs are different. They have lot of problems, which has affected the development of co-operative banks. Therefore, it was necessary to study this matter.

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2.7 HISTORY OF CO-OPERATIVE BANKING IN KARNATAKA:

Co-operative, in economic miracle of the 20 century, It is still one of the most potent instrument to resolve the socio-economic problems of the mankind, not by resorting to the revolution but through a process of mutual self help and co-operative effects. The co-operative movement in Indian was not spontaneously created out of Zeal by the people but it was sponsored by the colonial British Government. Initially, the co-operative were concerned with the credit delivery for the short term purpose, particularly for agricultural and allied activities. Later on, separate co-operative Institutions for extending investment loans were established. The movement which started way back in the year 1904 has come of age in 2009. Co-operative has contributed to its thought and refinement to bring about necessary changes to meet the emerging challenges. The co-operative credit system was established primary to combat the rural problem of usury and indebtedness of the farmers to vicarious Money- Lenders. Apart from the credit sector co-operative movement has made some Spectacular contributions in different industrial areas like sugar, milk, housing and many other segments of vital importance for the Indian economy. In fact, the reach and spread of the co-operative movement in India has been so widespread that, it presently, has the second largest co- operative sector in the world, next only to china. The enactment of co-operative credit societies Act of 1904 and the enactment of the co-operative societies act, 1912 marketed the beginning of a government policy of Co-operative movement was adopted as a state subject in 1919 by amending the India and constitution. In 1919, the MacLagon committee advocated that should be co-operative society for every village. In 1928, the royal commission suggested that the Co-operative movement should proper in India and the state should patronize co-operatives and protect the sector.

The co-operative movement is based on the spirit of working together and thereby eliminating the monopoly of powerful individuals. It is based on the principle of "one for all and all for one". The co-operative organization is characterized by mutual help and welfare of individual members. The co-operative movement was founded by

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Sanna Ningangouda Patil of Kanaginbal of Gadag District in Karnataka a far times in India. This Kanaginbal a small village located about eight Kilometers away from Gadag, happens to be the cradle of co-operative movement in India 8 may 1905, on which day Kanaginbal co-operative society was established member for the co-operative unit was founded on this day in this small village which then was part of the individual Dharwad district. The co-operative movement in Indian economy, over a century of fertile existence, has grown enormously and has earned the distinction of being the largest co-operative movement in the world.

The co-operative sector in India has passed through many tribulations and it has evolved over the past century in multifaceted manner. From co-operative credit to co-operative marketing, the sector has entered into and spread over almost all the facets of the rural economic life as well as some vital sectors of the urban economic space. It is a well with Indian co-operative sector. This is particularly so with the banking segment of the co-operative movement. Over the past decade, co-operative banking has been battered from many directions. A majority of co-operative banks have run into serious problems. A considerable number of them have come crashing down like house of cards. The situation requires immediate and drastic steps to pull the co-operative bandwagon back on track.

The co-operative banking in India has two facets. One is that of the agricultural credit system comprising of village agricultural credit co-operative societies forming part of district central co-operative banks with state level apex co-operative banks.

This segment of the co-operative banking has been all most entirely catering to the banking needs of rural population. The need for banking facilities among the rural population. Dependent mostly on the agricultural economy, is very acute. Hitherto, of any formal banking system, the rural farming community has entirely dependent upon the informal sources of funds that were both economically prohibitive and socially exploitative. In fact, the colonial British rulers ushered in the co-operative banking into the Indian economic scene with the purpose of helping the Indian farming community to get out of clutches of the money lenders.

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Co-operative are voluntary organizations of the have notes in the same cadre, joined together to achieve the common goal "co" and "opus" the two Latin words make it 'jointly operate'. Mutual help for self help is the principle and service is the motto of co-operative movement.

Important features of co-operative movement are:

- Voluntary membership,
- One member- one vote,
- Service motto,
- Public good,
- Non exploitative nature,
- Decentralized decision making,
- Eminent qualities for development,
- Combs private ownership,
- Economic, social and political- dimensions.

Formed on the foundation of such eminent features, co-operative credit has become the Back bone of agriculture in the country.

OVERALL BANKING AND NPA:

The Nationalization of the major commercial banks in the year 1969 and 1980 had brought radical changes in the banking system in India. It had brought about major shifts in the priorities in the banking operations. Branch expansion policies of banks were tuned up to meet the banking needs of the people in rural and semi urban centre. For accelerating the socio-economic rural development process several Government sponsored programs were launched and leading the in priority sector, irrational lending under socio political pressures, mounting level of bad dates, branch expansion at non viable centers etc. gradually started affecting the financial health of the banking sector in the country. Commercial banks were not following uniform accounting policies camouflaged the true financial position of banks. Quality of loan asset was not a concern and a high proportion of loan assets started becoming non-performing. Most

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of the bank were undercapitalized and some of them even with negative worth. Thus there was a compelling need for change and various policy corrections had to be taken with view of strengthening the economy. Thus the Government of India was forced to initiate process of reforming the financial sector which banks constitute a dominant part.

The reforms process includes:

- Introduction of prudential norms
- Transparency in the balance sheets
- De-regulation of interest rates
- Partial deviation from directed lending
- Up gradation of technology banks
- Entry of new private sector

2.8 NARASHIMHAM COMMITTEE:

The first phase of banking sector reforms was initiated in the year 1992 in pursuance of recommendations of committee on financial sector reforms headed by Narashimham committee.

As per the recommendation of Narashimham committee, the Reserve Bank of India introduced in phased manner prudential norms for income recognition, asset classification, and provisioning in the year 1998. Narashimham committee-II came out with more stringent norms for the industries. The prudential norms revised from

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time to time to fall in line with the best accounting practices and for transparency in published accounts.

It is widely recognized that as a result of these reforms, the Indian Banking System is becoming increasingly mature in terms of the transformation of business processes and the appetite for risk management.

Deregulation, technological up gradation and increased market integration have been the key factors driving change in the financial sector.

Recommendations of the Committee:

The 1998 report of the Committee to the GOI made the following major recommendations:

Autonomy in Banking:

Greater autonomy was proposed for the public sector banks in order for them to function with equivalent professionalism as their international counterparts.

To implement this, criteria for autonomous status was identified by March 1999 (among other implementation measures) and 17 banks were considered eligible for autonomy.

REFORM IN THE ROLE OF RBI:

First, the committee recommended that the RBI withdraw from the 91-day treasury bills market and that interbank call money and term money markets be restricted to banks and primary dealers. Second, the committee proposed a segregation of the roles of RBI as a regulator of banks and owner of bank. It observed that "The Reserve Bank as a regulator of the monetary system should not be the owner of a bank in view of a possible conflict of interest". As such, it highlighted that RBI's role of effective supervision was not adequate and wanted it to divest its holdings in banks and financial institutions.

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NON-PERFORMING ASSETS:

Non-performing assets had been the single largest cause of irritation of the banking sector of India. Earlier the Narasimham committee-I had broadly concluded that the main reason for the reduced profitability of the commercial banks in India was the priority sector lending. The committee had highlighted that 'priority sector lending' was leading to the buildup of non-performing assets of the banks and thus it recommended it to be phased out.

Capital adequacy and tightening of provisioning norms:

To improve the inherent strength of the Indian banking system the committee recommended that the Government should raise the prescribed capital adequacy norms. This would also improve their risk taking ability. The committee targeted raising the capital adequacy ratio to 9% by 2000 and 10% by 2010 and have penal provisions for banks that fail to meet these requirements.

Entry of Foreign Banks:

The committee suggested that the foreign banks seeking to set a business in India should have a minimum start-up capital of \$ 25 million as against the existing requirements of \$ 10 million. It said that foreign banks can be allowed to set up subsidiaries and joint ventures that should be treated on a par with private banks.

Stronger Banking System:

The committee recommended for merger of large Indian banks to make them strong enough for supporting international trade. It recommended a three tier banking structure in India through establishment of three large banks with international presence, eight to ten national banks and a large number of regional and local banks.

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2.9 EMERGING BANKING TRENDS:

During the current financial, the focus of non-going reforms in the banking sector was on soft interest rates regime, increasing operational efficiency of the banks, strengthening regulatory mechanism and on technological up gradation. As a step towards a softer interest rates regime, RBI in its annual policy statement had advised banks to introduced flexible interest system for new deposits, announce a maximum spread over PLR for all advances other than consumer credit and to review the present maximum spread over PLR and reduce them wherever they are unreasonably high.

2.10 A BRIEF HISTORY OF NPA

The concept of asset quality on the books of Public Sector Banks (PSB's) And Financial Institutions(FI's) came into being when Reserve Bank Of India(RBI) introduced prudential norms on the recommendations of the Narashimham committee in the year 1992-93. The committee recommended that an asset may be treated as Non-Performing Asset (NPA), if interest or installment of principle remains overdue for a period exceeding 180days and that banks and FI's should not take into their income account, the interest accrued on such Non-performing Assets, unless it is actually received or recovered. The committee also recommended that asset be classified into four categories namely Standard, Sub-standard, Doubtful and Loss Assets and that certain specified percentage of the same be held as provision there against. Before the reform process, banks were booking income on accrual basis and their balance sheets did not reflect their true specified financial health. Thus the profit, capital and reserves were overstated by them.

After 10years of NPA terror in the banking industry, "Now the banks have teeth". A new law lightens the burden of bad loans for Indian banks. The law that has been the catalyst for the bad loan cleans off passed India's parliament in November 2002. It allows lender to more easily foreclose on debtor assets or even demand a change in management. Within weeks of laws passage, banks saw a flood of loans once deemed unrecoverable unpaid in double time. The act is the securitization and reconstruction of financial asset and Enforcement of Security Interest Act, 2002 (Also known as the

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securitization act). This act enables the setting up of asset Management Company for addressing the problems of non-performing assets of banks and FI's.

Indian Banking and NPA:

The origin of the problem of burgeoning NPA's lies in the quality of managing credit risk by the bank concerned. What is needed is having adequate preventive majors in place namely, fixing pre-sanctioning appraisal responsibility and having an effective post-disbursement supervision. Bank concerned should continuously monitor loans to identify accounts that have potential to become non-performing.

The core banking business is of mobilizing the deposits and utilizing its for lending to industry. Lending business is generally encouraged because it has the effect of funds being transferred from the system to productive purposes which results into economic growth. However lending also carries credit risk, which arises from the failure of borrower fulfill its contractual obligations either during the course of transaction or on a future obligation. The history of financial institution also reveals the fact the biggest banking failures were due to credit risk.

Due to this, banks restricting their lending operation to secure avenues only with adequate collateral on which to fall back upon in situation of default.

Global NPA:

The core banking is of mobilizing the deposit and utilizing it for lending to industry. Lending business is generally encouraged because it has the effect of funds being transferred from the system to productive purposes which results into economic growth.

However lending also carries credit risk, which arises from the failure of borrower to fulfill its contractual obligations either during the course of a transaction or on a future obligation. A question that arises is how much risk can a bank afford to take? Recent happenings in the business world – Enron, World.com, Xerox, Global Crossing do not give much confidence to banks. In case, after case, these giant

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corporate became bankrupt and failed to provide investors with clearer and more complete information thereby introducing a degree of risk that many investors could neither anticipate nor welcome. The history of financial institutions also reveals the fact that the biggest banking failures were due to credit risk. Due to this, banks are restricting their lending operations to secured avenues only with adequate collateral on which to fall back upon in a situation of default.

It needs to be recognized that prudential norms in respect of loan classification vary widely across countries. A country follows varied approaches, from the subjective to the prescriptive. Illustratively, in the United Kingdom, supervisors do not require banks to adopt any particular form of loan classification and either is there any recommendation on the number of classification categories that banks should employ. Other countries, such as, the United States follows a more prescriptive approach, wherein loans are classified into several categories based on a set of criteria ranging from payment experience to the environment in which the debtor evolves. The adoption of such a system points to the usefulness of a structured approach that facilitates the supervisor's ability to analyze and compare bank's loan portfolios.

India is a better bet than China for investors to pump money into non-performing assets (NPA's) restructuring as it better environment for recovery, according to consulting firm Price water House Coopers(PwC).

Warning: Standard and Poor:

Standard & Poor's and the Credit Rating Information Services of India Ltd., (CRISIL) estimate that India's schedule commercial banks between US\$1.1 billion-US\$1.3 billion in new capital to support losses embedded in impaired assets. The significant capital shortfall estimated recognizes the existing moderate reported capital position of Indian banks, the inadequate loan loss reserves maintained by the banks to absorb likely losses.

The weak capital position of the India banking system is largely a reflection of growing asset-quality problems stemming from weak underwriting and credit management system, and the vulnerabilities of the Indian banking sector to the impact

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of globalization on the country's key industry sectors. The asset-quality position also has suffered from regulations with respect to lending to priority sectors. "The capital shortfall calculated assumes a significantly higher system non-performing loan level to that reported under Indian regulatory standards," said Peter Sikora, associate director, Financial Services Rating, Standard & Poor's together with CRISIL are, however, of the view that non-performing loan levels for Indian banks will be significantly higher at 20%-25% if more conservative classification standards are adopted and restructured, and ever greened loans are included as impaired assets.

Lending Behavior of Banks:

Due to the excess liquidity in the banking system, banks are now giving credit to even non-priority sectors in an aggressive manner. Now banks give credit more to unproductive purposes, like car loans, consumer durables loans and personal loans. This reckless lending paves the way to repayment irregularities and more of NPA in the banking system. But on the other side economy has become buoyant and the borrowers are now in a position to repay the loans even if it is an unproductive loan. Banks have improved their credit appraisal system. NPA percentage in City Bank's Car Loan Portfolio is zero, because of the sophisticated credit appraisal system followed by the bank. Banks now give priority to 'businesses' and lending schemes also follow the path.

2.11 CLASSIFICATION OF ASSETS:

Categories of NPA's:

Banks are required to classify non-performing assets further into the following three categories based on the period for which the asset has remained non-performing and the reliability of the dues.

- 1) Sub-standard assets
- 2) Doubtful assets

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3) Loss assets

Sub-Standard assets:

Sub-Standard assets were one, which was classified as NPA for a period not exceeding. With effect from 31/03/2001, a sub-standard asset is one, which has remained NPA for a period less than or equal to 18 months. In such cases, the current net worth of the borrower / guarantor or the current market value of the security charged is not enough recovery of the dues to the banks in full. In other words, such an asset will have well defined credit weakness that jeopardize the liquidation of debt and are characterized by the distinct possibility that the banks will sustain some loss, if deficiencies are not corrected. With effect from 31/03/2005, a sub-standard asset would be one, which has remained NPA for a period less than or equal to 12 months

2) Doubt full assets :

The doubtful assets were one, which remained NPA for a period exceeding two years. With effect from 31/03/2011, an asset is to be classified as doubtful, if it has remained NPA for period exceeding 18 months. A loan classified as doubtful has all the weaknesses inherent in assets that were classified as sub-standard, with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently known facts, conditions and values- highly questionable and improbable. With effect from 31/03/2005 an asset to be classified as doubtful if it remained in the sub-standard category for 12 months.

3) Loss assets:

Loss asset is one where loss has been identified by bank or internal or external auditors or RBI inspection but the amount has not been written off wholly. In other words, such an asset is considered uncollectable and of such little value that its

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continues as a bankable asset is not warranted all through there may be some salvage or recovery value.

It should be noted that the above classification is only for the purpose of computing the amount of provision that should be made with respect to bank advances and certainly not for presentation of advances in bank balance sheet. The third schedule to the Banking Regulation Act 1949, solely governs presentation of advances in the balance sheet. Banks have started issuing notices under the Securitization Act 2002 directing the defaulter to either pay back the dues to the bank or else give the possession of the secured assets mentioned in the notice. However, there is potential threat to recover a if there is substantial erosion in the value of security given by the borrower or if borrower has committed fraud. Under such a situation it will be prudent to directly classify the advances as a doubtful or loss asset, as appropriate.

2.12 RBI GUIDELINES FOR CLASSIFICATION OF ASSETS:

Broadly speaking, classification of assets into above categories should be done taking into account the degree of well-defined credit weaknesses and the extent of depends on collateral security for realization of dues.

Banks should establish appropriate internal system to eliminate the tendency to delay or postpone the identification of NPA's especially in respect of high value of accounts. The banks may fix minimum cut off point to decide what would constitute a high value account depending upon their respective business levels. Responsibility and validation levels for ensuring proper asset classification may be fixed by the banks. The system should ensure that doubts in asset classification due to any reason are settled through specified internal channels within one month from the date on which the account would have been classified as NPA as per extent guidelines.

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Up gradation of Loan Account Classified as NPA's:

If arrears of interest and principle are paid by the borrower in the case of loan accounts classified as NPA's, the account should no longer be treated as non-performing and may be classified as 'standard' accounts.

Assets classification to be borrower-wise and not facility-wise:

It is difficult to envisage a situation when only one facility to borrower becomes a problem credit and not others. Therefore, all the facilities granted by a bank to a borrower will have to be treated as NPA's and not the particular facility or part thereof which has become irregular.

If the debts arising out of development of letter of credit invoked guarantees are parked in separate account, the balance outstanding in that account should be treated as a part of the borrower's principle operating account for the purpose of application of prudential norms on income reorganization, asset classification and provisioning.

Accounts where there is erosion in the value of security:

A NPA need not go through the various stages of classification in cases of serious credit impairment and such asset should be straightaway classified as doubtful or loss asset as appropriate. Erosion in value of security can be reckoned as significant when the reliable value of the security is less than 50% of the value assessed by the bank or accepted by RBI at the time of last inspection, as the case may be. Such NPA may be straightaway classified under doubtful category and provisioning should be made as applicable to doubtful assets.

If the realizable value of the security, as assessed by the bank/approved value/RBI is less than 10% of the outstanding in the borrower accounts, the existence of security should be ignored and asset should be straightaway classified as loss asset. It may be either written off or fully provided for by the bank.

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Restricting/Rescheduling of loans:

A standard asset where the terms of the loan agreement regarding interest and principal have been renegotiated or rescheduled after commencement of production should be classified as sub-standard and should remain in such category for at least one year of satisfactory performance under the renegotiated or rescheduled terms. In the case of sub-standard doubtful assets also, rescheduling does not entitle a bank to upgrade the quality of advance automatically unless there is satisfactory performance under the rescheduled / renegotiated terms. Following representations from banks that the foregoing stipulations deter the banks from restructuring of standard and sub-standard loan assets were reviewed in March 2001. In the context of restructuring of the accounts, the following stages at which the restructuring/rescheduling/renegotiation of the terms of loan agreement could take place can be identified

Before commencement of commercial production

After commencement of commercial production but before the asset has been classified as sub-standard

After commencement of commercial production and after the asset has been classified as sub-standard.

2.13 PROVISIONING REQUIREMENTS:

As and when an asset is classified as an NPA, the bank has to further sub-classify it into sub-standard, loss and doubtful assets. Based on this classification, the bank makes the necessary provision against these assets.

Reserve Bank of India (RBI) has issued guidelines on provisioning requirements of bank advances where the recovery is doubtful. Banks are also required to comply with such guidelines in making adequate provision to the satisfaction of their auditors before declaring any dividend on their shares.

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In case of loss assets, guidelines specifically require that full provision for the amount outstanding should be made by the concerned bank. This is justified on the grounds that such an asset is considered uncollectable and cannot be classified as bankable asset.

Asset type	% of Provision
Sub-standard(Age up-to 12 months)	10%
Doubtful 1 (Age up-to 1-3 years)	20%
Doubtful 2 (Age 3-5 years)	30%
Doubtful 3 (Age above 5 years)	100%
Loss asset	100%

The NPA problem:

The origin of the problem of burgeoning NPA's lies in the quality managing credit risk by the banks concerned. What is needed is having adequate preventive measures in place namely, fixing pre- sectioning appraisal responsibility and having an effective post-disbursement supervision. Bank concerned should continuously monitor loans to identify accounts that have potential to become non-performing. The performance in terms profitability is a bench mark any business enterprise including the banking industry. However , increasing NPA's have direct impact on banks profitability as legally banks are not allowed to book income on such accounts and at the same time banks are forced to make provision on such assets as per RBI guidelines.

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Also, with increasing deposits made by public in banking system, the banking industry cannot afford defaults by borrowers since NPA's affects the repayment capacity on banks.

Further, RBI successfully creates excess liquidity in the system through various rate cuts and banks fail to utilize this benefit to its advantage due to the fear of burgeoning non-performing assets

Credit appraisal system:

Prevention of standard asset from migrating to non-performing status is most important in NPA management this depends on the style of credit management mechanism available in banks. The quality of credit appraisal and the effectiveness of post credit appraisal and effectiveness of post credit follow up influences the assets quality of banks in big way.

At pre-credit stage:

1. Extensive enquiry about the character and the credit worthiness of the borrower.
2. Viability of the project to be financed is meticulously studied.
3. Adequate coverage of collateral is ensured to the extent possible.
4. Financial statement of borrower is obtained and poor analysis of their financial strength is done.
5. Apart from the published financial statement independent enquiries are made with previous bankers.
6. Pre-credit inspection of the asset to finance is made.

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At post-credit stage:

1. Operations in the accounts are closely monitored.
2. Unit visit is done at irregular intervals.
3. Asset verification is done on a regular basis.
4. Borrowers submit control returns regularly.
5. Accounts are periodically to evaluate the financial health of the unit.
6. Early warning signals are properly attended to.
7. Close contact with the borrower is maintained.
8. Potential NPA's are kept under special watch list.
9. Potentially viable units are restructured.
10. Repayment program of accounts with temporary cash flow problem is rescheduling.
11. Immediate legal action is initiated in cases where the default is willful and the intention of borrower is bad.

Credit monitoring:

Credit monitoring system is for:

- * Preventing the slippage of quality assets through the monitoring of standard assets.
- * Up gradation of quality of impaired loan asset through recovery by means of legal or otherwise.
- * Up gradation of loan assets through nursing in deserving and viable cases

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Warning signals:

1. Default in revising periodic installments and interest.
2. Accumulation of stock and non-movement of stock.
3. Operating loss / net loss
4. Slow turnover of debtors and fall in level of sundry creditors.
5. Return of outward bills for collection/return of Cheque.
6. Labor troubles.
7. High turnover of key personnel.
8. Loss of critically important customers.
9. Court cases against the unit.
10. Avoidance of contacts with the bank
11. Delayed submission of financial statements
12. Disputes among partners/promoter

Credit risk and NPA:

Quite often Credit Risk Management (CRM) is confused with managing NPA's. However, there is an appreciable difference between the two. NPAs are the result of past actions whose effects are realized in the present, i.e., they represent credit risk that has already materialized and default has already taken place. On the other hand, managing credit risk is a much more forward-looking approach and is mainly concerned with managing the quality of the credit portfolio before default takes place. In other words, an attempt is made to avoid possible default by properly managing credit risk. Considering the current global recession and unreliable information in financial statements, there is a high credit risk in the banking and lending business.

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High cost of funds due to NPA:

Quite often genuine borrowers face the difficulties in raising funds in banks due to mounting NPA's. Either the bank is reluctant in providing the requisite funds to genuine borrowers if the funds are provided; they come at very high cost to compensate the lender's losses caused due to high level of NPA's.

Therefore, quite often corporates prefer to raise funds through commercial papers (CP's) where the interest rate on working capital charged by banks is higher.

The main purpose of this notice is to inform the borrower that either the same due to the bank or financial institution be paid by the borrower or else the former will take action by way of taking over the management of the company. Thus the bankers under the aforementioned act will have the much needed authority to sell the assets of the defaulting companies or change their management.

But the protection under the said act only provides a partial solution. What banks should ensure is that they should move with speed and be charged with momentum in disposing off the assets. This is because as uncertainty increases with the passage of time, there is all possibility that the recoverable value of asset also reduces and it cannot fetch a good price.

2.14 MEASURES FOR NPA CONTAINMENT

Measures to tackle NPA's:

Seeing the gravity of the situation, RBI has taken several constructive steps for arresting the incidents of NPA's. It has also created a regulatory environment to facilitate the recovery of existing NPA's of banks.

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1. Lok Adalats:

Lok Adalats have been set for recovery of dues in accounts falling in the doubtful and loss category with outstanding balance up to Rs. 5 lakh, by way of compromise settlements. This mechanism has, proved to be quite effective for speedy justice and recovery of small loans.

2. Debt recovery tribunals:

DRT's which have been set by the Government to facilitate to speedy recovery by banks/DFI's have not been able to make much impact on loan recovery due to a variety reasons like inadequate number, lack infrastructure, under-staffing and frequent adjournment of cases. It is essential that the DRT mechanism is strengthened and DRT's are vested with a proper enforcement mechanism to enforce their orders. Non-observance of any order passed by the tribunal should amount to contempt proceeding. The DRT's could also be empowered to sell the assets of the debtor companies and forward the proceeds to the winding-up court for distribution among the lenders. Also, DRT's could be set up in more centers preferable in district head quarters with more presiding officers. 22 DRT's have been set up in the country during the half last a decade. DRT's have not been able to deliver as they got swamped under the burden of large number of cases filed with since their inception.

3. Corporate debt restructuring:

Corporate Debt Restructuring (CDR) mechanism additional safeguard to protect the interest of the creditors and review potentially viable units. The CRD system was set up, in accordance with the guidelines RBI evolved in consultation with Government of India the objective of the CDR system is to ensure a timely and transparent mechanism for restructuring of corporate debts of viable entities and minimize the losses to the creditors and other stakeholders through an orderly and co-ordinate restructuring programmer. With CDR, banks can arrest fresh slippage of performing assets into the magnitude of assets. Under the system standard, sub-standard and doubtful assets can be restructured. The CDR mechanism is based upon effective co-ordinate among banks.

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Asset reconstruction companies (ARC's):

One of the most effective ways of removing NPA's from the books of the banks / DFI's would be to move these out to a separate agency which would buy the assets and make its own efforts for recovery. On this front, the SRES act has provided a frame work for setting up to asset reconstruction companies (ARC's) in India. A pilot company called assets reconstruction company (India) Ltd (ARCIL) has been set up under the joint sponsorship of IDBI, ICICI bank, SBI and others bank which is likely to provide an effective mechanism for banks to deal with the defaulting co. RBI has already issued final guidelines on the regulator frame work ARC's in April, 2003.

However, the success of ARC's will again depend upon the legal frame work which has to be addressed first. Legal provisions are required for transfer of the existing loan portfolio to the ARC's without the consent of the borrowers, for exercise of the power of private foreclosure by ARC's authorizing ARC's to take recourse to the debt recovery tribunals and granting exemption to ARC's from income-tax in order to mobilize resources by issue of bonds and exemption of ARC's from payment of stamp duty on conveyance / transfer of loans assets.

Reduction of NPA's:

The problem of the existing NPA's is currently being tackled in several ways. Efforts are made through negotiations and discussions with the borrowers to bring them around to settle the dues. Such settlements in the form of one-time settlement (OTS) and negotiated settlement (NS) are now being increasingly used by banks to reduce the level of NPA's. Under these schemes banks focus on maximum payment under the settlements being received up-front, and balance within the same financial year for quicker realization of locked up proceeds. However, despite such efforts made by the lenders, many defaulting borrowers exhibit reluctance to co-operate, leaving the banks no option but, to seek the legal route. Here lies the importance of a transparent legal system. Reforms in the existing legal system will go a long way in reducing the level and growth of NPA's in the banking system.

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6. Legal reforms:

The legal framework sets standards of behavior for market participants, details the rights and responsibilities of transacting parties, assures that completed transactions are legally binding and also provides the regulators with the necessary teeth to enforce standards and ensure compliance and adherence to law. Thus the legal framework is a key element for limiting moral hazards in Indian banking. As the problem of NPA's is closely linked with the issue of legal reforms the government has taken up initiatives to align the legal set-up with the requirements of banking system. As early as in 1999 the Andhyanujinacommitee set up by Government of India to formulate specific proposals to give effect to the suggestions made by the narashimham committee (1998) recommended amending the Recovery of Debts due to the Banks and Financial Institutions Act 1993 and Sick Industrial companies act, 1995. It also recommended a new legislation for banks and financial institutions to take possession and sale of securities without the intervention of the court, in respect of both immovable property and movable assets which resulted in the enactment of SRFAESI act 2002. The committee also considered securitization as an instrument to tackle the NPA problem.

7. Securitization:

Securitization enables risk sharing and trading of loans where the bad assets of banks can be securitized and sold at a discount. The lending institutions NPA's are hence removed from their balance sheets and are instead funded by investors through negotiable financial instruments. The security is backed by the expected cash flows for the assets. With securitization the NPA's in a bank's balance sheet can be upfront, which could be put to productive use.

High incidence of stamp duties makes securitization transaction unviable.

Under statutory assignment, securitization involves transfer of debt, which can be effected only by means of an instrument in writing. Every instrument by which property, whether movable or immovable, is transferred attracts as valorem stamp duty. Also, stamp duties being a state subject, vary from state to state.

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How they are bad for the economy?

NPA's constitute a real economic cost to the nation in that they reflect the application of scarce Capital and credit funds to unproductive uses. The money locked up in NPA'S are not available for productive use and to the extent that banks seek, to make provision for NPA's or to write them off, it is a charge on their profit.

To be able to do so, banks have to charge their productive and diligent customers a higher rate of interest. It thus becomes a tax on efficiency. It is the customer who uses credit efficiently that subsidizes the inefficiency represented by NPA's. This also raises the transaction costs in the system thus denying the diligent credit customers the benefits of lower rates, which would help them to be more efficient and competitive. NPA's, in short, are not just a problem for the banks. They are bad for the economy.

2.15 RISK MANAGEMENT:

Banking and risk are inseparable and risk management assumes significance as the banks have to take considerable risks. Analysis of risks also assumes importance as it determines the pricing for the products. As banking is subject to several types of risks like market risk, credit risk, liquidity risk, default risk, interest rate risk, investment risk, transaction risk, Foreign exchange risk, etc., proper perception and evaluation of risk is extremely important and any short comings on this score can play havoc on the financial decision.

It has been seen that in banks managing NPA's has been a reactive response rather than a proactive function. In a market driven environment, volatility and risk have increased considerably in any credit dispensation. Hence, a proper perception and evaluation of risk becomes essential along with market intelligence about the industry concerned.

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Effective appraisal and monitoring of loans:

In the present liberalized environment, globalization has a far reaching impact on the fortunes of the domestic industry and bankers have to be alert and equip themselves with the knowledge of the latest global trends and also study on an ongoing basis its implications on the industries financed by them. Thus, the appraisal and monitoring mechanism for loans needs to be revamped for control of NPA's. Banks need a robust end-to-end credit process. A robust credit process begins with an in depth appraisal focused on risks inherent in a loan proposal. Along with appraisal close monitoring of the loan account is equally important. It is a well-known fact that loans often go bad due to poor monitoring. An account does not become an NPA overnight. System should be in place such that the banker should be alert to catch signals of an account turning into NPA and quickly react, analyze, and take corrective action.

Banks should have a proper system in place to ensure that to the extent possible the assets are performing and do not turn into NPA's. In cases where the problems are of a short term nature and borrowers agree to clear the over dues within a short time period, temporary deferment is generally granted by the banks. In cases where the company requires longer time, depending upon the problems faced and the expected future cash flows, the proposals are considered for restructuring/re-placement of the dues.

All cases should be reviewed regularly and on the basis of review, 'stress cases' are identified which require more closer and effective monitoring. For these cases it becomes imperative to keep a close watch on the working of the company by taking up regular visits, calling for progress reports with greater frequency, engaging the services of concurrent auditors/technical consultants to exercise proper supervision and obtain independent report/assessment.

Assets recovery branch:

Assets recovery branches are specified branches for recovering NPA. The personnel in the branches are professionally competent to deal with defaulters and ensure repayment. It is meant for shifting the work of "high problem loans recovery" of main

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branches to specialized branches. It gives time to other branches to concentrate more upon branch's business development activities.

90 Days overdue effect:

As a facilitating measure for smooth transition to 90 days norm, banks have been advised to move over to charging of interest at monthly rests, by 01/04/2002. However, the date of classification of an advance as NPA should not be charged on account of changing of interest at monthly rests. Banks should, therefore, continue to classify an account as NPA only if the interest charged during any quarter is not serviced fully within 180 days from the end of the quarter with effect from April 01, 2002 and 90 days from the end of the quarter with effect from March 31st 2004.

There are two aspects to the adoption of the "90 days" overdue norm from identification of NPA's. The negative aspect is that NPA's will increase in the short term. But the positive aspect is that banks will become pro-active in detecting smoke signals about an account becoming bad and accordingly initiate remedial steps.

2.16 PROBLEMS LOANS IDENTIFICATION:

Identifications of accounts:

- 1) Term loan if interest/installments are overdue for four months & above.
- 2) Cheque on overdue, cash credit accounts if it is out of order continuously for four months.
- 3) In other loans if overdue four months & more.

2.17 REASONS FOR NON PERFORMANCE IN LOAN ASSETS

- A) Antiquated legal system in the country and defaulter taking shelter under this.
- B) Even DRT cases are not getting settled the way it was envisaged when tribunals were set up.

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C) Most of the NPA's have the cover of collateral by way of EM of landed properties. But real estate market depressed & thus impacted recoveries. Many large corporate borrowers have turned "wish defaulters" taking shelters under BIFR umbrella.

D) NBFC's are in doldrums, their recovery are adversely affected & strictures on accepting deposits has caused further resource crunch ultimately defaulting the banks, top priority being repayment of deposits. The bank has the highest exposure under this sector where the incidence of non performance is higher.

E) Textile industry is plagued by high cost of production & low returns & is running in loss & many units are being closed down.

F) The bank got fairly good exposure in real estate. The depressed real estate market has resulted in poor recovery rate in almost the entire segment.

G) In agriculture sector poor recovery has been due to various factors-recovery & RPDS advances has been affected by the sharp fall in rubber prices. Throughout the country aqua culture miserably failed due to reasons beyond the control of the borrowers we are not an exception.

H) Poor recovery in schematic loans is mainly due to willful default by the borrowers.

I) Default in share loans has been due to set back in securities market & sharp decline in the values of equities.

Assets Recovery Department:

Assets Recovery Department will conduct a study of banks exposure in different sectors, types of advances & other various parameters vis a vis the NPA position & the findings will be communicated to all field functionaries for initiating corrective action.

Effort shall be taken by branches to speed up the disposal of non-banking assets at the possession of the bank.

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The real effect of the continuing means of NPA will have a cascading effect on the bottom line because of the higher & higher provisions required on such accounts. Therefore the management of NPA calls for a short term & long term strategy. Prevention from further deterioration & recovery of the existing NPA's alone are the two alternatives for us to come out of the present problems.

Sub-Standard Assets:

This segment is more effort elastic in terms of recovery and hence the bank's recovery policy is to be tuned up for maximizing the recoveries from the sub-standard efforts.

NPA Recovery Action Plan:

Send simple reminder letters in installments / interest debited are not serviced on due dates.

If no results are forthcoming from the reminders, meet the borrower in person & persuade them to settle the accounts in person.

Official from the assets recovery cell at the regional office to compulsorily meet the borrower with Rs 5 lakhs & evaluate the reasons for non performance of account & suggest / evolve methods to improve the quality.

In cases of sick but viable industries units prospects for rehabilitation are to be looked into & a nursing program to be evolved.

Upgrade after 2 years, if the repayment is coming as per the redrawn schedule. If the accounts have become NPA due to cash flow problem the repayment program must be rescheduled according to the revised cash flow projections. This will enable the bank to maintain asset quality at the same level for two years, if the asset quality can be

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If the borrower is co-operative the settlement through compromise route to be considered

Double Assets:

Slippage of assets from sub-standard category to doubtful necessitates higher provisions requirements. Depending on the age of asset, 20% to 50% provision has to be made on such assets on the secured portion & 100% provision is required on the unsecured provision. Recovery of the doubtful assets in the normal course is difficult; the following strategies can be adopted in handling doubtful assets:

Borrowers are to be met in person to get the accounts settled through persuasion.

Ensure that the securities charged to the bank are intact and are not alienated.

Securities are to be inspected at periodic intervals and correct value properly recorded.

Legal remedy is the last resort.

Most of the accounts coming under this category are either suit filed or RR initiated. In case of suit filed accounts, cases are to be closely followed up with the advocates to ensure that the decree is obtained within a reasonable time.

Loss Assets:

Chances of recovery in most of these cases are very remote:

If recovery in the normal course is difficult, we may have to resort to legal remedies against the borrowers, guarantor, co-obligate, and effort shall be made to bring them to a compromise table for the settlement of the accounts.

In case of accounts coming under priority sector, recovery through the RR route is to be resorted to.

As per loss assets are concerned we have made 100% provision for loan losses. Hence there will not be any further impact on bottom line. If these assets are shed, notionally

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from the books of the bank. Such notional write-off will help in cleansing the balance sheet.

Even after write-off the branches can continue the recovery efforts thus made and can improve the bottom line of the bank. Recovery through legal action is time consuming.

CHAPTER 3

BANK PROFILE

3.1 Bank Profile

3.2 Board of Directors

3.3 Role of Janata Co-Operative Bank Ltd. Sadalaga

3.4 Working Structure of Janata Co-Operative Bank

3.5 Style

3.6 Staff

3.7 Skills

3.8 Shared Values

3.9 Organizational Chart

3.10 Products of The Janata Co-Operative Bank Ltd; Sadalaga

3.11 Aims and Objectives of The Bank

3.12 Conduct of The Meeting

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BANK PROFILE

3.1 BANK PROFILE:

THE JANATA CO-OPERATIVE BANK

MAIN ROAD SADALGA

Janatabanksdg@yahoo.in



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Information of The Janata co-operative bank ltd:

NAME OF THE BANK : The Janata Co-Operative Bank Ltd. Sadalga

ADDRESS : T.P.C No-1969, 1970, Main Road Sadalga.

AREA OF OPERATION :Belagavi distic accept chikodi taluka

YEAR OF ESTABLISHMENT: 1976

CHAIRMAN : Shri. VidhyasagarRamagouda Patil

RC REGISTERED NO : 4983/02-08-1976

RBI LICENCE NO : U.B.D.KAN/1655 P Dtd: 09-11-1998

No of Shareholders : 6375

Email id : janatabankscd@yahoo.in

IFSC Code : IBKL01340JC

NO OF BRANCHES : 1+5 Branches,

Main Branch Sadalga.

Sadalga (administrative office)

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3.2 BOARD OF DIRECTORS:

Si. No.	Name of the Directors	Designation
1	Shri. Vidhyasagar Ramagouda Patil	Chairman
2	Shri. Babu Satyappa Padalale	Vice-Chairman
3	Shri. Kumar Bhau Badanikai	Director.
4	Shri. Prabhakar Mallappa Telsang	Director.
5	Shri. Raygouda Shripal Patil	Director.
6	Shri. Lagamanna Murari Hugar	Director.
7	Shri. Chandrakant Appasaheb Patil	Director.
8	Shri. Adagouda Bhau Taradale	Director.
9	Shri. Sadashiv Babu Belavi	Director.
10	Shri. Pradeep Mahaveer Patil	Director.
11	Shri. Badasha Babu Jamadar	Director.
12	Shri. Rajagouda Ramagouda Patil	Director.
13	Shri. Ramesh Annasaheb Desai	Director.
14	Shri. Annasaheb Appanna Bajakke	Director.
15	Smt. Varsha Vijay Dixit	Director.
16	Smt. Nirmla Suresh Bhendawade	Director.
17	Shri. Sudhakar Ramachandra Melale	Director.

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History of the Bank:

The bank has been established by Shri Kumar BhavuBadanekai, Shree Prabhakar MallappaTelsang and Shri. AnnaravKrushnaji Dixit on 02/08/1976, with a initial share capital of 5400 rupees, working capital 28,844 rupees and deposits 23,026 rupees.

The bank done very well under the supervision of above members after registration. The has applied to reserve bank for getting registration on 06/05/1981. At that time the rules of reserve banks are not easy. After so many struggles the bank has been registered by RBI on 26/02/1996.

Till the bank serving the people by satisfying the needs of Sadalga and neighbor villages. With lot of hurdles bank managed to open its first two branches in Yadur and Mangur.

In 1976 the bank has only 9 directors but now it will be increased up to 15. The profit ratio of the bank increased year by year with Rs 2, 10,427 in 1986-87, Rs 12, 95,925 in the year 2006-07 again it has increased to Rs 40, 35,604.66 in the year 2017-18.

3.3ROLE OF JANATA CO-OPERATIVE BANK LID. SADALAGA:

The Janata co-operative bank plays an important role in sadalga as mentioned introduction the bank has established to provide financial support to the villages. Now a day, bank is providing various facilities. Are as that providing loans to

A study on non-performing asset at Janata Co-operative Society Sadalga

businessmen's, farmers, new entrepreneurs and other needed people, it is performing its role as co-operative Bank. (I.e. taking deposits and giving loans) in very effective way. Like-

1. Pan Card facilities
2. Fixed Deposits
3. SMS facility
4. Safe locker facility
5. Loans at lower interest rates.
6. Core Banking Facilities.
7. D.D at lower rate.
8. NEFT and RTGS Facility.
9. LPG Subsidy Facility.

3.4 WORKING STRUCTURE OF JANATA CO-OPERATIVE BANK:

Strategy:

Strategy of The Janata Co-Operative bank Ltd. Sadalga is to strengthening the overall agricultural sector in the district and to provide financial support for the rural development. For this purpose bank is raising funds through share capital, deposit

System:

System in the 7-S framework refers to all the rules regulations and procedure both formal and informal that complements the organization structure. It includes planning and control system, capital budgeting system, recruitment training and development system and performance evaluation system.

A study on non-performing asset at Janata Co-operative Society Sadalga

3.6 Planning and Control System in The Janata Co-Operative bank Ltd: Sadalga.

This is very important function, which is done by top management. It prepares plan every year by considering the potentiality, infrastructure facility and past performance. It is a master plan which consisting plan of all departments. While dreaming plan top management considers bank as a whole unit. Thus plan is the standard course of action prescribed for one year.

Capital Budgeting System in The Janata Co-Operative bank Ltd; Sadalga:

Capital budgeting may be defined as the firm's decision to invest its convert funds most efficiently in long term assets. It includes expansion or acquisition, modernization and replacement of long term assets. In The Janata Co-Operative bank Ltd; Sadalga annual budget are prepared by the top management. It is prepared on the basis of past performance and future prospective. This annual budget should be approved in annual general meeting.

Recruitment and Selection System:

The administration and staff department in The Janata Co-Operative bank Ltd; Sadalga undertakes the recruitment and selection process. It follows the government obligation for the purpose of recruitment. The board of directors and MD will be in the selection committee when recruitment and selection become necessary. Recruitment process in The Janata Co-Operative bank Ltd; Sadalga is purely on merit basis. Written test and personal interview is been carried out to select the candidates.

Performance Evaluation System:

The immediate superiors evaluate the performance of the employees. In The Janata Co-Operative bank Ltd; Sadalga respective Assistance general manager evaluate their subordinates. General Manager evaluates Assistance General Manager. Which managing director should approve.

A study on non-performing asset at Janata Co-operative Society Sadalga

3.5 STYLE:

1. Leadership style in The Janata Co-Operative bank Ltd; Sadalga is of automatic.
2. It has top to bottom or top down system style.
3. All the major decisions are taken by the board of directors.

3.6 STAFF:

Bank has divided its staff into following categories:

1. General Manager.
2. Assistant Manager.
3. Accountant.
4. Assistant Accountant.
5. Cashier.
6. Clerk.
7. Sweeper.
8. Security Guards

3.7 SKILLS:

In the MC Kinsey 7-S framework, skill is one of the most crucial attribute or capabilities of an organization. The term skill includes those characteristics, which most people use to describe a company. In other words skill refers to dominant skills or distinctive competence of an organization. Staffs of The Janata Co-Operative bank Ltd; Sadalga are highly qualified in accounting writing skills which are very essential for providing banking services. Rural orientations is one of the essential skills presents with The Janata Co-Operative bank Ltd; Sadalga.

A study on non-performing assets at Janata Co-operative Society Sadalga

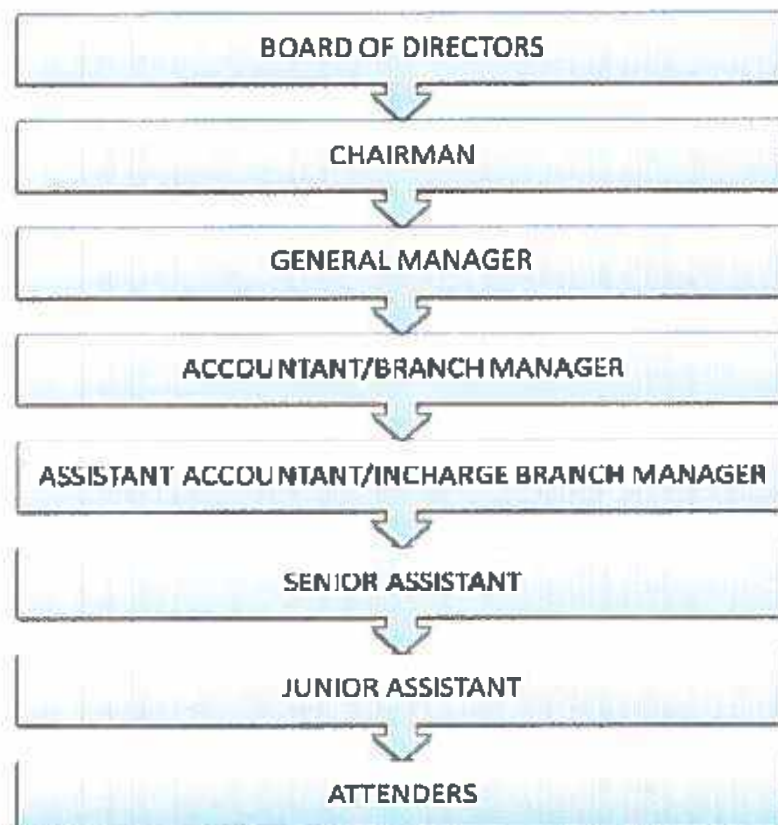
3.8 SHARED VALUES:

The core or fundamental values that are widely shared in the organization and serve as guidelines that are important, these values have greater meaning because they focus attention and provide broader sense of purpose.

The values of The Janata Co-Operative bank Ltd; Sadalga are Adhering to Co-Operative principles self help, self responsibility and self administration.

1. Welfare of the weaker sections of the Bank.
2. Customer Satisfaction.

3.9 ORGANISATIONAL CHART:



**A study on non-performing asset at Janata Co-operative
Society Sadalaga**

**3.10 PRODUCTS OF THE JANATA CO-OPERATIVE BANK
LTD; SADALGA:**

Types of Deposits	Rate of Interest
Current Deposit	9%
Saving Deposit	4%

Time Deposit	Individual	Senior Citizen	15 Lakhs and above
30 Days to 45 Days	5.50%	6.00%	6.00%
46 Days to 90 Days	6.50%	7.00%	7.00%
91 Days to 180 Days	7.00%	7.50%	7.50%
181 Days to 1 Year	7.50%	8.00%	8.00%
1 Year to 2 Year	9.00%	9.50%	9.50%
2 Year Above	8.00%	8.50%	8.50%

A study on non-performing asset at Janata Co-operative Society Sadalaga

Types of Loans	Rate of Interest
Cash Credit Loan	15%
Surety Loan	15%
Mortgage Loan(ST)	15%
Hypothecation Loan	14%
Hypo Cash Credit Loan	15%
Gold Loan	11%
Mortgage Loan (LT)	14%

3.11 AIMS AND OBJECTIVES OF THE BANK:

1. To undertake activities for the promotion of economic welfare of members and incidentally of the general public.
2. To receive funds and securities on behalf of the customers.
3. To act as guarantor on behalf of the banks members and customers by semi-government organization.
4. To accept discounting of bills to provide safe deposit lockers and other ancillary services.
5. To create funds get the promotion of Co-Operative education.
6. To mobilize funds.

A study on non-performing asset at Janata Co-operative Society Sadalaga

7. To lend money to its members to purchase on hire purchase of machines, equipments and motor vehicle etc.

8. To create funds for the promotion of education to limit prescribed by board.

9. Bank gives guarantees for the commitments of the customers.

3.12 CONDUCT OF THE MEETING

*Annual General Meeting – Once in a year.

*Board Meeting – Once in every month.

*Staff Subcommittee Meeting – Monthly based.

*Audit Committee Meeting – Quarterly based.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

Table: 4.1 Shows Net NPA Ratio % From 2017-18 To 2019-20

Table: 4.2 Shows NPA Financial Highlight

Chart: 4.2 Shows NPA Financial Highlight

Table: 4.3 Shows Growth Of Profit

Table: 4.4. Shows Deposits

Table: 4.5 Shows Loans & Advances

**A study on non-performing assct at janata co- operative
society sadalaga**

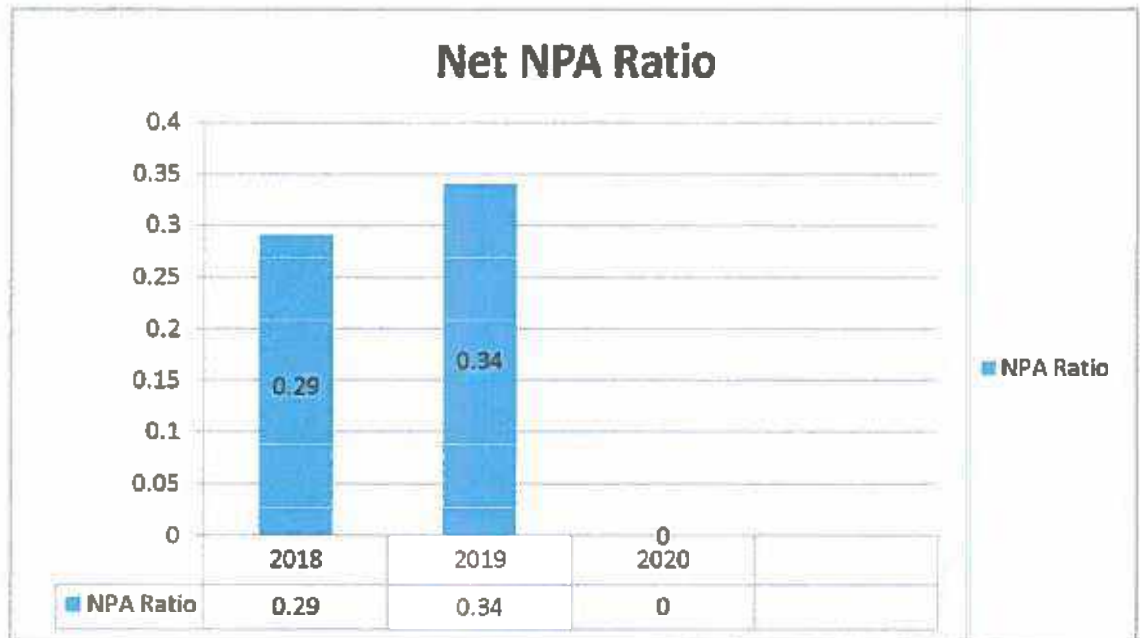
DATA ANALYSIS AND INTERPRETATION

TABLE: 4.1 NET NPA RATIO % FROM 2017-18 TO 2019-20

Sr. No	Particular	Year		
		2017-18	2018-19	2019-20
1	Members	4875	4966	5094
2	Share capital	14974400	16538100	17635100
3	Reserve fund	46517005	49113060	52555441
4	Deposits	400601923	462660039	467359011
5	Loans and advances	220808604	247607170	282924286
6	Working capital	470145240	534595031	545346122
7	Net profit	3820476	2576902	4035605
8	Net NPA	0.29%	0.34%	-.10%

A study on non-performing asset at janata co-operative society sadalaga

CHART: 4.1. SHOWS NET NPA RATIO % FROM 2017-18 TO 2019-20



Interpretation:

The above table shows that net NPA ratio from 2018 to 2020. In 2018 NPA ratio is .29 and 2019 it is .34 it is increased by .05 as compared to previous year. In 2020 NPA comes to 0, in 2020 NPA ratio is nil. Prudent asset management was accorded greater emphasis during the 2018 gross NPA of the bank as at March 2018 stood lower at Rs 138.58 lakh. Primary due to the introduction of new 90 days norms as a result in 2020 NPA ratio is nil.

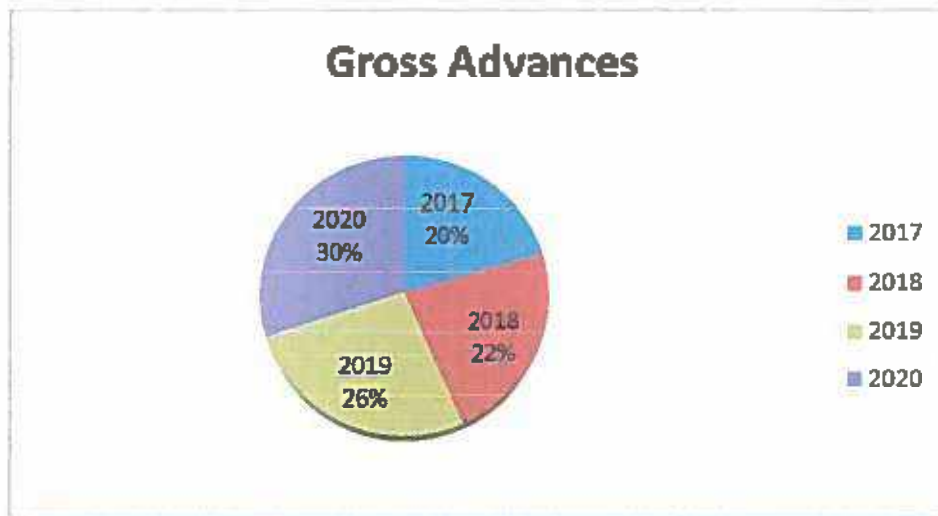
A study on non-performing asst at janata co- operative society sadalaga

TABLE: 4.2 SHOWS NPA FINANCIAL HIGHLIGHT

Year	Particular						
	Gross advances	Gross NPAs	Gross NPAs as % to gross advances	Total NPAs provisions held (BDDR Special BDDR balance after appropriation)	Net advance {(2(-)5}	Net NPAs {(3(-)5}	Net NPAs as % of net advances
2017	2252.81	106.1	4.71	98.19	2154.62	7.91	0.37
2018	2208.09	138.58	6.28	83.25	2089.78	55.33	2.64
2019	2476.07	145.69	5.88	119.41	2356.66	26.28	1.11
2020	2892.24	159.09	5.50	188.69	2703.55	-29.6	-1.09

A study on non-performing asset at Janata co-operative society sadalaga

CHART: 4.2 SHOWS NPA FINANCIAL HIGHLIGHT



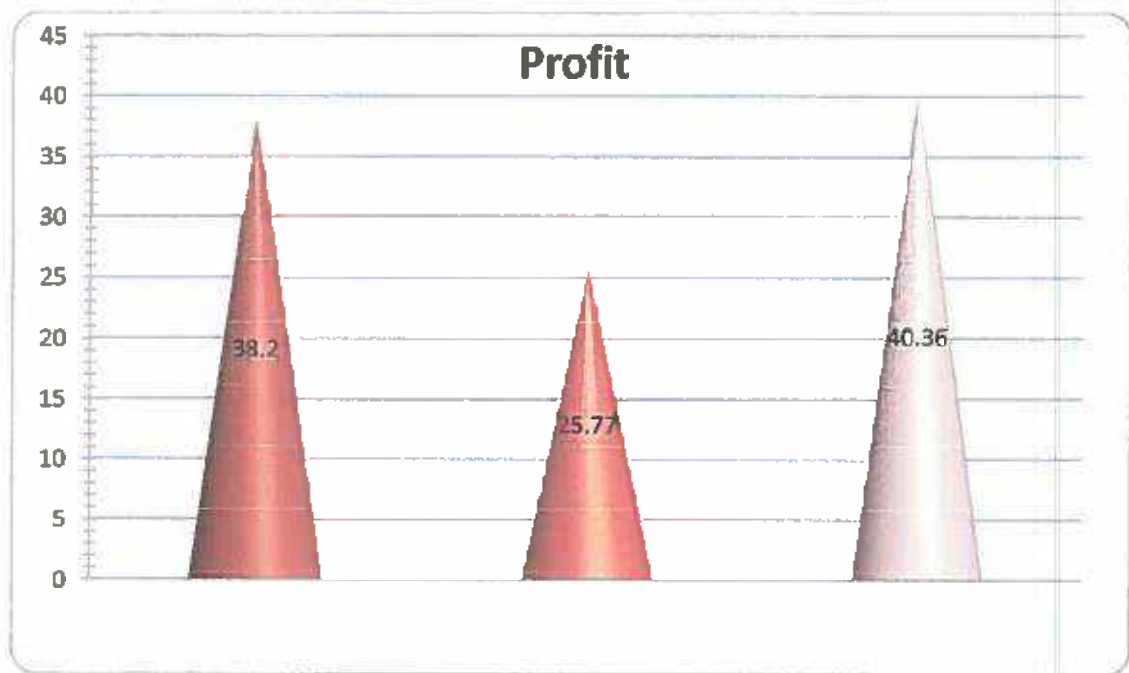
Interpretation:

It can be observed from above table during 2019-20, the The Janata co-operative bank continued to accord top priority to its asset quality and achieved considered success in bringing down volume of its impaired assets. Gross NPA Increased from Rs.145.69 lakh to Rs 159.09 lakh and as a percentage to total advances decreased from 5.88% to 5.50%. Net NPA of the bank declined from Rs.55.33 lakh at March 2017 to 26.28 lakh at March 2020, the Net NPA ratio coming from 0.29% to -.10%. Provisions made during the year for NPA amounted to Rs. (previous year Rs. 55.33 lakh).

A study on non-performing asset at Janata co-operative society sadalaga

TABLE: 4.3 SHOWS GROWTH OF PROFIT (RS. IN LAKHS)

Sr. No.	Year	Profit
1	2017-18	38.20
2	2018-19	25.77
3	2019-20	40.36



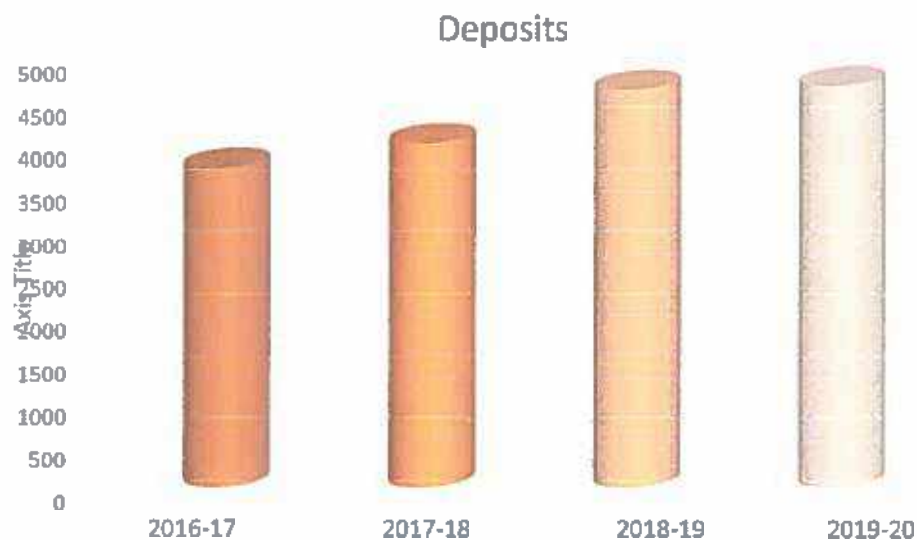
Interpretation:

This graph indicates in 2018 profit is 38.2 and in 2019 it falls to 25.77 and during 2019-20 The Janata Bank Sadalga continued to accord top priority to its asset quality and achieved considered success in bringing down volume of its impaired assets. Profits increased from Rs. 25.77 lakh to Rs. 40.36 lakhs.

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TABLE: 4.4. SHOWS DEPOSITS (RS.IN LAKHS)

Sr. No	Year	Deposits
1	2016-17	3710.07
2	2017-18	4006.02
3	2018-19	4626.60
4	2019-20	4673.59



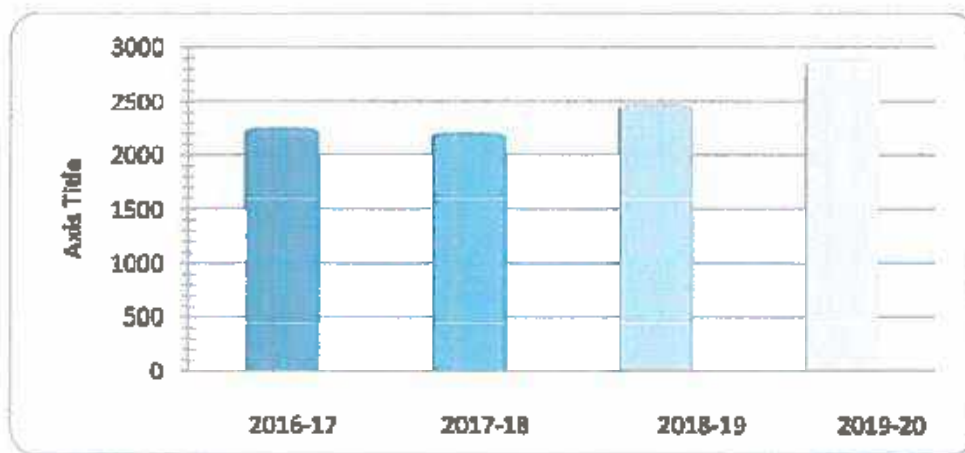
Interpretation:

It can be observed from the above table that in 2016-17 deposits is 3710.07. and profit increases year by year. during 2019-20 The Janata Bank Sadalga continued to accord top priority to its asset quality and achieved considered success in bringing down volume of its impaired assets. Deposits increases from Rs. 4626.60 Lakh to Rs. 4673.59 lakh.

A study on non-performing asset at Janata co-operative society sadalaga

TABLE: 4.5 SHOWS LOANS & ADVANCES

Sr. No	Year	Loans & Advances (amount in crores)
1	2016-17	2252.81
2	2017-18	2208.09
3	2018-19	2476.07
4	2019-20	2892.24



Interpretation:

From the above table we observed that loans and advances during 2016-17 is 2252.81cr .during 2019-20 The Janata Bank Sadalga continued to accord top priority to its asset quality and achieved considered success in bringing down volume of its impaired assets. Loans and Advances increases from Rs.2476.07 lakh to Rs.2892.24 lakh.

CHAPTER 5

FINDINGS, SUGGESTIONS AND CONCLUSION

- 5.1 Findings
- 5.2 Suggestions
- 5.3 Conclusion:

A study on non-performing assct at janata co- operative society sadalaga

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

- Non renewal of the limits.
- Interest/ installment not paid.
- Willing default.
- Sale of assets.
- Diversification of funds.
- Due to the natural calamities like floods, earthquakes, drought the loan become as non - payment.
- Lack of verification of his/her securities.
- Lack of man power for the frequent follow ups.
- Borrower absconding.
- Unit closed.
- The study revels that there is a increase in NPA from 2018-19 and in the year 2019-20 NPA is nill.
- The study revels that the gross advances and gross NPA shows increase in trend .
- The study revels the increase in tendency of profit.
- Increase the tendency in deposits also.
- Increase the tendency in loans and advances.

A study on non-performing asset at Janata Co-operative Society Sadalaga

5.2 SUGGESTIONS

- It suggested to bank to Issue of periodical notices.
- Conduct recovery campaigns.
- Take every NPA case as a separate issue and analyze the need for further funding from an economic point of view.
- Implement a system for selecting a good borrower.
- Immediate action has to taken for reduction of NPA in those sectors where NPA is more like agricultural sector.
- Bank should protect the interest of the investor but not at the cost of banks profitability.

5.3 CONCLUSION:

Non-performing asset means an asset or account of borrower, which has been classified by a bank or financial institution as Sub-standard, doubtful or loss asset in accordance with the directions or guidelines relating to asset classification issued by RBI.

Non-Performing assets play a very crucial role in the banking industry the origin of the problem of growing NPA's lies quality of managing credit risk by the banks concerned. What is needed is having adequate preventive majors in place namely, fixing pre-sanctioning appraisal responsibility and having an effective post-disbursement supervision.

Thus the Corporation bank being the nationalized and one of the best banks in India should concentrate much about the NPAs and strictly follow the guidelines given by the RBL.

BIOBOLOGY

REFERENCE BOOKS:

- Annual reports of The Janata Co-Op.Bank Ltd.,Sadalga.
- Recovery of loans-RBI.
- RBI Guidelines.
- Websites.

**K. L. E. SOCIETY'S
BASAYAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON MARGINAL COSTING"**

AT

**SHRI HIRANYAKESHI SAHAKARI SAKKARE KARKHANE NIYAMIT,
SANKESHWAR.**

Submitted to

RANI CHANNAMMA UNIVERSITY, BELAGAVI



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

Miss. Shilpa D Danappagol

M.COM-IV SEMESTER

REGISTER NO: MC191619

UNDER THE GUIDANCE OF

SHRI. S. M. BHOSAGE

**K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201
PG DEPARTMENT OF COMMERCE AND MANAGEMENT**



CERTIFICATE

This is to certify that Miss. Shilpa D Danappagol has satisfactorily completed the Project Report Entitled "A Study on Marginal Costing" At Shri. Hiranyakeshi Sahakari Sakkare Karkhane Niyamit, Sankeshwar for the partial fulfilment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year 2020-2021.

SHRI S. M. BIOSAGE

PROJECT GUIDE

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(Karnataka State

(Railway Station : GHATAPRABHA S.C.Rly.)



ಶ್ರೀ ಹಿರಣ್ಯಕೇಶಿ ಸಹಕಾರಿ ಸಕ್ಕರೆ ಕಾರಖಾನೆ ನಿಯಮಿತ,

ಜಿ : ಬೆಳಗಾವಿ)

ಸಂಕೇಶ್ವರ - 591 314.

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No.Est /Proj. Work No/2 60 7/2021

Date : /09/2021
21 SEP 2021

CERTIFICATE

This is to certify that **Miss. Shilpa D. Danappagol** M.Com IVth semester Student has undergone project work on "MARGINAL COSTING" in our factory from 16th August 2021 to 02nd September 2021.

During the training we found her sincere, honest, we wish all the best in her future endeavor.

This certificate is issued as per the request of the candidate.

Shilpa
I/c MANAGING DIRECTOR

To

Miss. Shilpa D. Danappagol
M.Com IVth Semester Student,
K.L.E Arts, Science & Commerce College,
CHIKODI-591 201

DECLARATION

I declare that the project report entitled "A Study on Marginal Costing" At Shri Hiranyakeshi Sahakari Sakhare Karkhane Niyamit, Sankeshwar is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. S. M. Bhosage, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 25/09/2021

Place: Chikodi


Miss. Shilpa D Danappagol
Register No: MC191619

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

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Miss. Shilpa D Danappagol

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UNIT-1

INTRODUCTION AND RESEARCH DESIGN

- 1.1 Introduction.
- 1.2 Review of literature.
- 1.3 Statement of the problem.
- 1.4 Need for the study.
- 1.5 Objectives of the study.
- 1.6 Scope of the study.
- 1.7 Research Methodology.
- 1.8 Limitations of the study.
- 1.9 Chapter scheme.

CHAPER-1

INTRODUCTION AND RESEACH DESIGN

1.1 INTRODUCTION

Sugar industry is the largest agro based industry in the rural India. About 45 million sugar cane cultivation, harvesting and ancillary activities constituting 7.5% of the population. On the 0.5% million skilled workers and semi-skilled workers, mostly from the rural areas are engaged in the sugar industry. The sugar industry in India has a focal point for socio-economic development in the rural areas by mobilizing rural resources, generating employment and higher income, transport and communication facilities. This project report starts with introduction of industry. Sugar industry owned by cooperative society. Producing three varieties of products, sugar, molasses & bagasse. Now a days there is competition between many sugar industries. This competition was increased by globalization of lubrication; due to liberalized economy there is no more demand for sugar. This project is an effort to liberalized economy there is no more demand for sugar. This project its an effort to know the MARGINAL COSTING of the company. India is developing country in which more than 70% population is dependent upon agriculture. In India wheat, cotton, rice tobacco & sugar cane are the some main crops. But the sugar cane is one of the important agriculture productions. And or by using the sugar cane we reduce sugar. This is very important item of daily meal. Sugar is mainly used cane we reduce sugar. This is very important item of daily meal. Sugar is mainly used for tea, coffee, and so many food products. It is also important raw material for bakery industry. The sugar is produced by so many co-operative also private factories. Sugar sector is one of the large scale Industry in manufacturing sector. Now days the competition in sugar sector is very high. Shree H.S.S.K.N.S is a cooperative society registered under Karnataka co-operative society's Act in 1969. The object of business is to encourage proper development of agricultural industrial amongst members on co-operative lives by promotion of co-operative and joint forming methods so as to secure best merits of modern large scale agriculture production to the owners of

the land. The nature of business is to encourage self-help, thrift & co-operate amongst members. Industrial development depends largely on the financial strength of the organization. Development of fund in an effective manner would better utilization of available resources and maintain minimum cost of production. In the other words control production cost and maximization of sales assist organization to earn more profit so cost play significant role in development of organization to produce a commodity, a firm has to incur some cost. These cost related to the payment which the firm has to make in producing the commodity. The cost of production in the words of Hanson is "the sum of all the payment to the factor of production. Engaged on the production of that commodity". The term cost of production is used in economics in a very wide sense an Industrial growth, expansion, monetization, computerization, application of upgraded technology, prompt redemption of payment concerned with short and long term obligation, survival in serve condition and climate is large externally rely upon organizational economic strength and even utilization of the appropriate opportunity arisen from market condition.

1.2 REVIEW OF LITERATURE

1. Limin Du, Aoife Hanley, Chu Wei (2015):

They paper estimated the marginal abatement cost curved (MACC) of CO₂ emissions in china based on a provincial panel for the period of 2001-2010. The provincial marginal (MAC) of CO₂ emissions is estimated using a parameterized Direction output distance fuction.

2. Thshome H Regassa, Charless Wortmann (2014):

Sweet sorghum (sorghum bicolour L. Moench) is a widely adapted sugar crop with high for bio energy and ethanol production. Sweet sorghum is well-adapted to marginal growing conditions such as water deficits, water logging, salinity, alkalinity and other constraints.

3. Luiz Felipe pellegrini, Silvio de Oliveira Junior (2011):

Many works have shown the potential of the Brazilian sugarcane industry as an electricity supplier. However few studies have how this potential could be achieved without jeopardizing the production of sugar and ethanol. Also the impact of modification in the co-generation plant on the

cost of production of sugar and ethanol has not been evaluation. This paper presents an approach to the problem of energy optimization to the co-generation system in sugarcane mills. A general model to the sugar and ethanol production processes.

4. Gale Boyd, J Mol burg, Raymond prince (1996):

This project implements a economic methodology to measure the marginal abatement costs if pollution by measuring the lost revenue implied by an incremental reduction in pollution. It utilizes observed performance, or best practice, of facilities to infer the marginal abatement cost. The initial stage of the project is to use data from an earlier published in electric utilities to test this approach and to provide insights on its implementation to issue of cost – benefit analysis studies needed by the department of energy.

1.3 STATEMENT OF THE PROBLEM

“The study on Cost Volume profit analysis and its impact on decision making”.

1.4 NEED OF THE STUDY

This study helps the company to identify their position by which the company can increase or decrease the total cost of production. It also helps the company to identify and offer a minimum rate of product price according to the expectations of the customer so that company's sales level will get increased, hence, it is prepared to conduct the study on marginal cost.

1.5 OBJECTIVES OF THE STUDY:

1. To study marginal costing of SHSSKNS from 2017-18 to 2019-20
2. To study the overall performance of organization
3. To study the growth and development of SHSSKNS
4. To understand the financial position of the organisation

1.6 SCOPE OF THE STUDY

Investment, borrowing etc. Change, this also covers study in general about this study is exclusively conducted for Hiranyakeshi sugar factory sankeshwar. It covers period 3 year financial statement analysis. The trends indicated may differ from year to year as the pattern of the industry. But comparison of financial indicator which the industry of beyond the scope of this project.

1.7 RESEARCH METHODOLOGY:

METHODOLOGY ADOPTED

DATA TYPE:

In this the type of data collection is...

Primary data

Secondary data

- **Primary data:**

Is collection through interaction with different heads' of department

- **Secondary data:**

The sources of collection of secondary data are:

a) Annual reports

b) Books

1.8 LIMITATIONS OF THE STUDY:

- 1) The data must collect within the span of time.
- 2) Due to the confidentiality of reports, data collection is limited.

1.9 CHAPTER SCHEME:

Chapter 1:

This chapter deals with introduction, review of literature, statement of the problem, need of the study, objectives of the study, scope of the study, research methodology, limitations of the study.

Chapter 2:

The chapter deals with introduction, meaning of marginal costing, definition of marginal costing, types of production cost, need for cost analysis, advantages of marginal costing, limitations of marginal costing, technique of marginal costing.

Chapter 3 :

This chapter deals with growth and development of the factory, key characteristics of sugar industry, key success factors, Karnataka sugar industry at glance, sugar mill, the growth of crushing rate, nature of business, vision and mission, product of the factory, board of directors, managing directors, sectors in hira sugar.

Chapter 4 :

This chapter deals with data analysis and interpretation.

Chapter 5 :

This chapter deals with findings, suggestions and conclusion.

UNIT-2
CONCEPTUAL FRAMEWORK

- 2.1 Marginal costing meaning.**
- 2.2 Definition.**
- 2.3 Types of production cost.**
- 2.4 Need for cost analysis**
- 2.5 Limitations of cost analysis.**
- 2.6 Advantages of marginal costing.**
- 2.7 Limitations of marginal costing.**
- 2.8 Technique of marginal costing.**

UNIT-2

CONCEPTUAL FRAMEWORK

2.1 MARGINAL COSTING

Marginal costing is a technique in which only variable manufacturing cost are considered and use while determining the cost of goods sold and valuing the inventories. Fixed overheads of business are not considered while ascertaining the product cost. They are met against the total funds arising out of excess of selling price over total variable cost. This fund called contribution. The technique of marginal costing guides management in cost estimating, profit planning and making important managerial decisions.

- a. The amount at any given volume of output by which aggregate cost are changed "if the volume of output is increased or decreased by one unit".
- b. The ascertainment, by differentiating between fixed cost and variable costs, marginal costs.

*Profit is always a matter of primary concern to management. The volume of sale never remains constant. It fluctuates up and down and. Income also goes up and down with fluctuations in volume. Profit is actually the result of interplay of different factors like cost, volume and selling price. When total costs and total revenues are equal, the business organization is said to be breaking even. The analysis is based on a set of linear equations for a straight line and the separation of variable and fixed costs. Although No one can be certain that costs are linear over the entire range of output or

production, this is an assumption of CVP. The relevant range is represented by the high and low output points that have been previously reached with past production. CVP analysis is best viewed within the relevant range, that is, within our previous actual experience. Outside of that range, costs may vary in a nonlinear.

Cost-volume profit analysis

Cost- volume profit analysis is an extension of the marginal costing. It studies, the Inter-relationship of three basic factors of business operations.

- Cost of production
- Volume of production/ sales and
- Profit

These three factors are Inter-connected in such a way they act and react on one another because of cause and effect relationship amongst them. The cost of a product determines its selling price & the selling price determines the level of profit. The selling price also affects the volume of sales which directly affects the volume of production in turn influence the cost.

2.2 DEFINITION

The study of the effects on future profits of changes in fixed cost, variable cost, sales price and understanding the CVP analysis is extremely useful to Management in budgeting and profit planning. It explains the impact of the following on the net profit.

- Changes in selling price
- Changes in volume of sales
- Changes in variable cost
- Changes in fixed cost

2.3 TYPES OF PRODUCTION COST

Before the studying the marginal costing is more important to knowledge about various types of production cost.

1.Fixed cost :

Fixed costs is those costs which do not change with the changes in the level of output in the short

run. Those costs remain constants at all levels of output and crop up even before anything is produced. In other words in the short run a firm must incur fixed cost even when the output is nil. These costs are also called overhead costs. Because they are common to all the units of the commodity produced by the firm. Fixed cost of firm generally includes the following contractual commitments.

- Rent of the factory premises.
- Interest on capital.
- Salary payment of permanent staff.
- Insurance premium.
- Deprecation and maintenance costs.
- Property and business levels, annual license fees etc.

2. Variable costs/ marginal costs:

Variable cost is those costs with changes with changes in the level of output in the short run. In other words, these costs increase when output rise and decrease when output falls, therefore, no variable cost has to be incurred when the output is nil these costs are also referred to as direct costs because the quantity of production of a firm depends directly upon them. They are also called prime costs, they are also known as 'avoidable costs'.

The variable cost of a firm in the short run includes the following.

- Cost of raw material,
- Wages of labour
- Cost of fuel and power
- Transport costs
- Sales tax and excise duties etc.

3. Total costs:

Total cost is the aggregate of those costs, all inputs used by a firm to produce a given output. In other words, it is the total of all expenses incurred by a firm for produce in a given output.

Total cost = fixed cost + variable cost.

2.4 NEED FOR COST ANALYSIS

As discussed above, the information disclosed by the financial statement may be misleading, and misleading if not arranged in a meaningful way and if not studied analyzed and interpreted properly. The way purpose of analyzing the important of cost is to locate, the areas to further investigation in order to determine the solvency of business and to evaluate its profitability for this purpose, the results are disclosed by the financial statements are treated as more indicator or signals based on which further examination and investigation are carried out.

2.5 LIMITATION OF COST ANALYSIS:

- a) cost is classified into elements, and while considering the elements hard and fast rules cannot be laid down, for the sake of convenience even the direct material is required to be treated as indirect material. Thus what is direct and what is indirect in particular case will depend upon convenience.
- b) Division of cost into fixed and variable cost is also based on convenience.
- c) Different methods of pricing of issue of material are adopted.
- d) predetermined overhead rates are used while determining the cost of products.

2.6 ADVANTAGES OF MARGINAL COSTING:

Following are some of the advantages of marginal costing to the business in the particular and other interested parties in general.

- 1) It is simple to understand and can be combined with the standard
- 2) Since only variable costs are charged to production cost per unit of production remain unchanged. Thus, the effect of varying charges per unit caused due to fixed overhead is avoided.
- 3) As the variable cost are controllable the management is more concerned with variable cost. Thus cost data required for decision making and profit planning are readily available from accounting records
- 4) As the fixed overheads are not charged to production the problem of over or under-absorption does not crop up. In case of manufacture of a number of products relative profitability can be ascertained easily.

2.7 LIMITATIONS OF MARGINAL COSTING:

- It is difficult to separate fixed and variable cost clearly.
- The semi-variable cost is not considered in the analysis.
- Sales revenue and variable cost are not increasing

2.8 TECHNIQUE OF MARGINAL COSTING

Specialized technique designed to show the state of profitability at a given level of activity, following some formula and equation are used. For considering marginal costing, is extensively used in all industries for profit planning, cost controlling, and decision making.

1. Contribution:

The excess of selling price over the marginal or variable cost is referred to as contribution. Contribution is not net profit because here only variable costs are considered and not the fixed cost. Are deducted from contribution, we get net profit/ loss . If contribution is equal to fixed cost there is either profit/ loss.

The following are the formulas....

Contribution = selling price –variable cost

= fixed cost + profit

Profit = contribution + fixed cost

OR

= selling price (variable cost +fixed cost)

The knowledge of contribution margin is a valuable aid to management in making decisions. On the basis of knowledge of "contribution" the management can decide.

- 1) Whether to accept or reject a new order.
- 2) A product or sales mix . The mix which give maximum contribution be adopted and
- 3) A selection of production method from alternative methods available.

2. Profit volume (p/v) ratio or contribution sales ratio:

This ratio establishes a relationship between the contribution and sales value. This ratios a useful guide in determining profitability of business. It is generally ' expressed in percentage.

The following are some formulas which are helpful to calculation of p/v ratio.

$$\text{P/v Ratio} = \frac{\text{Contribution}}{\text{Sales}} \times 100$$

OR

$$\text{p/v Ratio} = \frac{\text{Sales- variable cost}}{\text{sales}} \times 100$$

$$\text{p/v Ratio} = \frac{\text{changes in contribution}}{\text{change in sales}} \times 100$$

OR

$$\text{p/v Ratio} = \frac{\text{Change in profit}}{\text{change in sales}} \times 100$$

The ratio would remain constant at different level of production. This ratio is useful for determination of the desired level of output or profit and for the calculation of variable costs for any volume of sales. The variable cost can be expressed as.

$$\text{Variable cost} = \text{sales} (1-\text{p/v ratio})$$

Break – even point:

It is a point at which the total cost is equal to the income or sales. In other words it is a volume of sales at which there is neither profit nor loss. If sales cross the point, there results profit to the business and if the sales are the business suffers loss.

$$\text{BEP (in units)} = \frac{\text{Fixed cost}}{\text{Contribution per unit}}$$

$$\text{BEP (in Rs)} = \frac{\text{Fixed cost}}{\text{p/v Ratio}}$$

Margin of safety:

The margin of safety is the difference between actual sales at the breakeven point. In other words, when the actual sales exceeds the BEP sales, it is known as margin of safety. If the margin of safety is large, it is an indication of the soundness of business and the possibility of huge profits. On the other lands, if it is small, it indicates a very low profit or even a loss.

$$\text{Margin of safety} = \frac{\text{Profit}}{\text{p/v Ratio}}$$

OR

$$\text{Margin of safety} = \text{Actual sales} - \text{sales at BEP}$$

UNIT-3**INDUSTRY PROFILE**

- 3.1 Growth and Development.**
- 3.2 Key characteristics of sugar industry.**
- 3.3 Key success factors.**
- 3.4 Karnataka sugar industry at glance.**
- 3.5 Sugar mill.**
- 3.6 The growth of crushing rate.**
- 3.7 Nature of business.**
- 3.8 Vision and mission.**
- 3.9 Product of hira sugar, Features of the factory.**
- 3.10 Board of directors.**
- 3.11 Sectors in Hira sugar.**

UNIT-3

INDUSTRY PROFILE

Sugar can be produced from sugarcane, Sugar-beet or any other crop having sugar content. But in India, sugarcane is the main source of sugar. At present, this is the second largest agro- based industry of India after cotton textile industry. This industry involves a total capital investment of Rs. 1,250 crore and provides employment to 2.86 Lakh workers. In addition, 2.50 crore sugarcane growers also get benefit from this industry. In India, major sugar producing states are Maharashtra, Gujarat, Uttar Pradesh, Haryana, Tamil Nadu, Punjab, Karnataka, Bihar and Andhra Pradesh.

3.1 GROWTH AND DEVELOPMENT

India has a long tradition of manufacturing sugar. References of sugar making by the Indians are found even in the Atharva Veda. India is rightly called the homeland of sugar. In the early years of the 20th century, the industry grew rather sluggishly and there were only 18 mills in 1920-21 and 29 mills in 1930-31. The industry got a great fillip after the fiscal protection in 1931 and the number of mills rose to 137 in 1936-37. The Production also shot up from 1.58 lakh tonnes to 9.19 lakh tonnes during the same period. The industry passed through an uncertain phase during and after the World War II and some stability was experienced only after 1950-51. There were 139 mills producing 11.34 lakh tones of sugar in 1950-51. After that, the plan period started and the industry made rapid strides. In the year 1994-95, there were 420 mills producing 148 lakh tonnes of sugar. As per the Government of India's liberalized policy announced on 12th December, 1986 for licensing of additional capacity for sugar industries during 7th five-year plan, there will be only one sugar mill in a circular area of 40 sq km. Also the new sugar mill is allowed with an installation capacity of 2500 TCD (Tone Sugar Cane crushed per day) as against the earlier capacity norms of 1250 TCD. Similarly, the existing sugar mills with a sugar cane capacity of about 3500 TCD can crush Sugar cane to the tune of 5000 TCD with a condition imposed that additional requirement of

sugar cane be acquired through increased productivity and not sucrose, a disaccharide produced from the sugar cane plant and from the sugar beet. The refined sugars from the two sources are practically indistinguishable and command the same price in competitive markets.

The constituents of ripe cane vary widely in different countries and regions but fall generally within the following limits: Constituent Percentage range

Water 69.0 - 75.0

Sucrose 8.0 - 16.0

Reducing sugars 0.5 - 2.0

Organic matter other than sugar 0.5 - 1.0

Inorganic compounds 0.2 - 0,

Nitrogenous bodies 0.5 - 1.0

Ash 0.3 - 0.8

Fiber 10.0 - 16.0

Organic materials other than sugar include proteins, organic acids, pentose, coloring matter and wax. Organic acids present in the cane are glycolic acid, malice acid, succinct acid and small quantity of tannic acid, butyric acid and acenitic acid.

3.2. KEY CHARACTERISTICS OF SUGAR INDUSTRY:

- Capital intensive
- Government regulated
- Seasonal fluctuation in the industry (demand increases during festive season)
- Raw materials constitute major cost
- No proper substitutes

3.3. KEY SUCCESS FACTORS (KEY PERFORMANCE INDIVATORS):

- Capital utilization
- Optimum utilization of by-products for additional revenue
- Captive power generation

Sugar consumption rate is highest in India as shown in the statistics received from Foreign Agricultural Service. However, as per production is concerned, India has notched up 2nd position following Brazil, the largest sugar producer in the world. Almost 2.6 lakh people are directly dependent on the sugar industry for their livelihood. Sugar industry is an agricultural industry that still provides the maximum amount of employment in India.

3.4 KARNATAKA SUGAR INDUSTRY AT GLANCE:

Karnataka Sugar Industry ranks 3rd in terms of its contribution of sugar in the total sugar production in the country. The Sugar Industry in Karnataka is able to manufacture sugar in such huge quantities due to the fact that sugarcane is abundantly available in the state. In fact, Karnataka stands 4th in the country in the cultivation of sugarcane.

The Sugar Industry in Karnataka has around 41 sugar factories which are distributed all over the state. The various locations of the sugar factories of Karnataka Sugar Industry are Konnur, Varuna, Koppa, Madapura, Dandeli, Jambagi, Hosur, Margur, Yelgur, Siddapur, and Arsanghatta. The major benefits of Karnataka Sugar Industry are that it has generated many facilities in the state such as communication, employment, and transport. It has also benefited the state by helping in the development of the rural areas of the state by mobilizing the various resources of the villages. The major sugar factories of Karnataka Sugar Industry are:

- Bannari Amman Sugar Ltd. With the sugarcane crushing capacity of 5000 TCD.
- Davangere Sugar Company Ltd. with the sugarcane crushing capacity of 2500 TCD.
- Sri Chamundeswari Sugars Ltd. With the sugarcane crushing capacity of 4000 TCD.
- Godavari Sugar Mills Ltd. With the sugarcane crushing capacity of 7500 TCD.
- Mysore Sugar Company Ltd. With the sugarcane crushing capacity of 5000 TCD.
- Athani Farmers Sugar Factory Ltd. With the sugarcane crushing capacity of 4000 TCD.



Shri Hiranyakeshi Sahakari Sakkare Karkhane Niyamit Sankeshwar is one of the Pioneers in the co-operative sugar industries in the state of Karnataka, being on the boundary of Karnataka-Maharashtra states. The idea of establishing a sugar factory in the Cooperative Sector was first originated in the minds of Late Shri. Appanagouda Patil. The chief promoter is Shri M. P. Patil the theme "Co-operation Minister" of Mumbai region with the primary aim of uplifting the rural economy. The industrial License No. L. 8/55 DT. 05.01.1955 was obtained from the Govt. of India. The Society came into existence vide Registration No. G-277 dt. 10.09.1956 and the first trial crushing season commenced in the year 1961. The area of operation of the factory extends to 233 villages in Karnataka state and 77 villages in Maharashtra state within a radius of 22 miles. Since the factory has its members both in Karnataka and Maharashtra, it is governed under the Multi-State cooperative societies act. This area was underdeveloped before the establishment of

this factory. Now, following the establishment, there is lots of progress achieved which is apparent. The social status of the agricultural community has improved largely and Sankeshwar town is made visible on the Karnataka map significantly. This has resulted in recognizing the Belgaum District as "Sweet Sugar District".

3.5 SUGAR MILL :

The factory initiated started crushing at the rate of 1250 TCD which had been a big capacity then. But, as time passed away and the demand increased, to meet this required demand, the substantial expansions were undertaken by the factory and it crawled up 8000 TCD crushing capacity.

- The first stage of expansion increasing the crushing capacity from 1250 TCD to 1750 TCD commenced in the year 1965 and was completed in the year 1968.
- The second stage of expansion from 1750 TCD to 2600 TCD was undertaken during 1971 and completed in the year 1975.
- The third stage of expansion scheme of 2600 TCD to 3500 TCD was completed in 1981.
- The fourth stage of expansion scheme of 5000 TCD was completed in the year 1990. This Mill has now the capability of reaching 6500 TCD crushing rate with minor modifications on the smaller Mill.
- Finally the fifth stage of expansion scheme from 5000 TCD to 8000 TCD has been completed in the year 2015.

3.6 THE GROWTH OF CRUSHING RATE:

Crushing capacity in TCD	Period
1250	1961-62
1750	1968-69
2600	1972-73
3500	1980-81
5000	1990-91
8000	2017-18

The above clearly indicates that there has been a continuous increase in the availability necessitating quick expansions of the plant to higher capacities. As the factory continued to enjoy good cane availability, it was felt that the factory should take full advantage of the same by balancing the plant equipment in a manner such that it results both in increase in the average rate of crush and also improvement in overall technical performance.

3.7 NATURE OF BUSINESS

Nature of Business carried Hira sugar is involved in the activity of manufacturing white crystal sugar products which is the main product. The process of production involves conversion of

- 1) Raw sugar cane to sugar
- 2) Raw sugar into refined sugar, Molasses, Bagasse's is its byproducts

3.8 VISION AND MISSION

Vision

"Total customer satisfaction"

Mission

- Encourage Agro-based co-operative industry.
- To develop the co-operative movement in rural sector.
- To encourage the farmers to grow sugar cane for the production of sugar and its by-products.

AIMS AND OBJECTIVES OF THE COMPANY

The object of the society is to encourage proper development of Agricultural Industrialization amongst members on Co-operative lives by promotions of principal and methods of Co-operative and joint forming methods so as to secure best merits of modern large scale agricultural production to the owners of lands and for this purpose.

- To manufacture sugar jogger and their byproducts out of sugar-cane grown and supplied by members of the society and other and to sell the same to the best advantage.
- To undertake such other activities as are identical and conducive to the development of the society etc.
- To acquire and install machinery for the utilization of the product and buy raw material and sell finished product in the course of utilizing and marketing the by-products.

3.9 PRODUCT OF HIRA SUGAR

The products of Hira Sugar include:

1. Sugar: Hira Sugar manufactures mainly three varieties of sugar it includes mainly three types of sugar.

- M- [Medium size]
- S1-[Small size]
- S2-[very small size]

2. Molasses: It contains a large percentage of non crystallisable sugar and is a valuable source of raw material for manufacture ethyl alcohol or other products such as oxalic acid, lactic acid etc. Molasses is also used as nutritive additive in the manufacture of cattle feed. In the present industry the molasses is used in its captive distillery in the production of ethanol.

3. Botler Ash: It contains silica, and other metal oxides. It is a non-toxic material. It is also used along with the agro wastes for composting and production of fortified green manure. In the proposed industry the ash is mixed with press mud the same is composted and is disposed to farmers as a soil conditioner for agricultural land.

4. Bagasse: Bagasses is a fibrous material containing mainly cellulose material and therefore it can be used as a raw material in the manufacture of pulp and paper.

FEATURES OF THE FACTORY

1 AUTHORISED & PAID UP SHARE CAPITAL

The authorized share capital of the factory is Rs. 27.50 crores as stands on 31.03.2017 having share value of Rs.5000/- each. The membership is open to sugarcane growers under 'A' class (producer members) and to Co-operative society and individuals under 'B' class (non producer members). Initially during 1961 when the first crushing trial season commenced, the authorized share capital was Rs.19.99 lakhs under 'A' class and Rs.37,500/- under 'B' class with the number of shareholders as 2135 and 249 under 'A' and 'B' class respectively. Today i.e. as on 31.03.2017 the membership is as shown below

INFORMATION REGARDING MEMBERSHIP AND PAID UP SHARE CAPITAL

AS ON 31.03.2018

Description	No. of members	No. of shares	Amount (Rs.)
'A' class members	30,297	51,491	25,14,59,409.10
'B' class members (Institutions & Individuals)	806	808	38,21,000.00
TOTAL	31,103	52,299	25,52,80,409.10

Initial, the govt. of Karnataka had contributed Rs. 25 lakhs towards the share capital of the factory under state partnership in the development of the industry which was paid in the year 1979 at one stretch.

2. RESERVES & OTHER FUNDS:(As On 31.03.2018)

(Rs. In lakhs)

a)	Reserve fund	1,345.30
b)	Depreciation and other funds	28,912.31
	TOTAL	30,257.61

3. DEPOSITS: (As On 31.03.2018)**(Rs. In lakhs)**

a)	Non- refundable deposits	962.87
b)	Expansion deposits	394.30
c)	Special deposits	804.82
d)	Term deposits	539.03
e)	Refundable deposits	164.64
	TOTAL	2,865.66

1. INVESTMENTS: (As On 31.03.2018)

The factory has invested Rs. 132.85 lakhs in Shares, Deposits and NSC etc

The details are as under.

(Rs. In lakhs)

a)	Shares	129.87
b)	Deposits	2.63
c)	NSC & Postal savings	0.35
d)	Call Deposit (SBI SKV)	NILL
	TOTAL	132.85

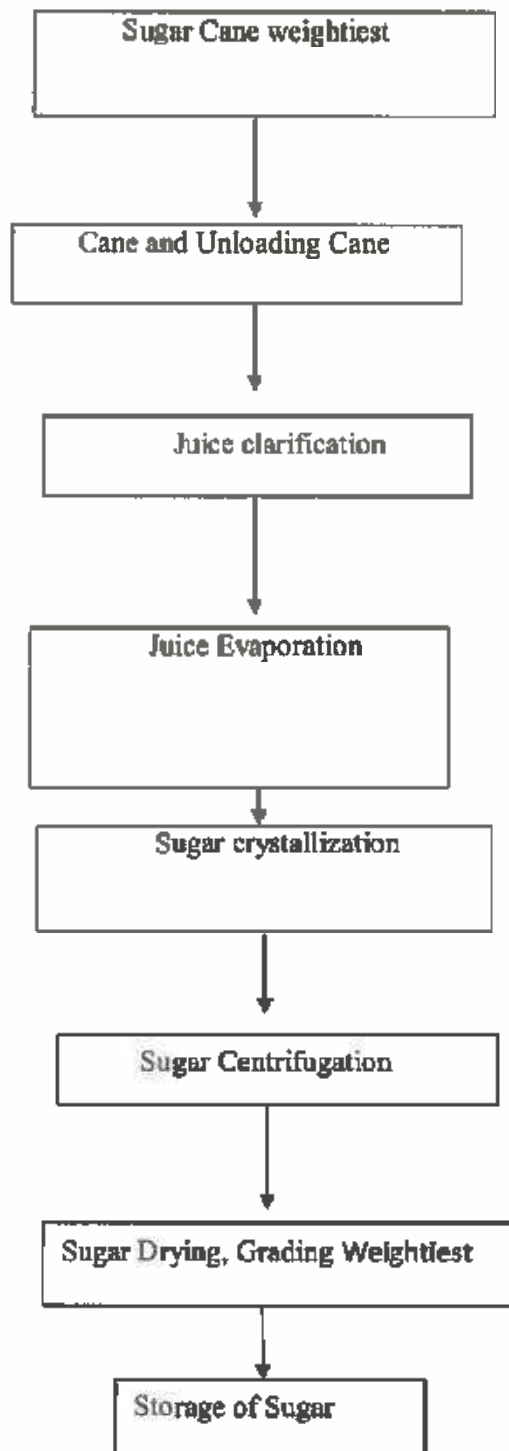
5. CAPITAL INVESTMENTS :(As On 31.03.2018)

(Rs. In lakhs)

a)	Sugar Plant and Machinery	14,480.39
b)	Lands, Buildings ,Roads, Waterworks ,Vehicles	12,186.98
c)	Distillery Building	33.14
d)	Distillery Plant & Machinery & Equipments	873.32
e)	Distillery Land	2.57
f)	Arrack Building	5.93
g)	Arrack Plant & Machinery & Equipments	66.23
h)	Cogen Plant & Machinery & Civil work phase 1 & phase 2	17,113.63
	TOTAL	44,762.19

PRODUCTION PROCESS

The broad outline and unit operation of sugar manufacture consist of:



3.10 BOARD OF DIRECTORS:

SL. No.	Name of the members	Designation	
1	Shri. Shivaputrashankareppashirkoli	Chairman	
2	Shri.Shrishailappa.Basavanneppa. Magadum	Vice -chairman	
3	Shri.Shivanaik. Veerabhadra Naik	Director	
4	Shri.BabasahebparappaArabole	Director	
5	Shri.NikhilUmeshKatti	Director	
6	Shri.RajkumarBabasahebpatil	Director	
7	ShriRajendraMalagouda Patil	Director	
3	8	Shri.PralhadBabagouda Patil	Director
•	9	Shri.UdaykumarShivagouda Desai	Director
1	10	Shri.SureshBasalingappaBellad	Director
1	11	Dr. A.M.Patil	Managing Director

5. "Best co-operative institute 2001-02" by the Karnataka state co-operative sugar federation ltd, Bangalore.
6. "Best co-operative institute 2001-02" by the Karnataka state co-operative sugar federation Ltd. Bangalore.
7. Efficiency Award- 2006-07 by National Federation of Coop Sugar Factories Ltd, New Delhi.
8. Technical Efficiency Award 2009-10 by South Indian Sugar Cane & Sugar Technologist's Association Chennai.

The appreciation of the better adoption of water recycling unit ,the south Indian Sugarcane Technologists Association ,Chennai has rendered this rewarded this worthy project with the GOLD MEDAL during August 2003, Furthermore, the Research paper based on the said project has bagged SILVER MEDAL & CERTIFICATE OF APPRECIATION from the Sugar Technologists Association of India ,New Delhi &SECOND PRIZE from the Deccan Sugar Technologists Association, Pune during the month of September ,2005.

SWOT ANALYSIS

1. Strengths

- Largest sugar factory in south India.
- Each and every waste material is used and generates some sort of income.
- The company has well equipped plant and machinery.
- The company has good demand for its spirit in southern state.
- This industry has some by products such as Molasses, compost etc. That helps to industry directly and indirectly to run the industry smoothly. It is producing own electricity and it reduces cost of electrical bill.
- Factory having their own vehicles, it reduces the transportation charges of the industry

2. Weaknesses

- The employees are not well qualified.
- It sells the product in India only. There is no consumer relation with foreign countries and they don't export to foreign countries.
- This industry is not having HRD department so the selection of employees are not satisfactory.
- They purchase two wheelers by loans at time of non-seasons they are Ideal, but the interest of the loan is always shooting.
- More space required for storage of raw material.

3. Opportunities

- It is located in best area there all the resource are available to factory in less cost.
- This factory has more and equity shares. Therefore every former who is a shareholder has too old to send sugar cane to this industry only.
- After replacement of the old machinery to new one since then the factory is running well.
- Present production performance per ton is excellent.
- Recycling of waste water treatment.

4. Threats

- Competitors are major threats.
- There is availability of other brands.
- Development and information technology.
- Emergence of new sugar industries in surrounding.
- Increasing labour turn over.

3.12 SECTIONS IN HIRA SUGAR

ACCOUNTING SECTION

It is concerned with the proper management of funds. Proper management of the fund is necessary effective managing of the organization.

Various account sections are

1. Cash Wing.
2. General Account.
3. Cane Account.
4. Distillery Account

PURCHASE SECTION

This department is controlled by the purchase requisition from the various department to the material required for other departments. This section calls tenders/ quotation from parties interested in the suppliers. The lowest bidding party is called for the supply of materials. All the purchase is as per the demands of departments. If the material are of low or inferior quality, as per inspected by the department heads are turned back to the concerned party.

OBJECTIVES:

- 1 .To reduce the cost of production.
2. To make arrangements for new parties for purchase.
3. To provide qualitative product with low price.

SALES DEPARTMENT

This department is one of the main departments in the organization, as it makes profit for the company. As it is a co-operative society the organization had licensed with central government & state government to sale their product in market the sale of the sugar is done in two ways that is.

1. Free Sale

Government allows the sugar factories to sale certain percentage of sugar by calling tender is known as free sale.

2. Levy Sale:

Levy sale means to sell the product to the government that is to sell the product under the guidance of government.

LABOUR WELFARE OFFICE

According to Local Inspection Committee (LIC) committee labour welfare means "Anything done for intellectual, physical, moral & economical betterment of the workers. Facilities provided for the workers are:

1. Housing facilities with electricity and water supply.
2. Free medical facilities to works & family.
3. Scholarship is provided to the works wards.
4. Kinder garden and primary school is running in factory campus.
5. Holidays pay is provided to the workers.
6. Community hall is built in colony which is been provided to marriage and other programmers.
7. Canteen facilities.
8. Employee children sports activities. Price will be given

AGRICULTURE SECTION

This department is licensed in 1964 and it is established in the Factory in 1965. This department helps the farmers for the production of good quality of the cane. The factory consists of 250 acres of farm land having 23 bore wells drilled by the factory, out of them 14 are working farm is used only for growing sugarcane for the factory.

Functions

- At season, slip boys provide skips to the farmers for sending the cane to the factory.
- During off season, slip boys fill the forms of saving the cane.
- To purchase the cane.

Facilities Provided for the Farmers

- Agriculture Department loans are provided.
- Recommendation letter to the bank loans.
- Provide cane seeds, They provide 10 types of seeds that is
- 8011,671,8371,86032,89014,8021,88628,88121,92020,7400
- Sugar department fund is provided.
- Pesticides are provided.
- Sugar is provided shareholders at a lower rate.

STORE SECTION

Goods must be stored properly in the store room. Goods have to protect from damages, theft, fire & some other losses. Therefore care should be taken to save the material & maintain the day to day store records. The organization has a well-managed store department, for each section mainly printing & stationary, mechanical, civil, chemical etc. There is division in the dept. Storekeepers have to give proper codification to products to identify the products. Separate names or codes are given for every material. In this organization combined code both Alphabets & Numerical are used.

FUNCTIONS

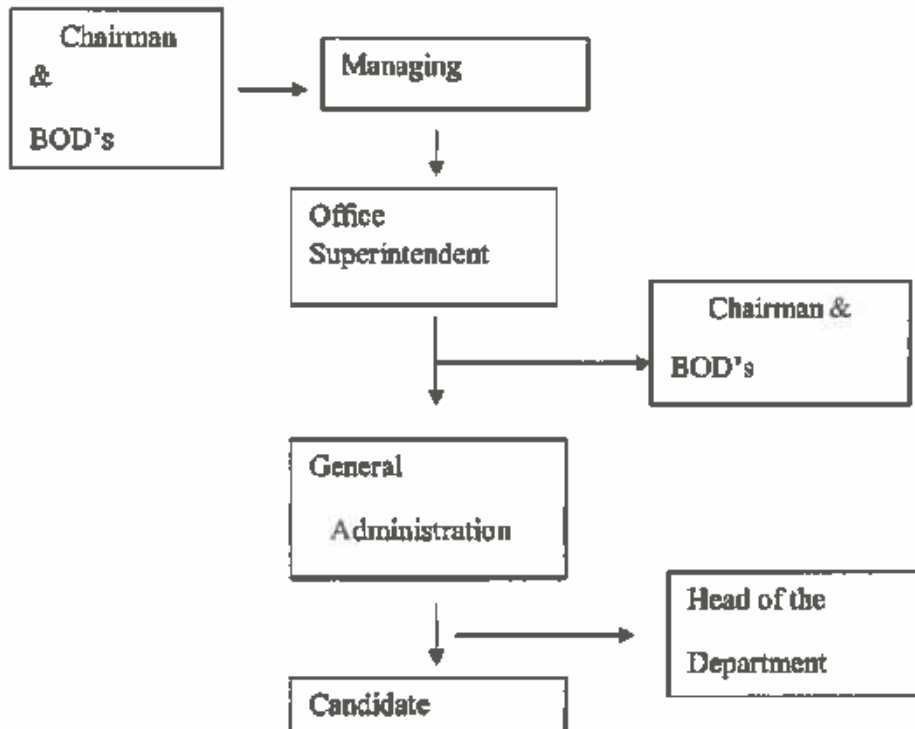
1. Issue & receipts of materials are per the requirement of the departments.
2. Maintain various stock levels.
 - Minimum order level.
 - Maximum order level.
 - Reorder level.
 - Danger level.
 - Economic order quantity.
3. Maintain day to day records of materials.
4. Protect the materials from any kind of damage.
5. Check the invoice with materials at the time of receiving the goods in the Gate.

GODOWN SECTION

This section consists of storage area. The main function of this section is to protect sugar bags from damage and storing in proper way. The factory consists of 15 Godown having the total capacity about 2684000 bags.

HUMAN RESOURCE SECTION

Its main function is to recruit and select well qualified and experienced candidates. This section recruits people by giving advertisement through newspaper and television.

Recruitment procedure:**EMPLOYMENT**

The factory has provided employment to about 1183 persons which are indirectly employed for 6 months as coolies for harvesting and loading cane as drivers and cleaners on trucks, as cart men to transport cane , for feeding cane and other allied work, as detailed below

	Direct employees			Indirect employees	
1	Regular	305	1	Harvesting gang	6390
2	Seasonal	625	2	Transportation – Drivers / Cleaners Cart men	1200 1800
3	Substitute /Daily Wages	24	3	Coolies for other allied work	2850
4	Farm Coolies	03	4	Coolies for cultivation	31590
5	On deputation	01			
6	Consolidate	224			
	Total	1182		Total	43830

SOCIAL SERVICE RENDERED

Besides establishing the sugar factory, Late Shri Appanagouda Patil, the founder of this factory, took considerable interest in the people's movement and was instrumental for the no. of changes in agro-business, agro-economy, socio-economic as also educational development in this area, which has resulted in:

- The established of the Hukkeri Grammen vidya utsahakari sangha, a first ever cooperative vidyutsanghain the country, has brought pride to the Hukkeri Taluka.
- For availing benefit of better medical services by the weaker section citizen, the contribution towards the established of Shri J.G. Hospital at Ghataprabha is commendable, which is presently running B.A.M.S. Ayurvedic Medical College in addition to fully fledged hospital.
- Considering the pressing needs of educational developments in the area, our contribution towards the establishing of Shri Durdundeshwar VidyaVardhak Sangha is laudable.
- The Nidasoshi polytechnic & Hirasugar Rural Engineering College ,aided by the factory have been rewarded with no. of recognition, becoming ideal college in the District.

UNIT-4**DATA ANALYSIS AND INTERPRETATION**

Table 4.1 shows Sales for 3years.

Table 4.2 shows Fixed cost.

Table 4.3 shows Variable cost.

Table 4.4 shows Profit for Previous years.

Table 4.5 shows Contribution.

Table 4.6 shows Profit Volume ratio.

Table 4.7 shows Breakeven point.

Table 4.8 shows Margin of safety.

Table 4.9 shows Marginal costing.

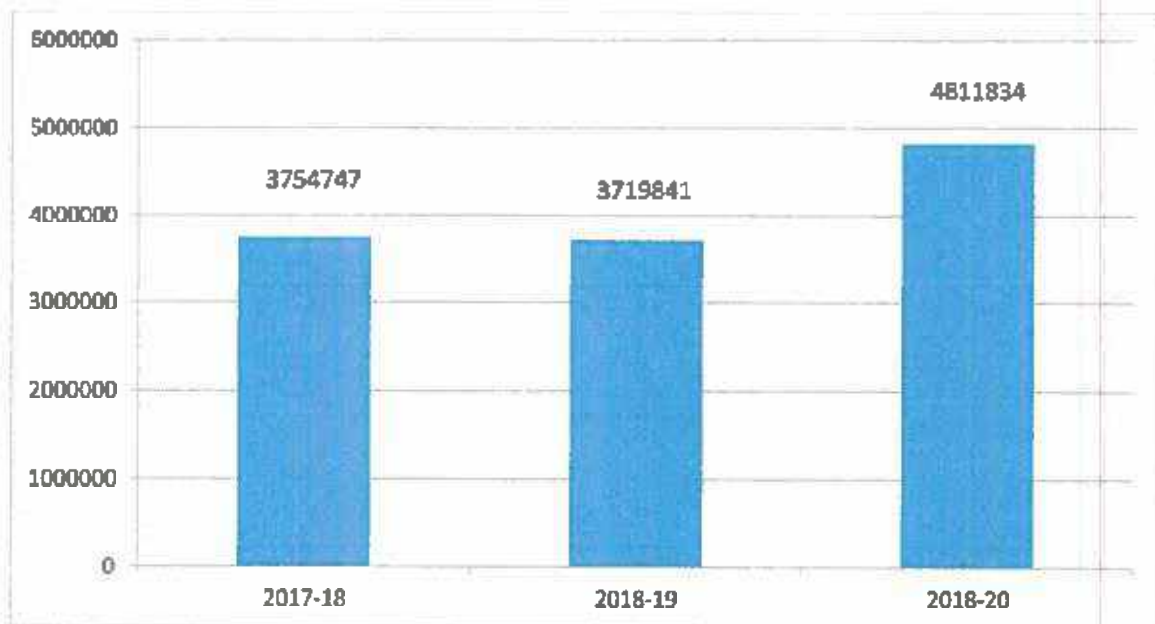
UNIT-4

DATA ANALYSIS AND INTERPRETATION

Table 4.1 shows sales for 3 years.

Particulars	2017-18	2018-19	2019-20
Sugar sales	2,02,606	2,42,171	2,39,106
Bagasses	4,30,383	4,48,995	3,484
Biogasses	640	1600	2,670
Scrapmaterial	10,686	2,187	23,226
Presumed	6,382	7,045	12,149
Other sales	30,64,818	29,57,805	43,98,293
Molasses	39,232	60,038	1,32,906
Total sales	37,54,747	37,19,841	48,11,834

Source: Annual Report

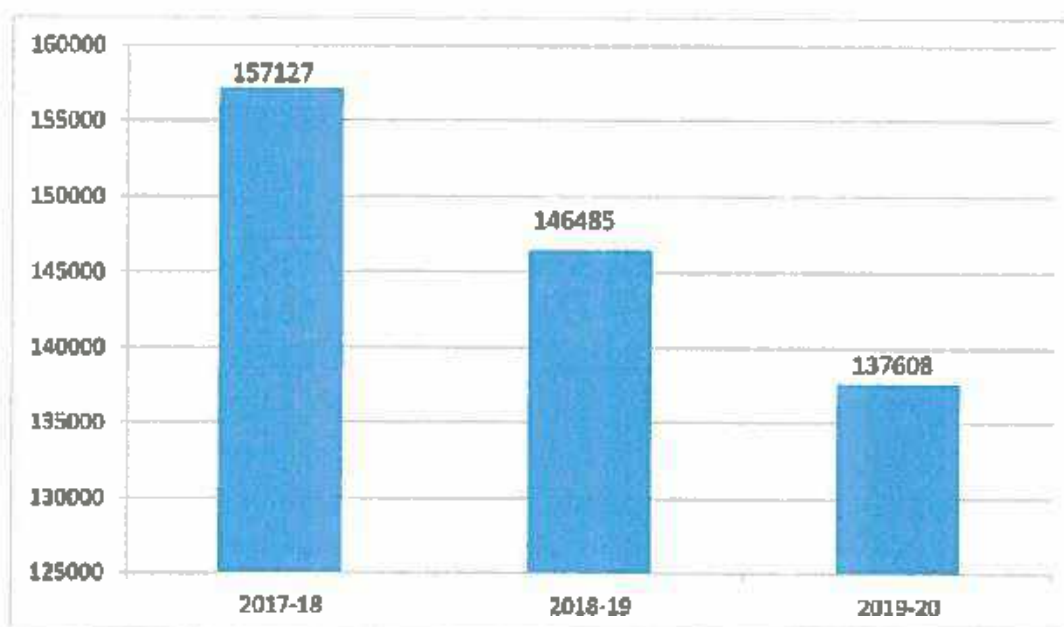


From the above table it is concluded that sales in the year 2017-18 was Rs 37,54,747, and was decreased to 37,19,841 in the year 2018-19. The sales was Rs 37,19,841 as compared to last year sales has decreased. In year 2019-20 sales revenue is Rs 48,11,834 there is an increase in sales as compared to last two years due to increase in the production capacity utilization.

Table 4.2 shows the Fixed cost.

particulars	2017-18	2018-19	2019-20
Staff & Insurance	56,502	55,870	55,683
Rent & taxes	165	130	106
Depreciation	81,933	73,420	66,626
Meeting & AGM Expenses	1,058	1,138	1,178
Administrative expenses	16,753	15,198	13,284
Interest & Insurance	716	729	731
Total Fixed Cost	1,57,127	1,46,485	1,37,608

Source: Annual Report

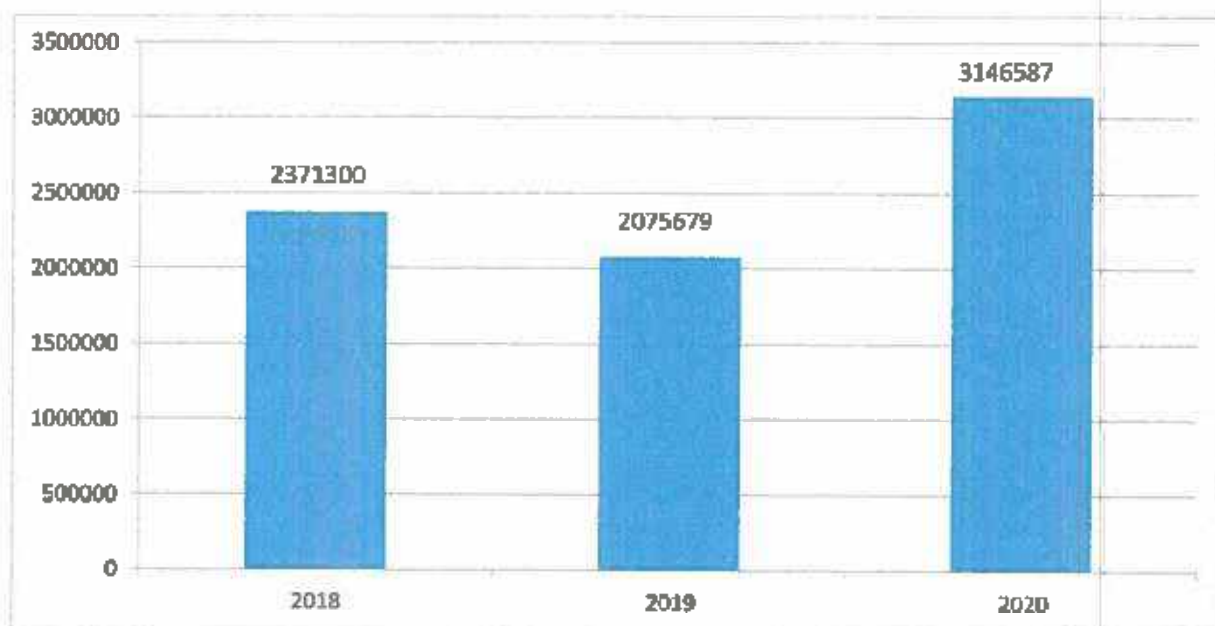


From the above data it is clear that fixed cost of factory in the year 2017-18 was Rs 1,57,127 and in the year 2018-19 it was Rs 1,46,485 there is a decrease in fixed cost. And in next year 2019-20 fixed cost was incurred Rs 1,37,608 it shows that during three year fixed cost has decreased. So factory is able to minimize its fixed cost in 2019-20 as compared to last years.

Table 4.3 Shows the Variable Cost.

Particulars	2017-18	2018-19	2019-20
Sugar cane purchased	21,65,301	24,63,599	20,35,450
Other charge of cane	4,73,151	5,73,014	4,25,005
P&Z A/C Travelling exp	2,230	2,303	1,283
Expenditure on vehicles	4,720	1,602	1,292
Printing & stationary	6,877	2,354	4,872
Stare material consumption	24,191	35,126	21,035
Establishment charges	30,794	26,871	24,402
Direct manufacture exp	50,515	76,031	83,544
Other administrative exp	16,753	15,198	13,284
Total	27,74,532	31,96,098	26,10,167
Difference stock	(4,03,232)	(11,20,419)	5,36,420
Total variable cost	23,71,300	20,75,679	31,46,587

Source: Annual Report

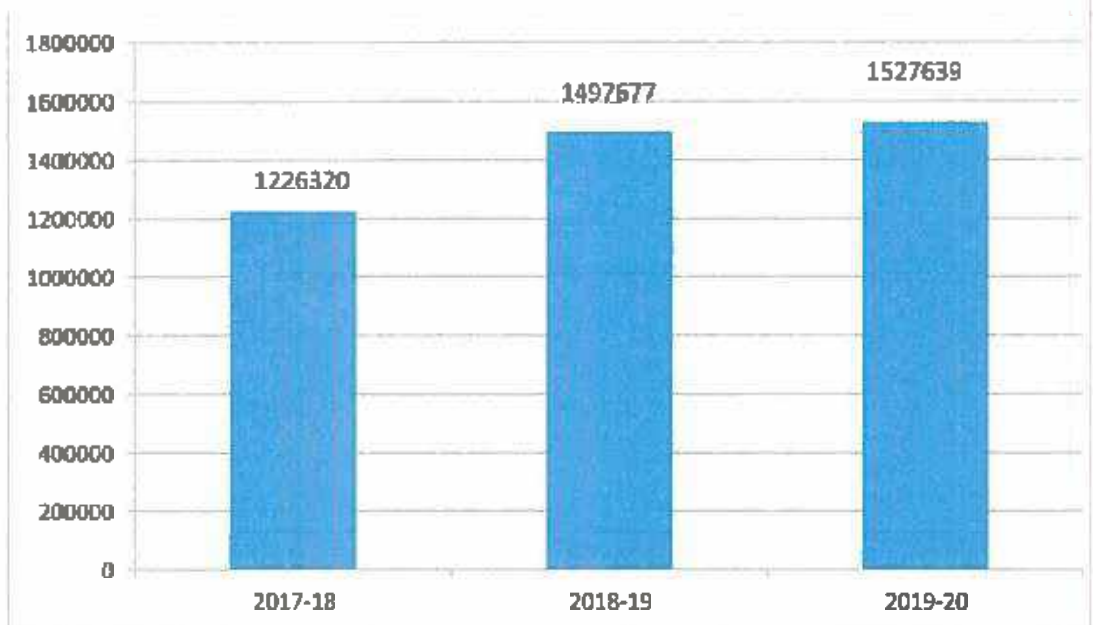


Variable cost charges with the output. If output is increase or decreases by on unit proportionately variable cost is also changes per unit. It clearly shows in the chart purchase of raw materials in the year 2018-19 was very high as compared to 2017-18 and 2019-20. Therefore variable cost of 2018-19 was very high because variable cost changes as activity level changes.

Table 4.4 shows the profit for previous years.

Particulars	2017-18	2018-19	2019-20
Sales	37,54,747	37,19,841	48,11,834
Variable cost	23,71,300	20,75,679	31,46,587
Contribution	13,83,447	16,44,162	16,65,247
Fixed cost	1,57,127	1,46,485	1,37,608
profit	12,26,320	14,97,677	15,27,639

Source: Annual Report

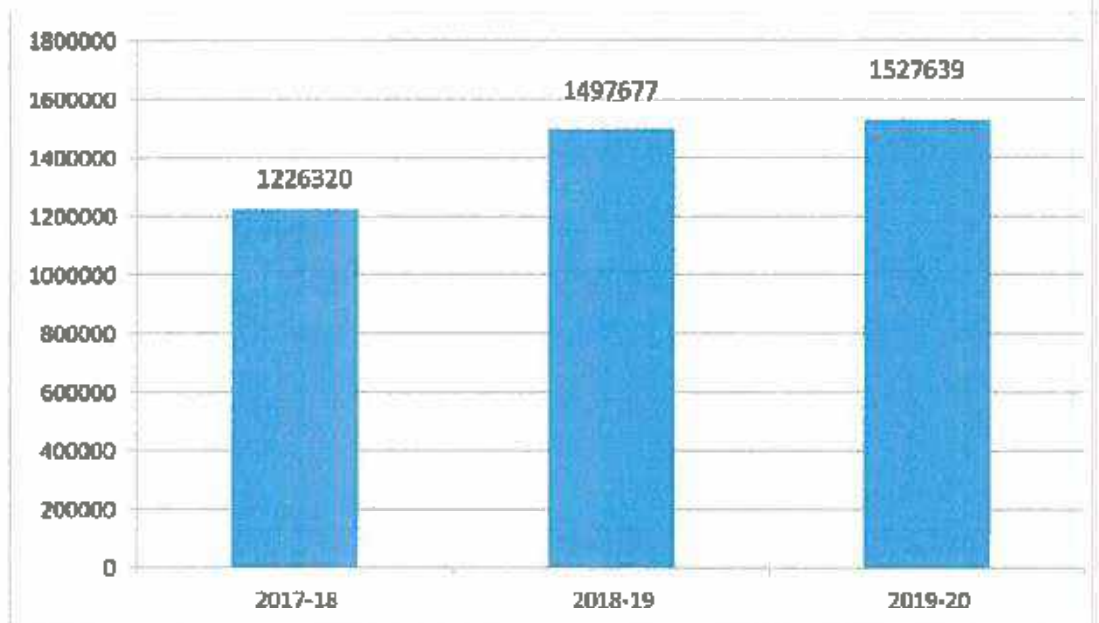


In the year 2017-18 the profit was Rs 12,26,320. In subsequent years, 2018-19 & 2019-20 it is increased to Rs 14,97,677 & Rs 15,27,639 respectively. Which is good sign to the factory, profit will be good. Because sales in 2018-19 is Rs 48,11,834 grater than previous years due to high productivity and maintaining the cost.

Table 4.4 shows the profit for previous years.

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profit	12,26,320	14,97,677	15,27,639

Source: Annual Report

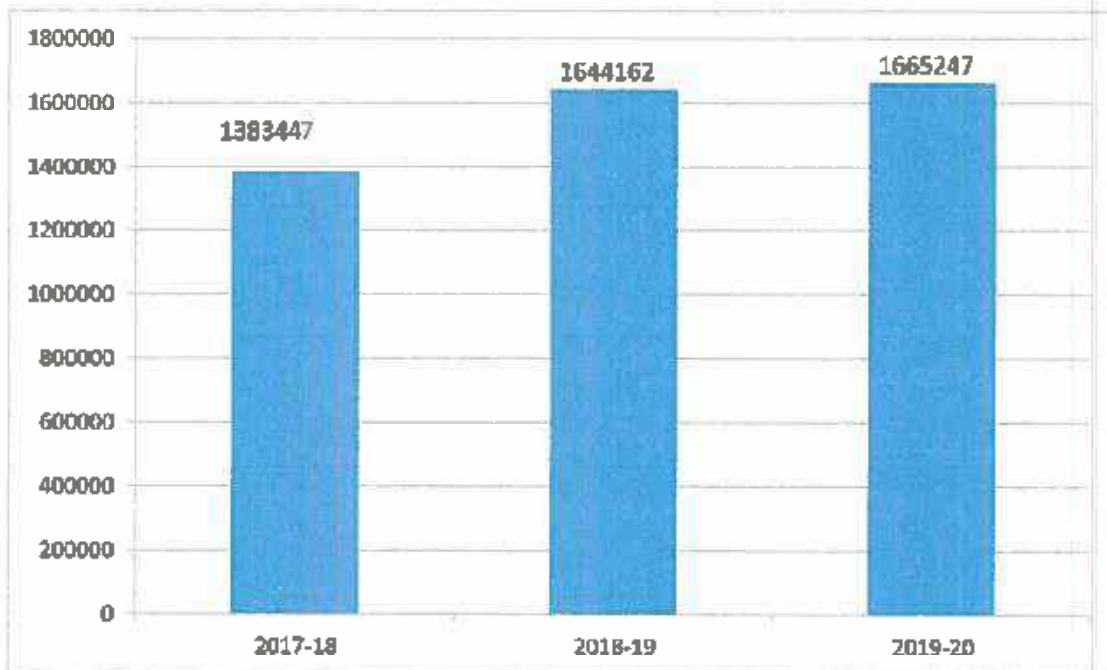


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Table 4.5 shows the contribution.

Years	Calculation	Contribution
2017-18	37,54,747-23,71,300	13,83,447
2018-19	37,19,841-20,75,679	16,44,162
2019-20	48,11,834-31,46,587	16,65,247

Source: Annual Report

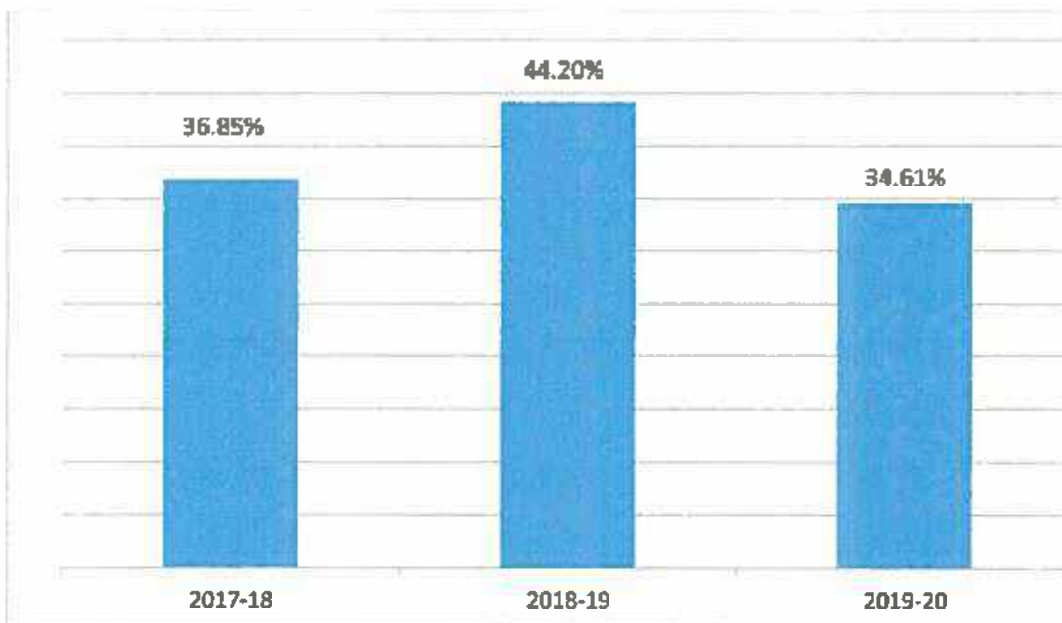


In the above table shows that the contribution in 2017-18 was 13,83,447. It increased to Rs 16,44,162 in the year 2016-17. And in the next year 2018-19 also increased. So factory contribution will be good. Contribution is a portion of sales which remains after recovering variable cost and is available towards fixed cost and profit.

Table 4.6 Shows the Profit Volume Ratio.

Years	calculation	P.V.Ratio
2017-18	$\frac{13,83,477}{37,54,747} \times 100$	36.85%
2018-19	$\frac{13,83,447}{37,54,747} \times 100$	44.20%
2019-20	$\frac{13,83,477}{37,54,747} \times 100$	34.61%

Source: Annual Report

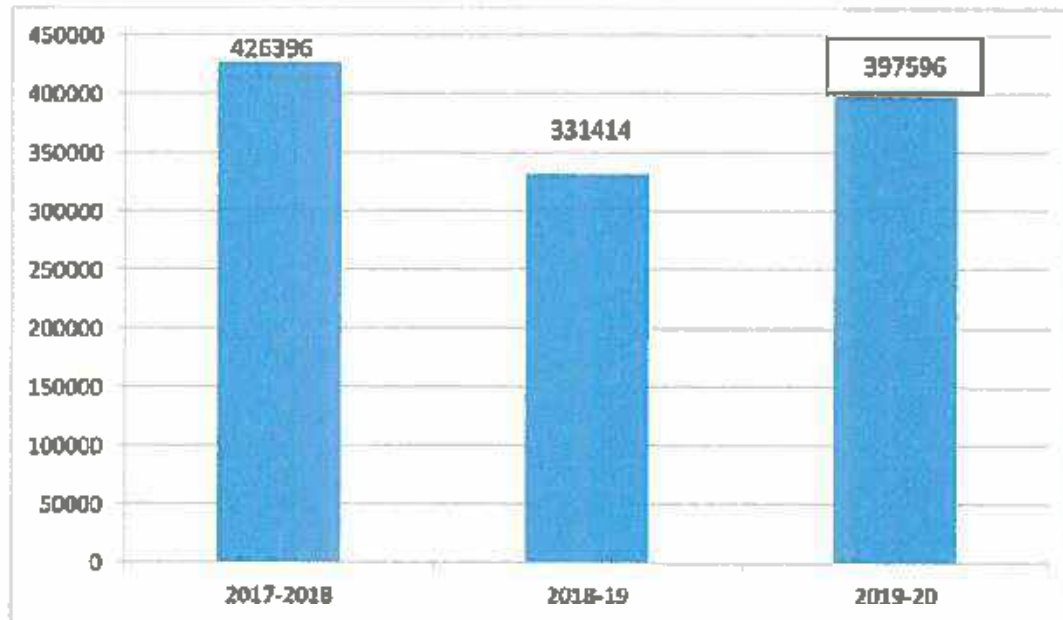


In the year 2017-18 p.v ratio 36.85% it increased to 44.20% in the year 2018-19 but again it declined to 34.61% in 2019-20. It shows that factory is having greater p.v ratio in 2017-18 p.v ratio indicates contribution per Rs 100 change in sales. P.v ratio will be improved when increase in selling price and decrease in variable cost.

Table 4.7 Shows the Break Even Point.

Year	Calculation	BEP
2017-18	1,57,127 38.85%	4,26,396
2018-19	1,46,485 44.20%	3,31,414
2019-20	1,37,608 34.61%	3,97,596

Source: Annual Report

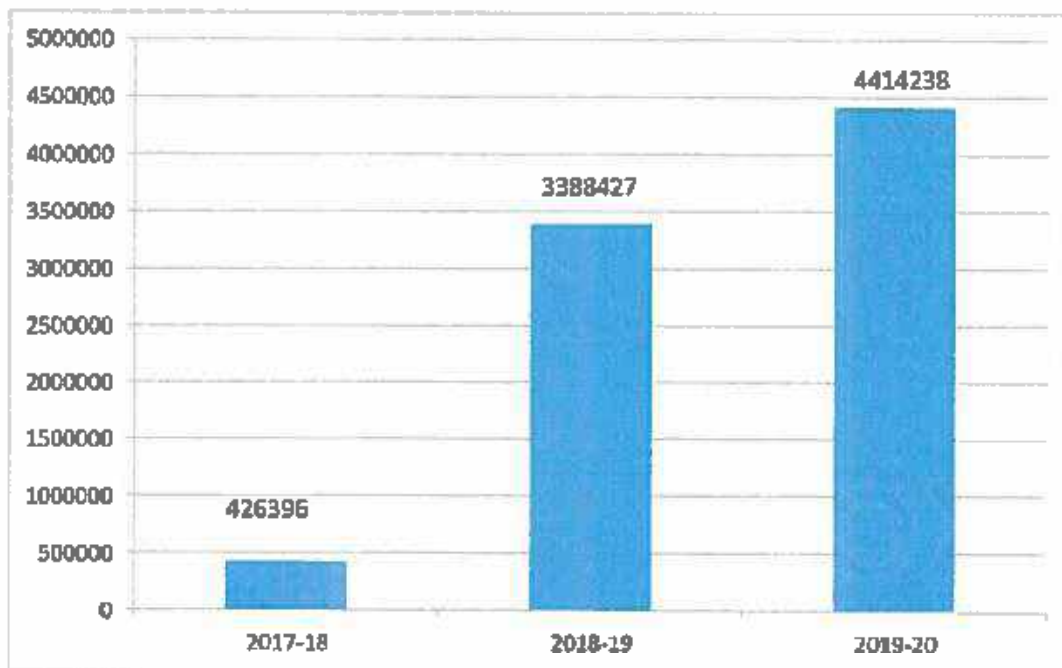


In the above calculation that is observed that during 2017-18 Rs 4,26,396 the where as breakeven point in 2017-18 Rs 3,31,414 in 2019-20 Rs 3,97,596. Breakeven point is indicates that at which level factory will earn no profit or loss. At above this point factory will earn profit and below this it will incur loss. This will help the factory to maintain the cost and also helps in making decision to buy or make product.

Table 4.8 shows the Margin of safety.

Year	Calculation	Margin of safety
2017-18	37,54,747-4,26,396	4,26,396
2018-19	37,19,841-3,31,414	33,88,427
2019-20	49,11,834-3,97,596	44,14,238

Source: Annual Report



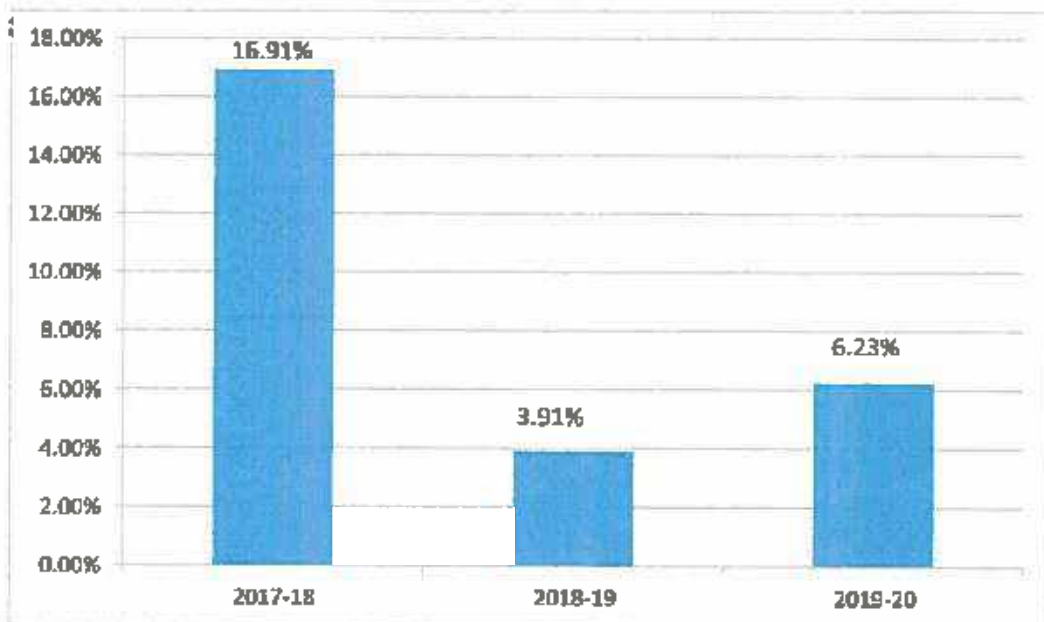
Marginal of safety is not a constant in any year due to flucting of profit volume ratio & total cost. It means sugar factory apply defensive. When actual sales are above the break even sales volume there is a marginal of safety. At margin of safety fixed cost will be zero similarly at any level of margin of safety contribution is equal to profit.

Table 4.9 shows the Marginal costing.

Formula :- Change in total cost

.....
Change in quantity

Year	calculation	Marginal costing
2017-18	22,14,173 1,30,900	16.91%
2018-19	19,29,194 4,93,100	3.91%
2019-20	30,08,979 4,82,300	6.23%



In the year 2017-18 marginal cost is 16.91% it decreased to 3.91% in the year 2018-19 but again in increased to 6.23% in 2018-19. It shows that factory is having greater marginal cost in 2017-18 Marginal cost indicates change in total cost to change in quantity . It will be improved when increase in variable cost and decrease in fixed cost.

UNIT-5

FINDINGS, SUGGESTIONS & CONCLUSION

- 5.1 Findings
- 5.2 Suggestions
- 5.3 Conclusion

UNIT-5

FINDINGS, SUGGESTIONS & CONCLUSION

5.1 FINDINGS:

- The sales (which includes all other sales) increased in the year 2017-2018 as compared to previous year.
- The major factor for this is increase in interest cost since the borrowing capital has increased.
- There is increase in the variable cost due to huge expenses incurred on manufacturing, but there was decrease in the year 2017-18 because of high crushing and high price of sugarcane.
- The contribution goes on increasing yearly but in 2017-18 there was decrease in the contribution due to increase in variable cost as compare to the sales.
- The p/v ratio is fluctuating due to the variable cost and sales.
- Margin of safety is not constant in any year, due to fluctuating of profit volume ratio and total cost. It means sugar factory apply defensive policy.
- Marginal cost is fluctuating during the year of study.

5.2 SUGGESTIONS:

- The company has extremely improved its sales and also have benefited by the Government, hence it should maintain its sales position and try to increase it by every year. The company should concentrate more on sale of product i.e. sugar rather than concentrating on it's by- products.
- Company should concentrate more on its proprietors fund or equity fund either than borrowed funds or try to balance both, hence, care should be taken by the company to not borrow excess funds.
- The profit is fluctuation in the year 2018, 2019 and 2020 is due to increase in variable cost. Hence, company should decrease its variable cost. Now in 2020 the profit is more this is due to decrease in depreciation. Therefore the company should maintain its position.
- For making breakeven point in control, the sugar sales must be increased/ improved.
- The factory should make good efforts to increase the sales & reduces the inventories.
- Marginal cost is increasing, so it show the improvement of the factory.
- Finally, the factory should endeavour to reduce its other expenditure by implementing stringent controls on all types of expenses.

5.3 CONCLUSION:

In the above research analysis it is concluded that the variable cost is increasing year by year due to increase in price of sugar cane in open market and price depends on the market condition. The company should emphasize more on its product rather than its by-products, this in turn will help the company to increase sales of the company so that will help to increase the profit.

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**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON CAPITAL STRUCTURE"**

AT

**CHIDANANDA BASAVPRABHU KORE SAHAKARI SAKKARE
KARKHANE NIYAMITH, CHIKODI**

Submitted to

RANI CHANNAMMA UNIVERSITY, BELAGAVI



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

MISS. SHRUTI Y NAGANAVAR

M.COM-IV SEMESTER

REGISTER NO: MC191620

UNDER THE GUIDANCE OF

SHRI. S. M. BHOSAGE

K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201
PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that Miss. Shruti Y Nagannavar has satisfactorily completed the Project Report Entitled "A Study on Capital Structure At Chidananda Basavprabhu Kore Sahakari Sakkare Karkhane Niyamit, Chikodi for the partial fulfilment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year 2020-2021.


 SHRI. S. M. BHOSAGE

PROJECT GUIDE


 SHRI. LAXMIKANTHA NAYAKA

CO-ORDINATOR
 P.G. Department of Commerce
 B.K. College Chikodi



SHRI. UDAYSINGH RAJPUT

PRINCIPAL
 KLES'S Basavaprabhu Kore
 Arts, Science and Commerce College
 CHIKODI - 591 201



ಕಾರ್ಯದ ಸ್ವರೂಪ : ವರ್ತಮಾನದ ಸಂಖ್ಯೆ 248/2015 ಲೀಡ್ಸ್ : 2-6-2016



ಚಿದಾನಂದ ಬಸಪ್ರಭು ಕೋರೆ ಸಹಕಾರಿ ಸಕ್ಕರೆ ಕಾರ್ಖಾನೆ ನಿಯಮಿತ,
ಚಿಕ್ಕೋಡಿ

**CHIDANAND BASAPRABHU KORE SAHAKARI SAKKARE
KARKHANE NIYAMIT, CHIKODI**

(Formerly : S.D.K.S.S.K.N. Chikodi ಈ ಮೊದಲು : ಶ್ರೀ ಡಿ.ಕೆ.ಎಸ್.ಎಸ್.ಕೆ.ಎನ್. ಚಿಕ್ಕೋಡಿ) GST No
29AAAAS132BL1ZC

No.CBKSSK/LWO/Trg.Crt./2021-22

Date: 11/09/2021

C E R T I F I C A T E

This is to certify that **Miss. Shruti Y Nagannavar** M.Com IVth Sem student of KLE Society's B K Collage Chikodi has successfully completed project work study titled "**Capital Structure**" in our factory from **20/07/2021 to 20/08/2021**. During the period she found sincere and hard working.

We wish her all the success for her bright future.



**Managing Director
C.B.K.S.S.K.N. Chikodi**

Copy to
Miss. Shruti Y Nagannavar

DECLARATION

I declare that the project report entitled "A Study on Capital Structure" At Chidananda Basavprabhu Kore Sahakari Sakkare Karkhane Niymit, Chikodi is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. S. M. Bhosage, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 21/09/2021

Place: Chikodisssss



Miss. Shruti Nagannavar

Register No: MC191620

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

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Miss. Shruti Y Nagannavar

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CHAPTER -1

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

1.2 REVIEW OF LITERATURE

1.3 STATEMENT OF PROBLEM

1.4 NEED OF THE STUDY

1.5 OBJECTIVES OF THE STUDY

1.6 SCOPE OF THE STUDY

1.7 RESEARCH METHODOLOGY

1.8 LIMITATIONS OF THE STUDY

1.9 CHAPTER SCHEME

CHAPTER-1

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

Capital structure decision is vital for every business organization. This decision is important because of the maximizing the returns and the impact of such decision on the firm's ability to deal with the competitive environment. The firm can choose any Proportion of debt and equity. It can issue more debt and less equity or less debt and more equity. In capital investment decision capital structure decision is the important as it affects the profitability. Therefore must be given while structure decision is made.

The project report starts with introduction of industry sugar, Industry owned by co-operative society. Producing three varieties of products Sugar, molasses and Bagasse. Now a day there is competition between many sugar industries, this competition was increased by globalization of lubrication; due to liberalized economy there is no more demand for sugar, this project is an effort to know the "capital structure" of the company.

Capital structure refers to the way in which a firm financing its total assets, operations and growth through issuing equity debt and hybrid securities. Financing is process of collecting money through certain sources to be used on purchasing or maintain total assets. Current operations of firm and any expected growth. Equity comes from issuing common stock, preferred stocks and retained earnings while debt can be classified in to land term debt e.g. long term note payable, bonds and debenture short term that is short term bank loan, account payable.

1.2 REVIEW OF LITERATURE

Review of literature was done to have in-depth idea related to the field of study.

1. Velnampy, Jaloy Niresh(2012)

Capital structure decision is vital one since the profitability of an enterprise is directly affected by such decision. The successful selection and use of capital is one of key elements of the firms financial strategy. Hence, proper care attention needs to be given while determining capital structure decision. The purpose of the study is to investigate the relationship between capital structure and profitability of ten listed Shrilankan companies over the past 8 year's period from 2002 -2009.

A Study on Capital Structure At C.B.K.S.S.K.N Chikodi

The data has been analyzed by using descriptive statistics and correlation analysis to find out the association between the variables.

2. Amanuel (2011)

The main object of the study is to carry out an empirical study to determine the factors influencing capital structure. Of the selected manufacturing share companies in Ethiopia. The observation reveals that size, profitability, non-debt tax shield, tangibility and earning volatility are important significant factors that determined the capital structure of the selected manufacturing companies in Ethiopia.

3. Ahmed Etal (2010)

The impact of firm level factors on capital structure. Data for the study has been collected mainly from secondary data sources over seven years. They have considered seven explanatory variables namely size, age, growth, profitability, assets tangibility. Risk and liquidity in order to find out there influence on leverage. The result shows that liquidity, age, profitability and risk are found to be a negative significant relationship with leverage where, size is found to be a positive association.

4. Christopher Parsons, Sheridan Titman (2009)

This survey provides a synthesis of the empirical capital structure literature. Our synthesis is divided into three parts. The first part examines the evidence that relates to the cross-sectional determinants of capital structure. This literature identifies and discusses the characteristics of firms that tend to be associated with different debt ratios. In the second part, we review the literature that examines changes in capital structure. The papers in this literature explore factors that move firms away from their target capital structure as well as the extent to which future financing choices move firms back towards their targets. Finally, we complete our review with a set of studies that explore the consequences of leverage, rather than its determinants.

5. Narendar V Rao, Khamis Hamed Mohamed Al-Yahyaee, Lateef AM Syed (2007)

This study examines the relationship between capital structure and financial performance. It motivated by desire to explain debt use by Omani firms. The results of this study suggest that, contrary to the trade-off-theory of capital structure, there is a negative association between the level of debt and financial performance. This Can be attributed to the high cost of borrowing and the underdevelopment nature of

A Study on Capital Structure At C.B.K.S.S.K.N Chikodi

the debt market in Oman. The tax savings that the firm receives by using debt does not seem to be sufficient to outweigh the costs of using debt including the high interest cost.

1.3 STATEMENT OF THE PROBLEM

The study is entitled as "Analysis of Financial performance" that the capital structure is one important determinants affecting the performance of "Shri Chidananda Basav Prabhu Kore Sahakari Sakkare Karkhane Niyamith Chikodi". That the managing capital structure is one of the primary financial decision that are related to corporate value of maximization.

1.4 NEED OF THE STUDY

Analysis of the relationship between firm's characteristics and financial structure and the effect of the challenges the companies are facing on their financial structure is essential it creates a fertile ground for finding out these relationship and be used as a basis to make the financial decision and will be useful as reference for the further research.

1.5 OBJECTIVES OF THE STUDY

1. To know the debt equity ratio of the "Shree Chidanand Basavprabhu Kore Sahakari Sakkare Karkhane Niyamit Chikkodi".
2. To measure the impact of the factory ratio on profitability of the factory.
3. To examine the influence of various factors affecting the capital structure decisions.
4. To find out earnings per share of "Shree Chidananda Basavprabhu Kore Sahakari Sakkare Karkhane Chikodi".
5. To determine the solvency position of the industry.

1.6 SCOPE OF THE STUDY

Investment, borrowing etc. change, this also covers study in general about this study is exclusively conducted for "Shri Chidanand Basavprabhu Kore Sahakari Sakkare Karkhane Niyamit Chikodi. It covers period 4year financial statement analysis. The trends indicated may differ from year to year as the pattern of the industry. But comparison of financial indicator which the industry of beyond the scope of this project.

1.7 RESEARCH METHODOLOGY

The methodology is the systematic approach to the given problem. In other words, Research methodology is a way to systematically solve the research problem. This project is basically descriptive and analysis in nature the study is based on both primary and secondary data. The primary data is collected through asking questions. A sample of 400 employees from various departments was selected. As respondent on the basis as purposive sampling.

1. Primary Data

The data required for the project was collected through the discussion with finance manager and various executive in the industry.

- Interaction with personal of the company
- Observation method

2. Secondary data

The major source of data for this project was collected from annual reports, profit and loss account, manuals and some more information collected through the internet.

- Published sources
- Magazines
- News papers
- Company annual reports

1.8 LIMITATIONS OF THE STUDY

1. Non availability of some part of financial data.
2. The study is not exhaustive due to time and other constraints.
3. Most of the information is mainly based on secondary data provided by the company.
4. The study is based on the 4 years annual report of a factory.

1.9 CHAPTER SCHEME

Chapter-1: INTRODUCTION AND RESEARCH DESIGN

This chapter deals with introduction , review of literature, needs of the study, objectives of the study, scope of the study, research methodology and limitations of the study.

Chapter-2: CONCEPTUAL FRAMEWORK

The chapter deals with meaning and definition of structure, pattern of capital structure, signification of capital structure, Factors determining capital structure, capital structure diagram, approaches of capital structure.

Chapter -3: INDUSTRY PROFILE

This chapter deals with industry profile which includes introduction to sugar industry, profile of the industry, establishment of company, vision, mission and values of the company, product and service profile, brief introduction of the company, flow chart of sugar manufacturing, details of board of directors, organisation chart, functional department, SWOT analysis.

Chapter-4: DATA ANALYSIS AND INTERPRETATION

This chapter deals with data analysis and interpretation.

Chapter-5: FINDINGS SUGGESTIONS AND COCLUSION

This chapter deals with findings, suggestions and conclusion.

CHAPTER-2
CONCEPTUAL FRAMEWORK

2.1 MEANING AND DEFINITION OF CAPITAL STRUCTURE

2.2 PATTERN OF CAPITAL STRUCTURE

2.3 SIGNIFICANCE OF CAPITAL STRUCTURE

2.4 FACTORS DETERMINING CAPITAL STRUCTURE

2.5 CAPITAL STRUCTURE DIAGRAM

2.6 APPROACHES OF CAPITAL STRUCTURE

CHAPTER -2

CONCEPTUAL FRAMEWORK

2.1 MEANING AND DEFINATION OF CAPITAL STRUCTURE

MEANING:

Capital structure of a company is the particular combination of debt, equity share, preference share and other long term sources of finance that is uses to fund its long term financing.

DEFINATION OF CAPITAL STRUCTURE

According to Gerestenbeg "capital structure of a company refers to the composition or make up of its capitalization and includes all long term capital sources"

According to James C. Van Horne "The mix of a firm's financing consists of equity, performance and debt".

2.2 PATTERN OF CAPITAL STRUCTURE:

Capital structure pattern varies from company to company and the available of finance. Normally the forms of capital structure are as followed

- capital structure with equity shares only
- capital structure with equity and preference share only
- capital structure with equity and debenture only
- capital structure with equity share, preference share and debentures

The choice of an appropriate capital structure depends on a number of factors such a nature and type of company, according to sources of capital, ownership and cost, regularity of earnings, conditions of the money market, attitude of investors, etc.

2.3 SIGNIFICANCE OF CAPITAL STRUCTURE:

Significance of capital structure is as follows

1. To increase levels of EPS
2. To minimize the cost of finance
3. To control the cost of finance
4. Legal requirements
5. Market sentiment

1. TO INCREASE LEVEL OF EPS

Use of debt and preference in capital structure can enhance the EPS. This is because their cost is less compared to the cost of equity, further debt has tax advantages. Firm can increase levels of EPS by maximum use of debt and preference.

2. TO MINIMISE THE RISK OF FINANCE

Debt and preference financing involve risk. This is because payment returns on these Source is compulsorily. A firm can raise capital in the form of debt or preference, provides it has capacity to make adequacy profits to pay return on these source.

3. TO CONTROL THE COST OF FINANCE

Normally dividend on equity is more as compared to dividend on preference or interest on debt. Cost of burden can be minimized, if a firm has more debt in its capital structure as cost of debt is less. Study of capital structure can help a firm to minimize the cost of finance.

4. LEGAL REQUIREMENT

Capital structure of a company has to fulfill legal provision determined by particular country. In India SEBI, RBI, companies act of 1956 act. have prescribed provisions for capital issue and its administration. Capital structure has to be designed fulfill the conditions.

5. MARKET SENTIMENTS

Company can design is capital structure based on moods of market and investors. Buoyant business conditions and risk investor will support for equity issue on the contrary subdued market conditions will

call for issue of debt and preference as investors would not like to take risk. Company can design an appropriate capital mix by raising the type of capital depending on market conditions.

2.4 FACTORS DETERMINING CAPITAL STRUCTURE

➤ SIZE OF THE COMPANY:-

If the firm belongs to large scale, it can manage the financial requirement with the help of internal source but if it is small size, they will go internal finance. It consists of high cost of capital.

➤ COST OF FINANCING

It is seen that debenture at the of profit earning of company prove to be a cheaper sources of finance as compared to equity share where equity shareholders demand an extra share in profit.

➤ PERIOD OF FINANCING

When company wants to raise finance for short period, it goes for loans from banks and other institutions, while for long term periods it goes for issue share and debenture.

➤ STABILITY OF SALES

When sales are high, there by the profits are high and company is in better position to meet such fixed commitments like interest on debentures and dividends on preference share. If company is having unstable sales, then the company is not in position to meet fixed obligations. So equity capital proves to be safe in such cases.

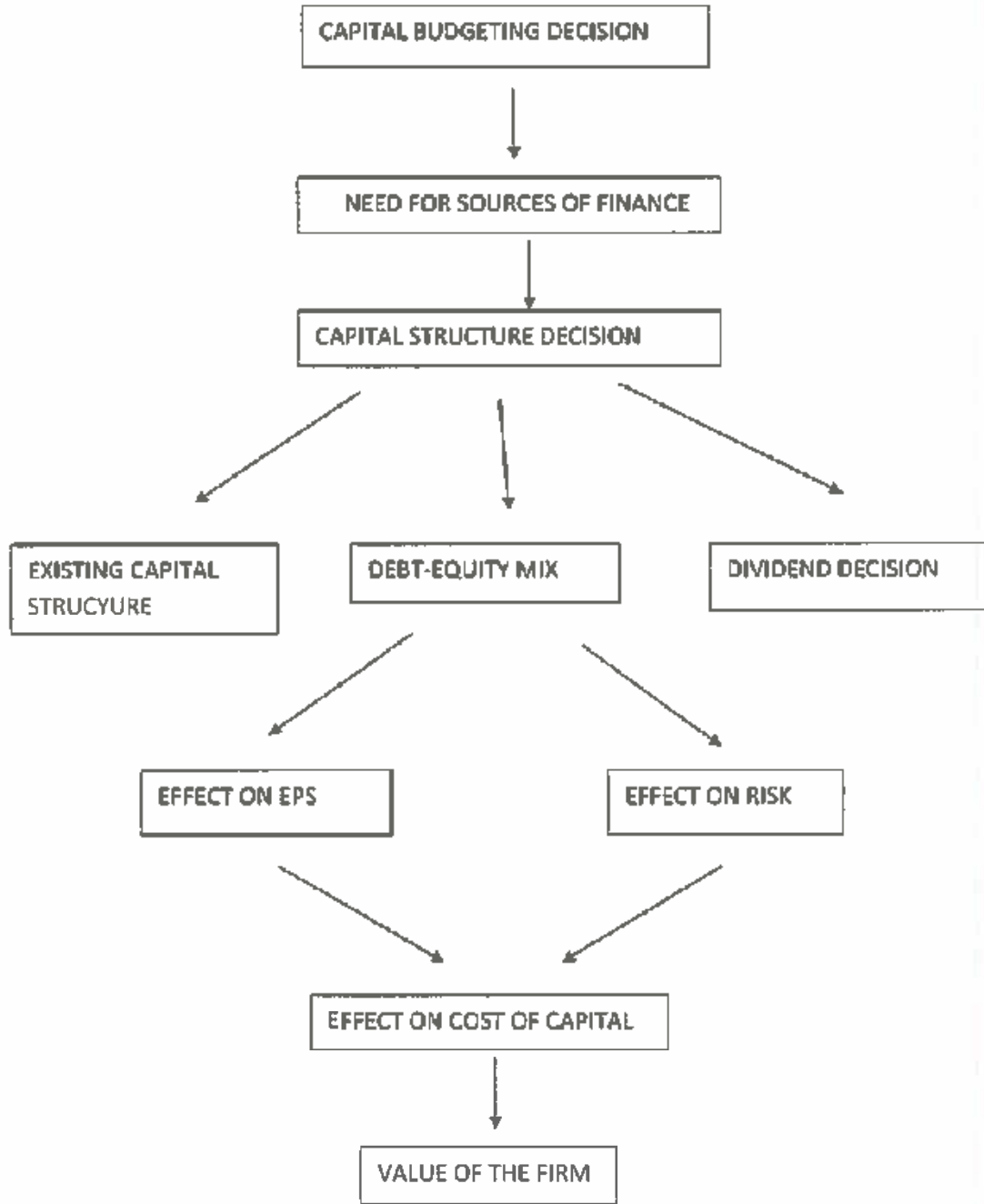
➤ CAPITAL MARKET CONDITION

The life time of the company, the market price of share has got an important influence. During the depression period, The Company's capital structure generally consists of debenture and loans. While in period of boons and inflation the company's capital in should consists of share capital generally equity shares.

➤ CHOICE OF INVESTORS

A capital structure should give enough choice of kind of investor to invest. Bold and adventurous investors generally go for equity shares and loan and debenture are generally raised keeping into mind conscious investors.

2.5 CAPITAL STRUCTURE DIGRAM



2.6. APPROACHES OF CAPITAL STRUCTURE

The capital structure will be planned initially when a company is incorporated. The initial capital structure should be designed very carefully. The management of the company should set a target. Capital structure and the subsequent structure. The company needs funds have to be procured, the financial manager weighs the pros and cons of various sources of financial and selects the most advantageous sources keeping in the view the target of capital structure. Thus the capital structure decision is a continuous one and has to be taken whenever a firm needs additional finance.

There are four major theories / approaches which explain the relationship between capital structure, cost of capital and value of firm:

1. Net income approach
2. Net operating income
3. Modigliani-miller (MM) approach
4. Traditional approach

1. NET INCOME APPROACH

This approach has been suggested by Devin Durand. According to this approach, capital structure decision is relevant to the valuation of the firm. In other words, change in capital structure causes a corresponding change in the overall cost of capital as the total value of the firm.

According to this approach, higher debt content in the capital structure will result in the overall or weighted average cost of capital. This will cause an increase in the value of the firm and consequently an increase in the value of equity share of the company. Reverse will be in a converse situation.

Assumptions

1. There are no corporate taxes.
2. The cost of debt is less than the cost of equity capitalization rate.
3. The use of debt does not change the risk perception of the investors.

The value of the firm on the basis of NI approach can be ascertained as follows:

$$\text{Value of firm} = S + D$$

Where as,

V=value of firm

S=market value of equity

B=market value of debenture and borrowed fund

$$\text{Market value of equity} = \text{NI}/\text{Ke}$$

Where as,

NI = Earning available for equity capital shareholders

Ke = Equity capitalization rate

2. NET OPERATING INCOME APPROACH

This approach also has been suggested by David Durand. This is just opposite to the net income approach. According to this approach, the market value of the firm is not at all affected by the capital structure changes. According to this approach, the change in capital structure will not lead to any changes in the total value of the firm and market price of share as well the overall cost of capital. The market value of the firm is ascertained by capitalizing the net operating income at the overall cost of capital, which is considered to be constant the market value of equity is ascertain by deducting the market value of the debt from the market value of the firm.

Assumption

1. The overall cost of capital remains constant for all degrees of debt-equity mix or leverage.
2. The market capitalizes the value of firm as a whole and therefore, the split between debt and equity is not relevant.
3. The use of debt having low cost increases the risk equity shareholders.

The value of the firm on the basis of NOI approach can be ascertained as follow

$$V = \frac{\text{EBIT}}{K_o}$$

Where as,

V = value of firm.

KO = cost of capital.

EBIT= earnings before interest and tax.

3. MODIGLIANI-MILLER APPROACH:

According to this approach, the value of value of a firm is independent of its capital structure. However, there is a basic different between the two, MM approach maintain that the weighted average cost of capital does not change in the debt-equity mix or capital structure of the firm.

Basis proposition

1. The overall cost of capital the value of the firm is independent of the capital structure.
2. The cost of equity is equal to capitalization rate of pure equity stream plus a premium for financial risk.
3. The cut of rate of investment purpose is completely for the way in which an investment is financed.

Formula:

$$V = \frac{O \times (1 - T) + B \times T}{K_e}$$

Where,

V= value of levered firm

O= operating profit

T= corporate tax rate

KE= cost of equity

B= amount of debt.

4. TRADITIONAL APPROACH

It is mix of net income approach and net operating. Hence, it is also called as intermediate approach. According to the traditional approach, mix of debt and equity capital can increase the value of the firm by reducing overall cost of capital up to certain level of debt. Traditional approach state that the cost of capital decreases

Only within the responsible limit of financial leverage and when reaching the minimum level, it starts increasing with financial leverage. This is because debt relatively a cheaper source of found and compared to raising money through shares because of tax advantages. The content of debt in the capital structure will favorably affect the value of a firm.

A Study on Capital Structure At C.B.K.S.S.K.N Chikodi

Basis proposition;

1. There are only two sources of fund used by a firm debt and shares.
2. The business risks remain constant.
3. The investors behave relationally.
4. The cost of capital remains more or less constant up to a certain degree of leverage but raises thereafter at an increasing rate.
5. The cost of equity capital remains more or less constant or rises only gradually up to a certain degree of leverage and rises sharply thereafter.
6. The averages cost of capital as a consequence of the above behavior of cost of capital and equity.

CHAPTER-3

INDUSTRY PROFILE

- 3.1 INDIAN SUGAR INDUSTRY SCENARIO**
- 3.2 INTRODUCTION TO SUGAR INDUSTRY**
- 3.3 PROFILE OF THE STUDY AREA**
- 3.4 ESTABLISHMENT OF COMPANY**
- 3.5 VISION, MISSION AND VALUES**
- 3.6 AIMS AND OBJECTIVES OF THE STUDY**
- 3.7 NATURE OF BUSINESS**
- 3.8 PRODUCT AND SERVICE PROFILE**
- 3.9 BRIEF INTRODUCTION ABOUT COMPANY**
- 3.10 ACHIEVEMENTS AND AWARDS**
- 3.11 COMPETITOR'S INFORMATION**
- 3.12 FLOW CHART OF SUGAR MANUFACTURING**
- 3.13 BOARD OF DIRECTORS**
- 3.14 ORGANIZATION CHART**
- 3.15 LICENSE AND PERMISSION**
- 3.16 INFRASTRUCTURE FACILITIES**
- 3.17 FUTURE OUTLOOK**
- 3.18 MISSION OF THE COMPANY**
- 3.19 FUNCTIONAL DEPARTMENT**
- 3.20 PURCHASE AND STORE DEPARTMENT**

CHAPTER- 3

INDUSTRY PROFILE

3.1 INDIAN SUGAR INDUSTRY SCENARIO

India has been known as the original home of sugarcane and sugar. Indians knew the art of making sugar since the fourth century. However, the advent of the modern sugar industry in India dates back to mid-1930's when a few vacuum pan units were established in the subtropical belts of UP and Bihar. Karnataka's the Mysore sugar company Ltd. at Mandya was the India's first sugar mill established in the year 1933.

Is the largest consumer and second largest producer of sugar in the world. The sufficient and well distributed and monsoon rains, rapid population growth and India's substantial increase in sugar production capacity have combined to make India the largest consumer and second largest producer of in the world. (Source: USDA Foreign Agricultural services).

The Indian sugar industry is the 2nd largest agro. Industry located in the rural India. The Indian sugar industry has a turnover of Rs.500 billion p.a. and it contributes Rs.22.5 billion rupees to the central and state exchanges tax, cess and excise duty every year (source, Ministry of finance, GOI). It is the second largest agro processing industry after the cotton textiles with the 453 operating sugar mills in different part of the country. Indian sugar industry has been the focal point for socio economic development in the rural areas, about 50 million sugarcane growers and a very large number of agricultural laborers' are involved in sugarcane cultivation and ancillary activities constituting 7.5% of rural population. Besides, the industry provides employment to about 2 million skilled/unskilled workers and others mostly from the rural areas. (Source: ISMA website accessed on 22nd May 2006).

The industry not only generates power for its own operation but surplus power for state electricity grid based on Bagasses (by products). And also produce fuel ethanol, rectified spirit (alcohol) and bio fertilizers, etc.

The sugar industry in the country uses only sugarcane as input; hence Sugar Company's have been established in large sugarcane growing states like UP, Maharashtra, Karnataka, Tamilnadu, AP, and Gujarat. These six states contribute more than 85% of total sugar production in the country. UP and Maharashtra together contributes 57% of total production.

Indian sugar industry has grown horizontally with large number of small sized sugar plants setup through the country as opposed to the consolidation, of capacity in the rest of the important sugar producing countries, where greater emphasis has been laid on larger capacity of sugar plants.

3.2 INTRODUCTION TO SUGAR INDUSTRY

Sugar is an agro-based industrial product. In an agricultural economy like India, large industries have played vital role in economic development with social justice. Only through encouragement to agro-industries, can the country attain prosperity and achieve a balanced economic growth state. In this risky undertaking the co-operative form of business organization is more appropriate instrument for creating socialistic common wealth. The government policy is oriented towards this aim. As a result, many co-operative societies were established in sugar industry both in manufacturing and also are enjoying numerous concessions such as land allotment, easy credit facilities and state patronize.

A Study on Capital Structure At C.B.K.S.S.K.N Chikodi





3.3 PROFILE OF THE STUDY AREA

"Shree Chidananda Basavaprabhu Kore Sahakari Sakkare Kharkane Niyamit, Chikodi" is a co-operative society registered under Karnataka co-operative society's Act in 1969. It is how inspired our founder Late ShriChidanand .B. Kore, an agriculturist and co-operator, to establish this factory during 1972-73 with the financial support from cane growers of this area and the state government. The industrial licence number of the factory is L-25/N-250/LC dated 16/10/1970.

The factory was registered under the co-operative act on 05-03-1969 firstly the executive body was constituted under the chairmanship of Shree Chidanand.B.Kore. Being the strong will of the board commercial license was obtained on 02-09-1973. This has been a landmark event in the history of sugar in north Karnataka.

3.4 ESTABLISHMENT OF COMPANY

The construction of the factory was started after receiving the order for commitment of construction. The machinery of capacity 1250metric tones per day was purchased from m/s walechandanager Industries at the cost of 146.50 lakh and the assembly work was started. The assembly work was completed with a period of 1 year i.e. on the year 27-10-1974 and factory was started producing sugar.

C. B. K. S. S. K. N. Chikodi is a co-operative unit. It is situated near Nandi village at a distance of about 10km from Chikodi town and the factory at present has an attractive campus with magnificent building

After a lot of dispute on location of plant, near Nanadi village, the construction work started in year 1971 and completed in the year 1974. The factory was inaugurated by Voice-president ShriB. D.Jatti on 6th Nov 1974. The regular production has been started from Dec 1974.

The area of operation covered 111 villages of which 102 villages are from chikodi talukas, 5 villages are from chikodi talukas, 5 villages are from Raibag taluka and 4 villages from Athan italuka.

At present total sugar cane supplied to this sugar industry is from 20,000 acres with average yield per acre of 25 MT.

The entire plant and Machinery has been supplied by m/s National Heavy Engineering Co-operative Ltd. Pune, A co-operative institution has also been installed to meet the present requirement of the Crushing capacity. The DKSSK, at present is equipped with modern machines and skilled personals.

A Study on Capital Structure At C.B.K.S.E.K.N Chikodi

Rs. 325 lakhs long term loan was borrowed from IFC, LIC, IDBI for original plant and First phase expansion and has been repaid as per their

The crushing capacity was enhanced from 1250 TDC to 2000 in 1984-85 and from 2000 TCD to 3000 IN 1993-94. The factory house hold expenses of factory from 3500 to 5500 TCD. Every expansion was not easy and had created a financial setbacks due to the lack of professionalism both in technical and financial managements. Thus over the period of two and half decades, the factory had grown only in sizes but not adopted the range of different by-product activities and had suffered due to a weak governance on efficiency, effectiveness, adaptability and internal and external accountability in the management. These things have brought and had suffered due to a weak governance on efficiency, effectiveness, adaptability and internal and external accountability in the management.

These things have brought the factory almost to the brink of sickness. Besides resulting a huge negative net worth and ever-high accumulated losses. However, this cooperative and rural based industry must succeed if the poor farmers and the rural unemployed youths have to be prosperous.

3.5 VISION, MISSION AND VALUES

VISION

- To be a world class producer of sugar.
- Achieve greater raw material security.
- Delivering consistently on returns to all its shareholders.

MISSION

- Encourage Agro-based co-operative industry.
- To develop co-operative movement in rural sector.
- To encourage the farmers to grow sugar cane for production of sugar & its by-products.

VALUES

- Consistently offer quality product and services to customers.
- Uphold excellence in performance as a key business driver.
- Encourage teamwork and innovative employees.

- Be an equal opportunity employer guided by local laws and international labour organization convention.

3.6 AIMS AND OBJECTIVES OF THE COMPANY

- To encourage self-help thrift & co-operative amongst members.
- Utilization of raw material and sell finished product.

3.7 NATURE OF BUSINESS

Sugar sector is one of the large scale industries in manufacturing sector. Now a day the competition in sugar sector is very high. **SHREE CHIDANANDA BASAPRABHU KORE SAHAKARI SAKKARE KARKHANE NIYAMIT, CHIKODI** is a co-operative society registered under Karnataka co-operative society's Act in 1969. The object of business is to encourage proper devolvement of agricultural industrial amongst members on co-operative lives by promotions of co-operative and joint forming methods so as to secure best merits of modern large scale agriculture production to the owners of the lands. The nature of business is to encourage self help, thrift and co-operate amongst member

Infrastructural Facilities:

- Near to raw material.
- Good transportation facilities.
- Nearer to rivers place (Krishna river).
- Good networking.
- Proper accommodation for its employees.

3.8 PRODUCTS AND SERVICE PROFILE

Production : Raw material

Production of sugar : Sugar cane

Large -30

Medium -30

Small -30

Production of alcohol : Molasses

Production of compost : Press mud spent wash

- **Procurement**

The factory obtained the sugarcane, which is required from more than 1000 farmers and by the company farms and others raw materials which are required for the operation is taken from the basis of price and quality and then the required raw materials will be taken for the efficient vendors.

The transport of sugar cane from the formers to the factory will be engaged through lorries which will be taken through bidding at the time of harvesting and also farmers themselves supply by their own bullock carts or by tractors.

- **Cane weightment**

There are 12 out laying weigh bridges situated round about chikodi for delivering the sugarcane from the farmers. Double check has been provided over the weightment of cane transported from out station.

- **Operation**

The sugarcane, which is carried by Lorries or other, will be directly fed to the machine where the initial process starts. At the starting point these are knives which cuts sugar cane bunches into individual sugar cane.

After this in the next steps there are sharp cutter which cuts the sugarcane bunches into very small pieces. Then it will go to trade marbs [a series of roller used for crushing purpose] for crushing. Then the juice produced will go for further processing and the Biogases will be lift out their itself. Then they add flocculent [used for mud setting] milk sanitation etc and then after it will go through pans and mesquite for this mesquite they will add Sodium Hydro Sulphite [to bleach the mesquite] and it will be separated out and the molasses will be send to distillery and they white sugar will be bagged.

A Study on Capital Structure At C.B.K.S.S.K.N Chikodi

- **By products of sugar manufacturing**

The chief by product of sugar manufacturing are:-

1) Bagasse

Bagasse is the by-product of sugar left behind after cursing of sugar cane. It is used as a fuel in the sugar factory boiler. Excess bagasse finds use as raw materials in paper manufacturing industry.

2) Molasses

Molasses is a by-products of sugar refining chiefly used for alcohol production. The entire molasses output is routed to the distillers unit which is maintained by the organization.

3) Press mud

Press mud is the by-products generated by cane juice filtration during sugar manufacture currently. Press mud is used as a fertilizer in sugarcane cultivation.

Area of operation

The area of operation of the society shall be confined to the following village of Chikodi, Athani, Raibag, taluka of Belgaum District & Jamakandi taluka of Bagalkot District of Karnataka State and villages of shiroi, Kagal taluka of Jodhpur District, Maharashtra State only.

3.9 COMPANY PROFILE**SHREE DOODHGANGA KRISHNA SAHAKARI SAKKARE KARKANE NIYAMIT –CHIKODI**

Taluk chikodi , dist –Belagavi

Name of Organization : Shree D.K.S.S.K.N – Chikodi

Location : Nanadi Village.

Tal- Chikodi . Dist- Belgavi

Karnatak.

Resi. Office : Chikodi

Ph.No – 08338-276931 To 35

Fax : 08338-276105

E-Mail – : dkssugara@sancharnet.com

Construction : Building Layout, Garden and Light facilities.

Capacity : 5500tones sugar cane crushing/ day.

20.7 M. W Power Generation.

30 K.L.P.D. Rectified Spirit.

Turnover : 450 to 500 crores / Annum.

Employees : 1282

Work Shift : 3 Shifts / 8 hours per shift

(No Holiday)

3.10 ACHIEVEMENTS AND AWARDS

ACHIEVEMENTS

- STAI, SISSTA & DSTA in their recent 8th annual convention at Hyderabad held on 13-08-2005 have honored with the most prestigious award as the "THE BEST EFFICIENCY & PERFORMANCE SUGAR FACTORY" in the country for the year 2004-05. The award was given by Humble Union Minister for agricultural, food & Civil Supplies, in presence of Humble Chief Minister of Andhra Pradesh.
- The Karnataka State Co-op Federation Ltd. had adjudged as "The Best Co-operative Sugar Factory in the State" and AWARD had been given to us through Humble Chief Minister of Karnataka, on 14/11/2004.
- The companies have the Honor of achieving the Highest Sugar Recovery @ 11.80% in Southern part of India for the year 2001-02. And 11.90% for 2002-03 also.

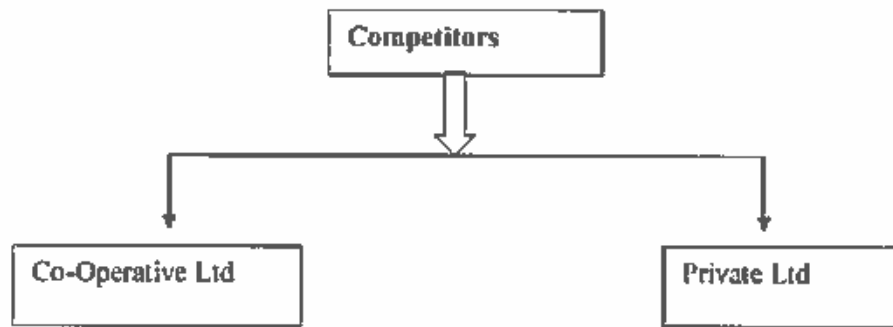
AWARDS

The Karnataka State Cooperative Sugar Factories Federation Ltd., Bangalore had honored the company with the following awards for the:-

1. Highest sugar recovery in South India during 2001-02.
2. The "Best Administration Award" to the Managing Director with a cash prize of Rs 10,000/- and a certificate.
3. The Best chief Chemist Award with Rs.5, 000/- Cash prize and a Certificate.
Best chief engineer with award worth of Rs.5, 000/- cash prize and certificate.

3.11. COMPETITOR'S INFORMATION

The competitors for this industry are other located nearby sugar industry named as under:



1. Hira Sugars, Sankeshwar (Karnataka)

1. Renuka Sugars, Munnoli (Karnataka)

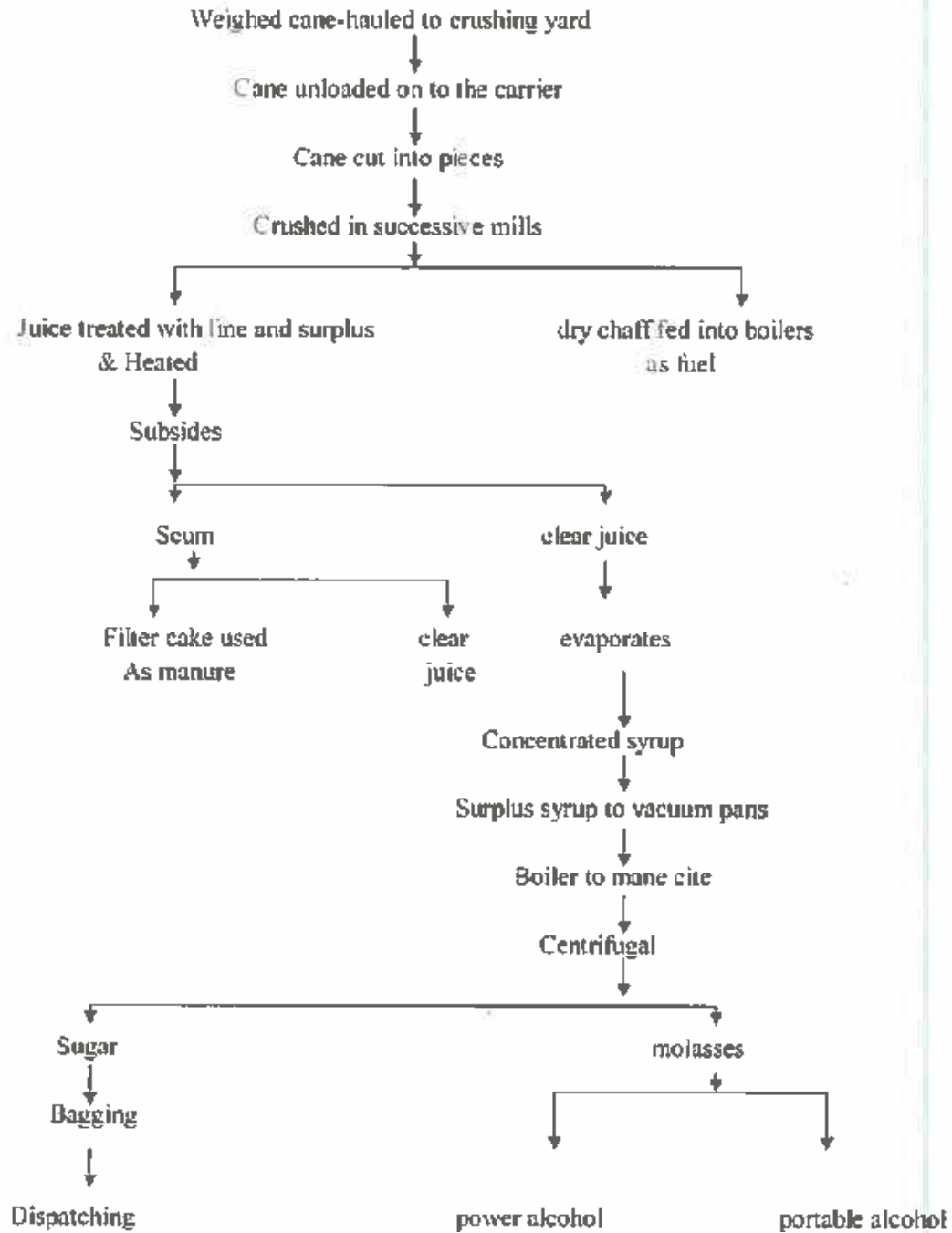
2. Prabha sugars, Gokak (Karnataka)

2. Vishwas Sugars, Bagewadi (Karnataka)

3. Ajara Factory, Ajarai (Maharashtra)

3. Ugarkurd Sugar, Athani (Karnataka)

3.12 FLOW CHART OF SUGAR MANUFACTURING

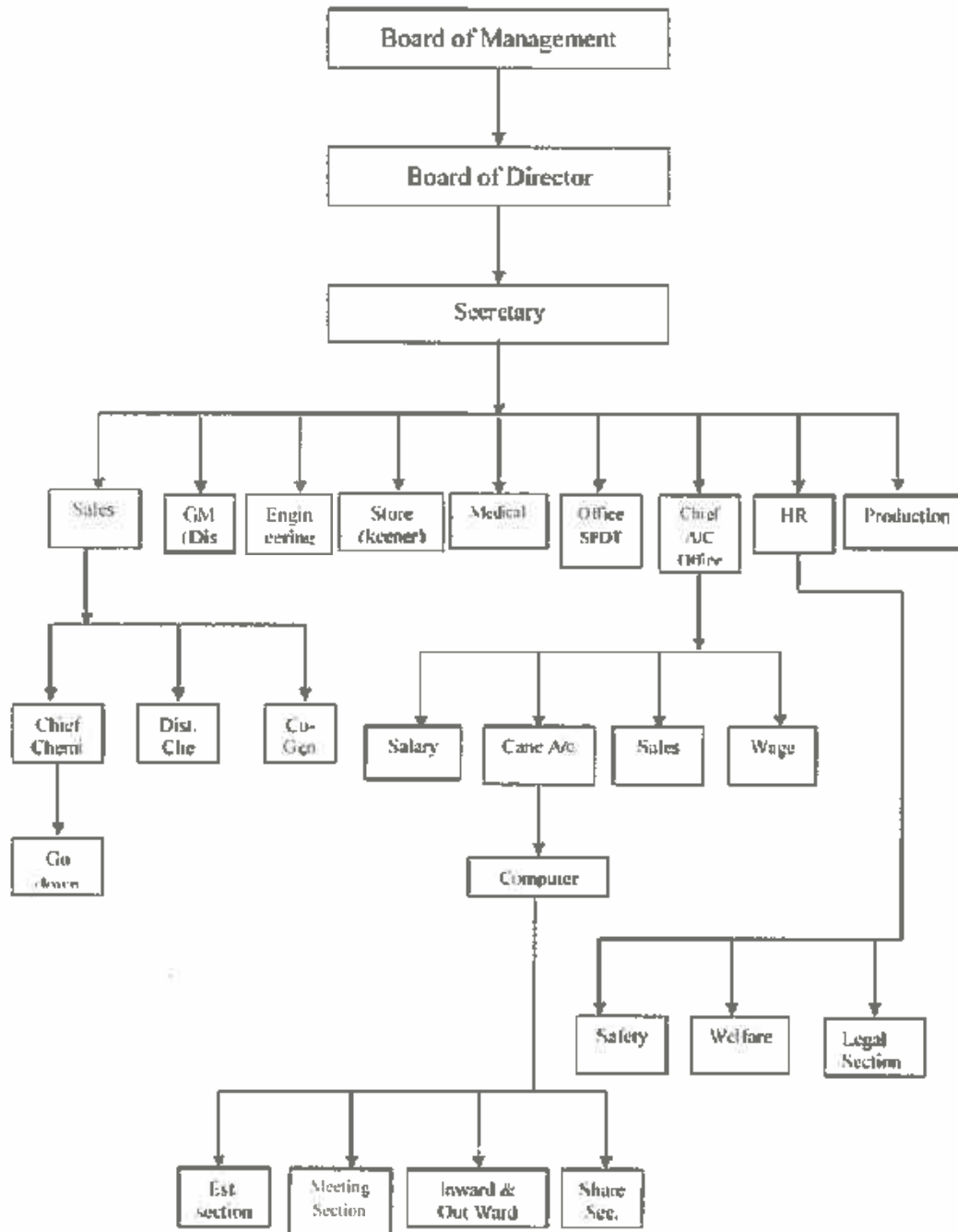


A Study on Capital Structure At C.B.K.S.S.K.N Chikodi

3.13 Shree Chidanand busavaprabhu kore Sahakar Sakare Karkhane Niymit, Chikodi (Dist. Belagavi)

Sl. No	Name	Position
1.	Shri. Amit prabhakar kore	Chairman
2	Shri. Rohan/Sandip Ashok Patil	Vice-chairman
3	Shri. Mahantesh mallayyaswami kavadgimath	MLC/Director
4	Shri. Annasaheb Shankar Jolle	Director
5	Shri Bharatesh Shantappa Banavane	Director
6	Shri. Mallikarjun Ganapataroa kore	Director
7	Shri. Parasgouda Igaroda Patail	Director
8	Shri. Tatyasaheb dadu kate	Director
9	Shri. Ajit S Desai	Director
10	Shri. Mahaveer Yashwant Mirje	Director
11	Shri. Nandkumar Mallappa Nashipdi	Director
12	Shri. Balagouda Shivmurthi Rendale	Director
13	Shri. Ramchandra Maruti Niushandhar	Director
14	Shri. Mallappa Shankar Patil	Director
15	Shri. Chetan Prakash Patil	Director
16	Shri. R.T Desai	Managing Director

3.14 ORGANIZATION CHART



3.15 LICENSE & PERMISSION

A factory obtained all the license & permission required from various government & semi government of India

- Letter of intent from government of India.
- Certificate of incorporation.
- Certificate of commencement of business.
- Registration certificate regarding KST, CST professional tax & KTEG from government of Karnataka.
- Excise registration certificate.
- Sugar cane crushing license.
- Permission from pollution control board.
- Single window clearance from Karnataka udyogmitra.
- Income tax registration certificate.
- Allotment of cane area reservation certificate.
- New unit certificate from joint director of industries.

3.16 INFRASTRUCTURE FACILITIES

- Profile of employees.
- of conveyance is good
- Ambulance & medical facilities provided for the employees.
- Drinking water & rest room is provided for the employees.
- Health camps will be conducted.
- Section of leave whenever necessary.
- Payment of bonus of effective work.
- Training to employees during non working hours.

3.17 Future outlook

- The installation & commissioning of Co-generation project is completed. The power generation will start during the ensuing crushing season i.e. October-2012.
- The company has taken up expansion of its distillery from present 30 KLPD to 60 KLPD. The preliminary work of preparation of Detailed Project Report, appointment of consultants, etc. has been completed and placement of orders for plant and machinery is in final stage.
- Considering the socio-economic development of the operational area of the company, the company has taken up five lift irrigation schemes covering area of 1000 acres, out of which, two schemes in the village Madbhavi have been completed.
Further, company has decided to take up ten lift irrigation schemes which will cover additional 2000 acres of land. All the schemes will be owned and managed by the company. This will help both the farmers and the company. The farmers will benefit by converting their dry land into irrigated land which will result in improvement in standard of living of farmers and thereby entire region. This will also get assured good quality cane from nearer distance.
- The company proposes to start its own infrastructure civil construction division. Necessary changes in the objects clause have been proposed in the Notice of the Annual general meeting.

3.18 MISSION OF THE COMPANY

- To become world class sugar producer in the nation.
- To fulfill national & social obligations at the responsible citizen of the country.
- To create a better environment, intellectual satisfying and professionally rewarding to the employees.

3.19 FUNCTIONAL DEPARTMENTS

(I) ADMINISTRATION DEPARTMENT

- All department and it manages all activities of the organization. It includes chairman and it is the department works as a head of the board of directors.
- It maintains all type of works like income tax, purchase goods through purchase department and deciding payment of workers & also types of staff payments. Meeting is conducted once in a month. Chairman checks daily reports it is prepared by chief chemist.
- By seeing report management will get daily performances. If performance low in any department chairman visit particular department & officers meet to chairman daily to show present working conditions.

The company is being managed by the board of directors consisting of fifteen directors. The day today affairs of the company are being looking after by Mr. Amit Prabhakar kore, chairman & managing director.

FUNCTIONS

- The main function of chairman is checking daily reports.
- Visiting other departments according problem arising.
- Analyzing market conditions.
- Taking decisions according to change in corporate world.

2 .PURCHASES AND STORE DEPARTMENT

Purchase department purchases material whatever factory required, it purchase-

1. Electric goods
2. Machinery spare parts
3. Building materials
4. General materials.

Method of purchasing

Method of purchasing varies according to nature of the demand in the plant & conditions in the market in which materials are to be bought.

A Study on Capital Structure At C.B.K.S.S.K.N Chikodi

Following are the methods used generally-

- ✓ Purchasing be required
- ✓ Purchase for a specified period
- ✓ Negotiations
- ✓ Contract purchasing
- ✓ Telephonic quotations.

(3) STORE DEPARTMENT

Store means a building constructed for purchasing the materials. proper storage of goods is very essential for effective production. Materials when received are to be properly tested & kept proper place known as store. In D K S S K N Sugar Factory . Store department works in three shifts.

STORE KEEPER

The store is under the one person called store keeper.

FUNCTIONS

- ✓ Maintaining stock.
- ✓ Overall supervision.
- ✓ Sends material what required.

4) CIVIL DEPARTMENT

It is one of the department in C B K S S K N Sugar Factory, this department maintains infrastructure. It includes civil engineer as head of the department have 20 regular workers. If any projects starts tasks more workers. Here number of workers depends on work.

FUNCTIONS

- Construction of buildings.
- Create new projects.
- Water supply.
- Building & gardening maintenance
- Internal water supply

-Colony water supply

-Process water supply.

(5) DISTILLERY DEPARTMENT

Distillery plant uses by-products of sugar mill viz. molasses as a raw material for production of alcohol, rectified spirit (Rs), ethanol & extra neutral alcohol (ENA). It is registered under excise commissioner of Karnataka.

Products are supplied to Bangalore, Kerala, and Tamil nadu & Goa for sales.

FUNCTIONS OF DISTILLERY MANAGER

- Production of alcohol, rectified spirit (Rs), ethanol & extra neutral alcohol.
- Maximum quality in products.
- Maintaining quality.
- Marketing of alcohol.
- To avoid the losses.

6) ENGINEERING DEPARTMENT

Engineering department maintains machinery & all technical works. This department starts from unloading the sugar cane vehicles up to juice is extracted from sugar cane & wherever machines are working. In ATHANI FARMERS SUGAR FACTORY LTD has 4 sectors are there in engineering department with the head of engineers & factory managers.

a) ASSISTANT ENGINEER

In this section 4 engineers are there to maintain mill, boiler, boiling house & centrifugal. In this section total 275 workers are there, every section includes 8 persons in 3 shifts. In 8 persons 4 persons are called as filter-a & filter-b class persons. Remaining is called as helpers.

b) ELECTRICIAN ENGINEER

A Study on Capital Structure At C.B.K.S.S.K.N Chikodi

In this section electrical engineer maintains all electrical works. Main function is providing current to all works & to avoid accidents from electricity.

- **SAFETY OFFICER**

In AFSF LTD. One safety officer is there. He always takes predetermined action to avoid accidents. The main function is prevention of accidents & safety from fire.

- **MECHANICAL DRAFTSMAN**

In AFSF LTD one mechanical draftsman is there with helper.

7) GODOWN DEPARTMENT

It is one of the department in Athani Farmers Sugar Factory, it maintains final stock of finished products i.e. sugar bags.

In Athani Farmers Sugar Factory 8 godown are there, with a capacity of one lack k.w daily production of factory is 600 k.w& every 314 day's 25000 k.w is delivered for sale. One watch man is there for security.

FUNCTION OF GODOWN KEEPER

- Maintaining of stock.
- Recording of stock whatever delivered & received.
- He stores stock according to grade wise.

TYPES OF GRADES

S-30

S1-30

Main sugar is supplied to Delhi & Kolkata for market.

8) SECURITY DEPARTMENT

It is one of the department gives security to the organization. It is required to every organization or business.

OBJECTIVE OF THIS DEPARTMENT

- Providing security to the organization.
- Checking every person who enter & exit from organization.
- Checking of every vehicle.

3.20 SWOT ANALYSIS

STRENGTHS

- Well established since long time.
- Strong network from all aspects- location, transports, and infrastructure.
- Good financial supports whenever needed are provided by both state and central governments.
- Located in the heart of city.
- Concept of multi joint-product.
- New power plant, which is constructing now is needed for future growth.

WEAKNESS

- Absent of motivating incentives.
- Lot of training required for all levels of employees.
- Improper planning of investment for future growth.

OPPORTUNITIES

- Can implement change in technology.
- Frame proper policies and procedures.
- Restructuring of manpower.
- Re- engineering.

THREATS

A Study on Capital Structure At C.B.K.S.S.K.N Chikodi

- Other units.
- Competition.
- Decrease in sugar growth.
- Diversified resources such as raw material due to many sub units initialization.

CHAPTER -4

DATA ANALYSIS AND INTERPRETATION

TABLE: 4.1 SHOWS EARNINGS PER SHARE

TABLE-4.2 SHOWS EARNINGS BEFORE INTEREST AND TAX

TABLE 4.3 SHOWS COST OF EQUITY

TABLE 4.4 SHOWS COST OF DEBT

TABLE 4.5: SHOWS DEBT EQUITY RATIO

TABLE 4.6 SHOWS VALUE OF FIRM

TABLE 4.7 SHOWS OVERALL COST OF CAPITAL

CHAPTER -4

DATA ANALYSIS AND INTERPRETATION

TABLE: 4.1 SHOWS EARNINGS PER SAHRE

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20
Earnings Available To Equity Shareholders	22356224	35171922	28023510	33636922	18423698
No. of Shares	1446700	1446700	1786700	2186700	2186700
EPS	15.45	24.31	16.68	15.38	8.42

(Source: Annual Report)



INTERPRETATION

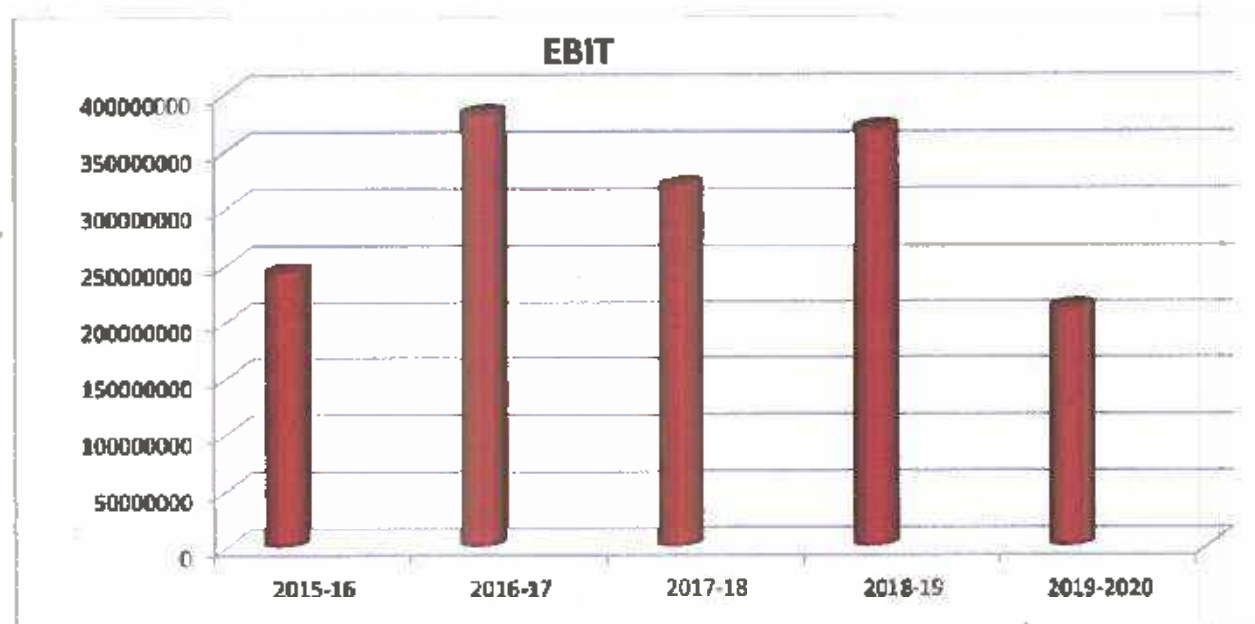
The above table shows that there is fluctuating trend in the all financial years. The company has lowest EPS in 2019 i.e. 8.42 .Compare to all years there is an increase in the EPS of the company in the year 2016-17 i.e.24.31.And in the year 2017-18 and 2018-19 the EPS of the company is 16.68and 15.38 respectively.

A Study on Capital Structure At C.B.K.S.S.K.N Chikodi

TABLE-4.2 SHOWS EARNINGS BEFORE INTEREST AND TAX

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20
Total Sales	269066775	423536483	353569958	400022028	238317000
Less: Variable cost	25233970	40292502	33175550	29901580	26378014
Contribution	24382805	38323981	320394408	370120448	211938985
Less: Fixed Cost	746832	1112717	849183	810762	1064758
EBIT	243085973	382131264	319545225	36930986	210874227

(Source: Annual report)



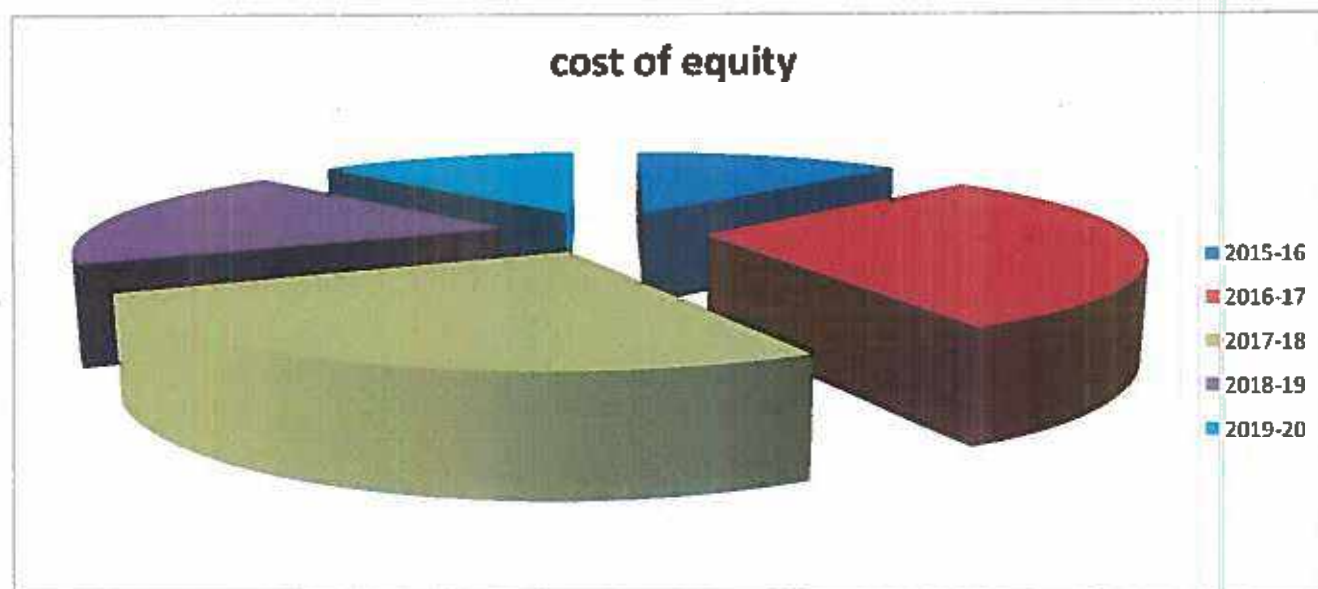
INTERPRETATION

From the above table we find out that is decrease in the total sales and EBIT of C.B.K.S.S.K.N Ltd RS.238317000 and RS. 210874227 in 2019-20. In the financial year of C.B.K.S.S.K.N Ltd there is fluctuating in the sales and value of EBIT of the company is Rs. 423536483 and Rs. 382131264 in 2016-17.

TABLE 4.3 SHOWS COST OF EQUITY

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20
Net income	22339352	35154784	27957335	33553707	18377761
Market value of share	183265772	125940282	116135500	190680240	158645085
Cost of Equity (%)	12.18	27.19	24.07	17.59	11.58

(Source: Annual Report)



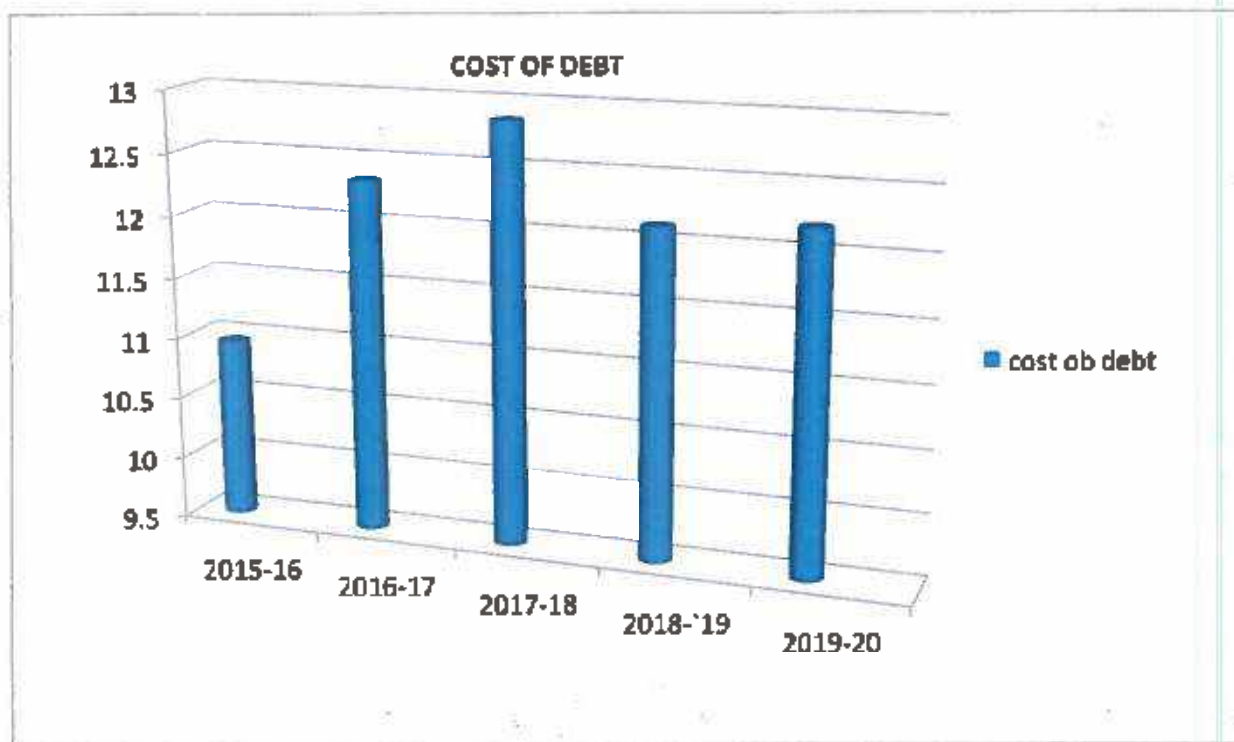
INTERPRETATION

The above table explains regarding the trend of cost of equity. There is increase in the value of cost of equity. In the 2019-20 the company has lowest cost of equity i.e. 11.58%. There is an increase in the cost of equity in the year 2016-17 i.e. 27.19% as compared following year.

TABLE 4.4 SHOWS COST OF DEBT

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20
Interest paid	1952372	3041204	3931119	3294046	2663724
Long term borrowings	4869495	7768472	7099778	5717217	4814291
Cost of debt	10.95	12.33	12.86	12.13	12.20

(Source: Annual report)



INTERPRETATION

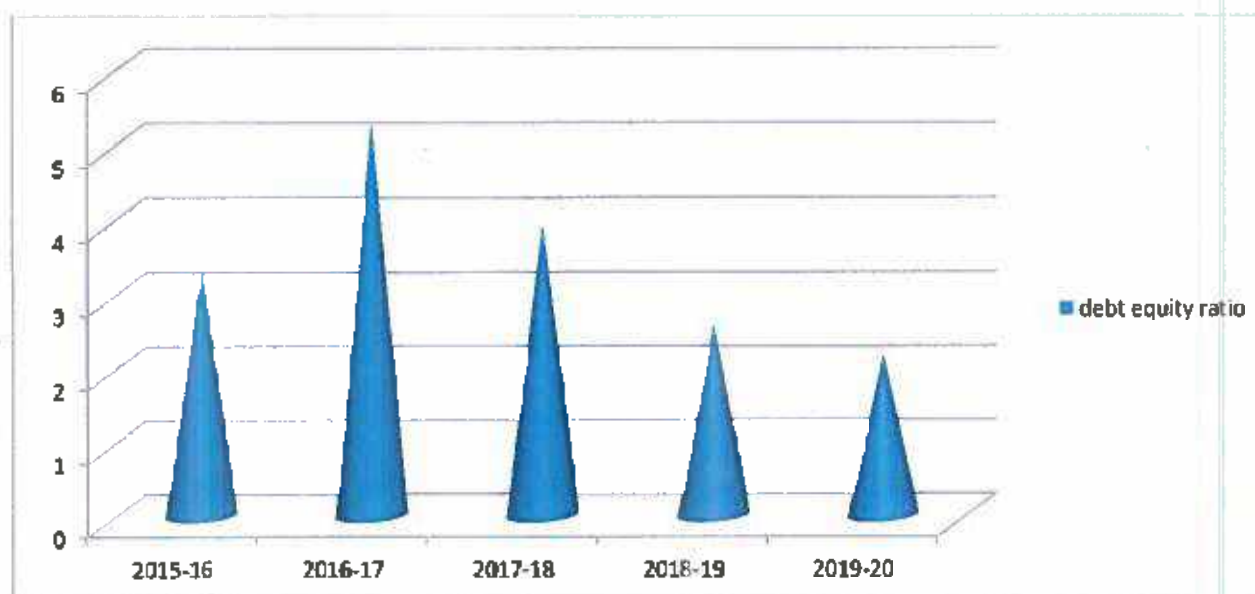
The above table shows there is a less than the cost of debt. There is a highest cost of debt in the year 2017-18 is 12.86% and lowest cost of debt in the year is 2015-16 is 10.95%. In all financial years the trend of cost of debt value is fluctuating.

A Study on Capital Structure At C.B.K.S.S.K.N Chikodi

TABLE 4.5: SHOWS DEBT EQUITY RATIO

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20
Total debt	48694950	77684721	70997781	57172170	48182916
Equity share capital	14533503	14533500	17933500	21933500	21933500
Total debt equity ratio	3.35	5.34	3.95	2.61	2.19

(Source: Annual report)



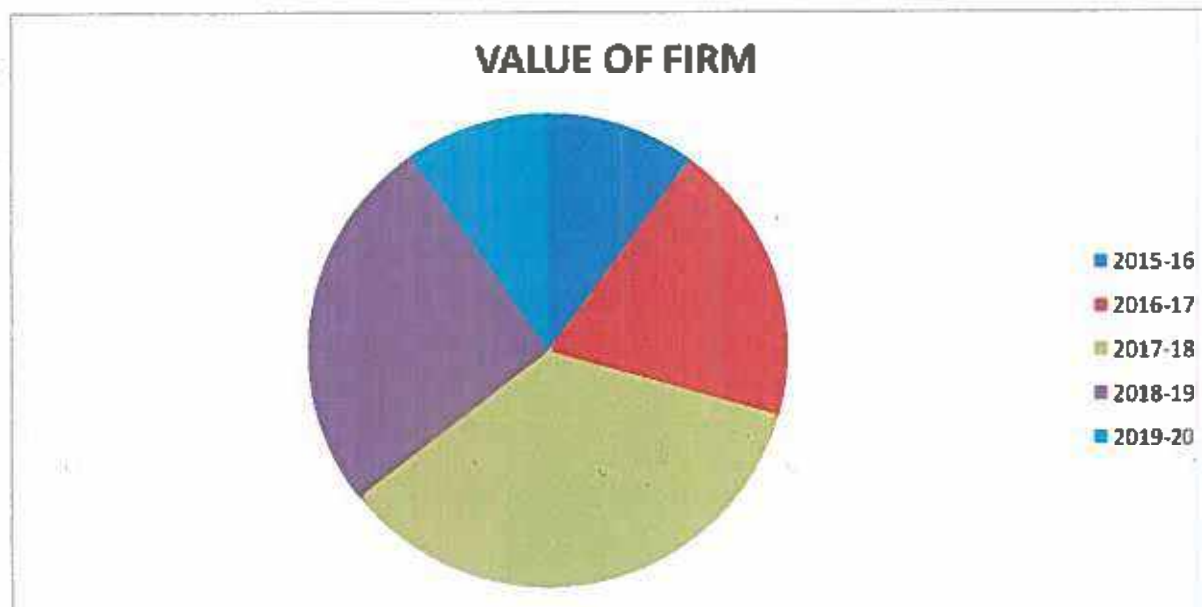
INTERPRETATION

The above table explains regarding the trend related to the total debt equity ratio. There is a decreasing trend of debt equity ratio from 2015-16 to 2019-20. In the year 2015-16 the company has total debt equity ratio from 2016-17 to 2019-2020. In the year 2015-16 the total debt company equity ratio is 5.34, which is the highest value compared to all financial year.

TABLE 4.6 SHOWS VALUE OF FIRM

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20
EBIT	243085973	382131264	319545225	369309686	210874227
Less: interest(I)	19523729	30412042	39310119	32940461	26637247
Earnings available to equity shareholders(NI)	223562244	351719222	280235106	336369225	184236980
Market value of equity (S)	1242012466	2473412250	4631985223	3363692250	1150761898
Market value of debt(B)	178298894	246650786	305677441	271561920	218338090
Value of firm (V=S+B)	1420311360	2720063036	4937662664	3635254170	1369099988

(Source: Annual report)



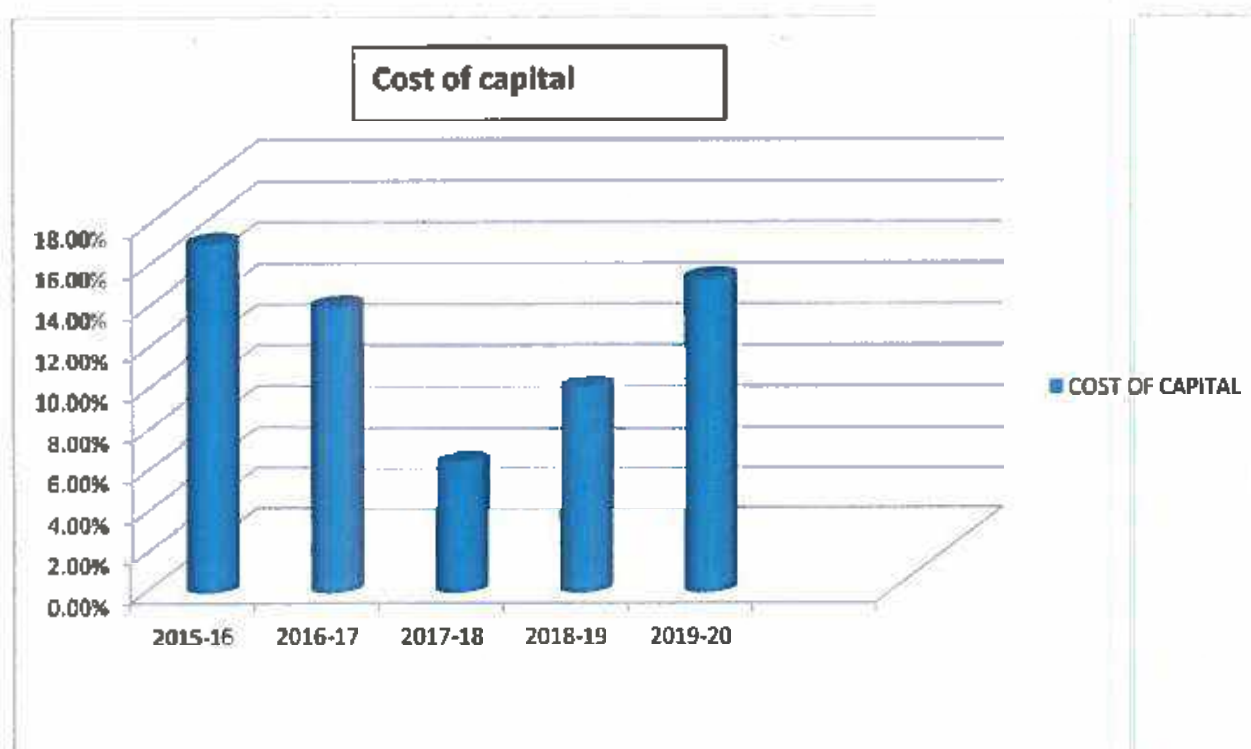
INTERPRETATION

The above table shows the value of firm. There is increase in the value of firm. In the year 2019-20 the company has lowest values of firm i.e RS.1369099988. There is an increase in the value of firm in the year 2017-18 i.e. 4937662664 as compared following years.s

TABLE 4.7 SHOWS OVERALL COST OF CAPITAL

Particulars	2013-14	2014-15	2015-16	2016-17	2017-18
EBIT	243085973	382131264	319545225	369309686	210874227
Value of firm(v)	1420311360	2720063036	4937662664	3635254170	1369099988
Overall cost of capital (ko)	17.11%	14.04%	6.47%	10.15%	15.40%

(Source: Annual report)

**INTERPRETATION**

The above table shows the overall cost of capital. In the financial year 2015-16 there is increase in the trend overall cost of capital i. e. 17.11% and there is decrease in overall cost of capital from 2016-17 to 2017-18 again there is increase in overall cost of capital i.e 5.04%.

CHAPTER-5
FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

5.2 SUGGESTIONS

5.3 CONCLUSION

CHAPTER-5

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

1. In the financial year 2015-16 the company had highest EPS that time it was able to generate dividend to the investor i.e. Rs. 24.31. From 2017-18 to 2019-20 the trend of EPS is fluctuating i.e. Rs.15.38, Rs.8.42.
2. There is relatively fluctuating in the value of EBIT from 2015 to 2018. In the year 2019-20 company had lowest total sales and EBIT i.e. Rs.238317000 and Rs. 21087422.
3. The trend of cost of equity in the financial year 2016-17 is very high i.e. Rs.27.19%. There is an increase and decrease trend of cost of debt.
4. From the financial year 2017-18 to 2019-20 there is relatively decrease in the total debt equity ratio i.e. Rs 3.95.261.219 which states that the company is overcoming from its financial borrowing.
5. In the financial year from 2015 to 2020 there has been increase in the value of firm and in the financial year 2019to 2020 again it is decrease as per net income approach.
6. The overall cost of capital trend shows that there is increasing trend because debt proportion is very low.
7. In 2018-19 the returns which are generated are healthy, it shows that net profit is very high and it increases the value of firm.

5.2 SUGGESTIONS

1. The company should adopt the cost control technique to minimize the cost and to increase the EBIT of the company.
2. Expand its share in market which will help in enhancing its market presence.
3. The firm must keep the reserve debt capacity to meet the financial leverages.
4. The net profit should be increase every year that will help the company to increase the value of the firm.
5. Payment of interest should be reduced by using more own capital and minimizing the borrowing of long term debt.
6. The company should improve their sales by adopting various strategies.

5.3 CONCLUSION

Capital is very important for every business concern to run their business. In India companies can raise capital through equity share capital, preference share capital, debenture, long term loans and retained earnings.

I conclude that capital structure of C.B.K.S.S.K.N Ltd is equity good company's capital structure is showing maximization of value of firm and overall cost of capital should minimize.

Company should borrow the debenture which will help to increase their value of firm and decrease the overall cost of capital.

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**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON RATIO ANALYSIS"**

AT

D.T.PATIL CO-OPERATIVE BANK, CHIKODI

Submitted to

RANI CHANNAMMA UNIVERSITY, BELAGAVI



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

**Miss. Sonali Jhutale
M.COM-IV SEMESTER**

REGISTER NO: MC191621

UNDER THE GUIDANCE OF

SHRI V. S. KHOT

K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201
PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that **Miss. Sonali Jhutale** has satisfactorily completed the **Project Report Entitled "A Study on Ratio Analysis" At D.T.Patil Co-operative Bank, Chikodi** for the partial fulfilment of **Degree in Master of Commerce in Rani Channamma University, Belagavi** during the academic year **2020-2021.**

SHRI. V. S. KHOT

PROJECT GUIDE

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ESTD : 1980

SHRI D. T. PATIL CO-OPERATIVE BANK LTD., CHIKODI.



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Email : liberalbank@rediffmail.com Email : dtpatilbank@rediffmail.com.

(Formerly : The Liberal Co-operative Bank Ltd., Chikodi.)

ಶ್ರೀ ಡಿ. ಟಿ. ಪಾಟೀಲ ಕೋ-ಆಪರೇಟಿವ್ ಬ್ಯಾಂಕ್ ಲಿ., ಚಿಕ್ಕೋಡಿ
ಶ್ರೀ ಡಿ. ಟಿ. ಪಾಟೀಲ ಕೋ-ಆಪರೇಟಿವ್ ಬ್ಯಾಂಕ್ ಲಿ., ಚಿಕ್ಕೋಡಿ

Ref. No. _____

Date : 8 / 09 / 2021

CERTIFICATE

This is to certify that Miss. Sonali Sakharam Jhutale Student of M.COM IV Sem in K.L.E Society's Basavaprabhu Kore Arts and Commerce College Chikodi Dist: Belagavi had completed "A study on Ratio Analysis" of "Shri. D .T. Patil Co-op. Bank Ltd., Chikodi" from 25-06-2021 to 25-08-2021.

During her study, she has been provided with the necessary information.
We wish her every success in her future endeavors.

For Shri D T Patil Co-op Bank Ltd. CHIKODI

Anjali
Managing Director

DECLARATION

I declare that the project report entitled "A Study on Ratio Analysis" At D.T.Patil Co-operative Bank, Chikodi is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. V. S. Khot, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 21/09/21

Place: Chikodi

Sonali

Miss. Sonali Jhuhtale

Register No: MC191621

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

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At the outset, I would like to thank all the teaching faculty of PG Department of Commerce and Management for their valuable suggestions during project work.

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Miss.Sonali Jhutale

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CHAPTER 1

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

1.2 REVIEW OF LITERATURE

1.3 NEED FOR THE STUDY

1.4 STATEMENT OF THE PROBLEM

1.5 OBJECTIVES OF THE STUDY

1.6 SCOPE OF THE STUDY

1.7 RESEARCH METHODOLOGY

1.8 LIMITATIONS OF THE STUDY

1.9 CHAPTER SCHEME

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

A co-operative or credit is an autonomous association of person who voluntarily co-operate for their mutual social, economic, and cultural benefit. In India Co-operative Societies Engaged in banking barriers are regulated with the RBI and governed Co-operative Societies Act, 1965.

As co-operative bank is retail and commercial banking organized on a co-operative basis. Co-operative banking institutions take deposits and lend money in most parts of the world. The Banking Industry was once a simple and reliable business that took deposits from investors and lent it to borrowers at a higher rate.

The bank is an institution which deals in money. It borrows money from those who have surplus money and lends the same to those who are in need of it. Beyond the millennium, the Indian co-operative and other private bank will emerge larger size, technologically better equipped and stronger capital base. The health of Indian private bank is preserved and improved and they continue to play an important role in the Indian economy. D.T.Patil co-operative bank ltd., has large number of customer data base with variety of full services retail banking products including deposits and loans, mutual funds, investments. D.T.Patil co-operative bank also provides credit services cash management services, SMS banking service along with treasury, investment and wealth management.

The Financial Performance on ratio analysis of private co-operative bank reflect the health of the bank and inherent risk, this entire project focuses on liabilities and assets of D.T. Patil co-operative bank ltd., and it indicates that the sources from which bank raised funds and how it utilized that fund. It deals with capital structure of bank deposits which are collected from public.

1.2 REVIEW OF LITERATURE

A. Soni and saluja (2013)

The study is based on the financial ratio of DCC Bank in RajandGaon. The different ratios indicating liquidity, efficiency, profitability, and solvency are taken into consideration in order to understand the financial position of the bank. The financial position of this bank analyzed by ratio analysis Techniquial and it is found that the solvency, liquidity and profitability are satisfactory. The efficiency ratios indicated a medium level of the expenditure over the profitability of the bank was very low due to the heavy over dues and low rate of recovery.

B. Jyoti Gupta, Suman Jain (2012)

In their research paper has discussed the financial performance of UCBS in India. They have studied 200 respondents in order to understand types of loan preferences, services standard of co-operative banks, efficiency, lending practices as well as satisfaction level of the customers with references to co-operative banks. Descriptive research is used in order to identify the lending practices of bank and determining customers level of satisfaction and also suggested measures to efficiency of UCBS in India.

C. Patil (2000)

Used various financial ratios to evaluate the performance of primary co-operative Agriculture and rural development banks in Dharwad district of Karanataka. Study revealed that the current ratio was more than Chaptery and acid-test ratio was less than Chaptery, while the net worth and profitability ratios were negative for all the banks in all the periods except PCARDB, Dharwad.

D. Shekhar et al. (1999)

Employed financial ratio analysis for the karimnagar District central co-operative bank in Andhra Pradesh, India. Financial ratio relating to solvency, liquidity, profitability, efficiency and strength of the bank were analysed for the period 1985/86-1994/95

A Study on Ratio Analysis At D.T.PATIL Co-operative Bank Ltd.,Chikodi

E. Hosamani (1995)

Used various ratio to evaluate the performance of MalaprabhaGrameena bank in Karnataka profitability ratio were negative (-43%) due to higher burden ratio (3.11%) compared to spread (2.96%)

1.3 NEED FOR THE STUDY

Ratio analysis is the powerful tool applied for measuring financial soundness and performance of a firm. And now a day it is necessary to all companies to know as well as to show the financial soundness i.e. position and operation of company to know their financial position and operation of the company.

In this report researcher tried to know the financial position of D.T.Patil co-operative bank ltd, Chikodi .by using the 5 years Annual Report of the organization. The financial analysis of this report will show the strength and weakness of the D.T.Patil co-operative bank ltd, Chikodi. Financial analysis will help the firm to take decision. This study can say that, financial analysis is a starting point for making plans before using any sophisticated forecasting and planning.

1.4 STATEMENT OF THE PROBLEM

As the study is pertaining to financial performance of study Chapter, analysis and interpretation of financial statement is a regular exercise to review the performance of the company. it was proposed to conduct a review to study the short term prospects as well as long term trends and to arrive at the conclusion on the performance review resulting in taking corrective action optimizes the performance in the subsequent period.

1.5 OBJECTIVES OF THE STUDY

- To know the financial performance of D.T.Patil co-operative bank based on ratios.
- To find out the organization efficiency based on past and present profitability ratios.
- To study the liquidity position of the organization.

A Study on Ratio Analysis At D.T.PATIL Co-operative Bank Ltd.,Chikodi

- To improve its future performance by analyzing its financial statements and offering suggestions

1.6 SCOPE OF THE STUDY

The benefits of the study for the researcher are that it helped to gain knowledge and experience and also provided the opportunity to study and understand the prevalent ratio analysis procedures. The Present Study is limited to Ratio Analysis of D T Patil Co-operative bank, Chikodi.

1.7 RESEARCH DESIGN

The present study is based on the primary and secondary data viz.; discussion, annual report of the bank for the respective year is from 2015 to 2019, etc. The necessary primary data is collected through informal discussion with the secretary, founder and also with the members of the bank.

Tools for data collection:

The tools for data collection are divided into two parts i.e.

a) Primary Data:

This data is collected with the help and guidance of Shree A.S.MASTI, manager of the D.T.Patil co-operative bank ltd. Chikodi. The conversation helped to have an idea about the society, its functions and other aspects of the society.

Source of Primary data:

- Observation
- Discussion

b) Secondary Data:

This study is mainly based on Secondary data which includes the annual report of the society for the past years helped to study the financial aspects of the society.

This data shows about the gain/ loss in the financial statement of the society. It is

A Study on Ratio Analysis At D.T.PATIL Co-operative Bank Ltd.,Chikodi

the data, which gives relevant information in the different fields of the D.T.Patilco operative bank ltd. Chikodi. The secondary data also includes the data collected from other sources mentioned below;

Sources of Secondary data:

- Annual Report
- Internet
- Books
- Reference material.

1.8 LIMITATIONS OF THE STUDY

My research was limited because of the fact that the major source of data was from the annual reports of the company, which were subject to accounting policies and practices followed by the organization.

The major limitations are:

The study is based on the data supplied by the bank personnel.

The project is just a brief study due to lack of comprehensive and practical knowledge. Lack of sufficient time to get required information of D.T.Patil co-operative bank ltd. Chikodi.

Study is concerned for five years only.

1.9 CHAPTER SCHEME

Chapter 1- Research Designing

The first chapter gives detail of introduction of Ratio analysis, Statement of problem, Need for study, Objectives of the study, Scope, and Research Methodology and Limitations.

Chapter 2- Conceptual framework

Meaning of ratio analysis, Significance of ratio analysis, Advantages of ratio analysis, Limitations of ratio analysis, Categories of ratio analysis.

Chapter 3- Bank Profile

It gives the profile of the bank where the project is conducted. It also explains about future plan of the bank

A Study on Ratio Analysis At D.T.PATIL Co-operative Bank Ltd.,Chikodi

Chapter 4- Data Analysis and Interpretation

This chapter gives details regarding the analysis and interpretation of data. It also consists of the tables, graphs, and its interpretation.

Chapter 5 -Findings Suggestions and Conclusion

This chapter concluded the project report it comprises of findings, conclusion draw from above analysis based on the data collected and also included suggestion.

CHAPTER 2

CONCEPTUAL FRAMEWORK

2.1 RATIO ANALYSIS

2.2 SIGNIFICANCE OF RATIO ANALYSIS

2.3 ADVANTAGES OF RATIO ANALYSIS

2.4 LIMITATIONS OF RATIO ANALYSIS

2.5 TYPES OF RATIO ANALYSIS

CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

A ratio is a simple arithmetical expression of the relationship of one number to another. It may be defined as the indicated quotient to two mathematical expressions. According to Accountants hand book by Knell and Bedford, a ratio "is an expression of the quantitative relationship between two numbers".

Ratio analysis is a process of comparison of one figure against another, which make a ratio, and the appraisal of the ratios to make proper analysis about the strengths and weakness of the firm operations. The calculations of ratios are a relatively easy and simple task but the proper analysis and interpretation of the ratios can be made only by the skilled analyst. While interpreting the financial information, the analyst has to be careful in limitations. The analyst has to be careful in limitations imposed by the accounting concept and methods of valuation. Information of non-financial nature will also be taken into consideration before a meaningful analysis made.

2.2 SIGNIFICANCE OF RATIO ANALYSIS

The ratio analysis is one of the most powerful tools of financial analysis. It is used as a device to analysis and interprets the financial health of the enterprise. The use of ratio is not confined to financial manager only. There are different parties interested in the ratio analysis for knowing the financial position of a firm for different purpose. The suppliers of goods on credit, banks, financial institution, investors, shareholders and management all make use of ratio analysis as a tool in evaluating the financial positions and performance of a firm for granting credit, providing loans or making investment in the firm with use of ratio analysis, one can measure the financial condition of a firm and one can point whether the conditions of a firm and one can point whether the conditions is strong, good, questionable or poor.

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- **Helps in financial forecasting and planning:**

Ratio analysis is of much help financial forecasting and planning. Planning is looking ahead and the ratio calculated for a number of year work as guide for the future.

Meaningful conditions can be drawn for future from these ratios.

- **Helps in control:**

Ratio analysis even helps in making effective control of business standard ratio can be based upon perform financial statement variance or deviation, if any can be found by comparing the actual with standards to take a corrective action at the right time. The weakness or otherwise, if any come to the knowledge of the management which helps in control of business.

- **Utility to shareholders/investors:**

Investors in the company will like to assess the financial position of the concern where he is going to invests, this first interest will be the security of his investment and then a return in the form of dividend or interest.

- **Utility to creditors:**

The creditors or suppliers extend short-term credit to the concern. They are interested to know whether financial positions of the concern enable their payments at a specified time or not. The concern pays short-term creditors out of its current position.

2.3 ADVANTAGES OF RATIO ANALYSIS

- **It simplifies and summarizes the huge financial Data**

Financial data contained in the financial statements is summarized and simplified by the ratio in order to make them more understandable. Ratio helps in comprehending complex financial statements.

- **Useful in finding strength and weakness of business**

The ratio analysis is powerful tool of financial used in diagnostic studies of the enterprise to determine their strength and weaknesses.

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- Tool for financial forecasting and planning:

Internal management takes time series of ratio forecasting purpose. Significant ratio of the firm over past years will help in projecting the future. Trend analysis is used to forecast on the basis of present ratio. Thus ratio analysis helps the management for forecasting, planning of budgets etc.

- It helps in decision making

Ratio analysis provides a meaningful analysis and interpretation of the data contained in financial statements. Thus ratio analysis facilities the manager to take correct decision based on the ratios.

- The strength and weakness

The ratio analysis is analysis of strength and weakness of the organization may be communicated to the users of financial statements. Thus, ratio analysis helps in better communication, to take prudent decisions.

2.4 LIMITATIONS OF RATIO ANALYSIS

Ratio analysis is very useful in many aspects. However, its importance should not be exaggerated because it has number of limitations which are as follows.

Ratio computed from historical dated are used for predicting and projecting the likely events in the future. Such ratio may provide a glimpse of the firms past performance but the forecast for the future may not be correct.

Ratios are tools of quantitative analysis only. As such only quantitative aspects are taken into account in ratio analysis, there by ignoring qualitative factors which generally where the conclusion are drawn.

2.5 Types of ratios /categories:-

Management is interested in evaluating every aspects of firms performance in view of the requirement of the various users of ratios. We may classify them into following four important categories.

Liquidity ratio

Leverage ratio

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Activity ratio

Profitability ratio

1) LIQUIDITY RATIO

It is essential for a firm to be able to meet its obligations as they become due liquidity ratio helps in establishing a relationship between cash and other current assets to current obligations to provide a quick measures of liquidity. Therefore it is necessary to strike a proper balance between high liquidity.

Liquidity ratio can be divided into 3 types

- A) Current ratio
- B) Quick ratio
- C) Cash ratio

Current ratio is an acceptable measure of firm's short term solvency current assets including cash within a year such as marketable securities, debtors and inventories prepaid expenses are also included in current assets as they represent the payments that will not made by the firm in future all obligations maturing within a year are included in current liabilities. These include creditors, bills payable, accrued expenses, short-term bank loan, income tax liability in the current year.

Current ratios calculated by dividing current assets and current liabilities;

$$\text{CURRENT ASSETS} = \frac{\text{CURRENT ASSET}}{\text{CURRENT LIABILITIES}}$$

B) Quick Ratio:-

Quick ratio establishes a relationship between quick or liquid assets and current liabilities an assets is liquid if it can be converted into cash immediately or reasonably soon without a loss of value. Cash is the most liquid assets other assets that are considered to be relatively liquid assets and included in quick assets are debtors and bill receivables and marketable securities.

The quick ratio is found out by dividing quick assets by current liabilities

$$\text{QUICK RATIO} = \frac{\text{CURRENT ASSETS} - \text{INVENTORIES}}{\text{CURRENT LIABILITIES}}$$

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A bank with a high value of quick ratio can suffer from the shortage of funds if it has low paying, doubtful and long duration outstanding debtors, a slow peak ratio may really be prospering and paying its current obligation in time.

C) Cash Ratio:-

Cash is the most liquid asset; a financial analyst may examine cash ratio and its equivalent current liabilities, cash and bank balance and short term marketable securities are the most liquid assets of a firm. If the bank carries a small amount of cash, there is nothing to be worried about the lack of cash if bank has reserves borrowing power. Cash ratio is perhaps the most stringent measure of liquid.

$$\text{CASH RATIO} = \frac{\text{CASH AND BANK BALANCE + CURRENT INVESTMENT}}{\text{CURRENT LIABILITIES}}$$

3) LEVERAGE RATIO

Financial leverage refers to the use of debt finance while debt capital is a cheaper source of finance it is also a riskier source of finance. The short term creditors like bankers and suppliers of raw material are more concerned with the firm's current debt paying ability. On the other hand long term creditors like debenture holders, financial institutions.

Leverage ratios are calculated to measure the financial risk and the firm's ability of using debt to shareholders advantage.

Leverage ratios can be divided into five types

- Debt equity ratio
- Debt ratio
- Interest coverage ratio
- Proprietary ratio
- Capital gearing ratio

1) Debt equity ratio

It is directly computed by dividing total debt by net worth, lower the debt equity ratio, higher the degree of protection. A debt equity ratio of 2:1 is considered ideal. The debt consists of all short term as well as long term and equity consists of net worth plus preference capital plus deferred tax liability

$$\text{DEBT EQUITY RATIO} = \frac{\text{LONG TERM DEBTS}}{\text{SHARE HOLDERS FUNDS}}$$

2) Debt ratio

several debt ratios may used to analyse the long term solvency of a firm. The firm may be interested in knowing the proportion of the interest bearing debt in the capital structure. Total debt will include short and long term borrowing from financial institutes, debentures/bonds, difered payment arrangements for buying equipments and borrowings public deposits and any other interest bearing loan, capital employed will include total debt net worth.

$$\text{DEBT RATIO} = \frac{\text{DEBT}}{\text{EQUITY}}$$

3) Interest coverage ratio

The internet coverage ratio or the time interest earned is used to test the firms debt servicing capacity the interest coverage ratio shows the number of times the interest charges are covered by funds that are ordinarily available for there payment. We can calculate the interest average ratio as earnings before depreciation, interest and taxes divided by interest

$$\text{INTEREST COVERAGE RATIO} = \frac{\text{EBIT}}{\text{INTEREST}}$$

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4) Proprietary ratio

The total shareholders fund is compared with the total tangible assets of the company. This ratio indicates the general financial strength of concern it is a test of the soundness of financial structure of the concern. The ratio is of great significance to creditors since it enables them to find out the proportion of shareholders funds in the total investment or business.

$$\text{PROPRIETARY RATIO} = \frac{\text{NET WORTH}}{\text{TOTAL TANGIBLE ASSETS}} * 100$$

5) Capital gearing ratio

This ratio makes an analysis of capital structure of firm. The ratio shows relationship between equity share capital at the fixed cost bearing that is preference share capital and debentures.

$$\text{CAPITAL GEARING RATIO} = \frac{\text{EQUITY CAPITAL}}{\text{PS CAPITAL} + \text{DEBENTURE} + \text{LOAN}}$$

3) ACTIVITY RATIOS

These ratios are also called turnover ratios because they indicate the speed with which assets are being converted or turned over into sales. Activity ratios thus involve a relationship between sales and assets. A proper balance between sales and assets generally reflex that asset utilisation.

Activity Ratios Are Divided into four types:-

- Total capital turnover ratio
- Working capital turnover ratio
- Fixed assets turnover ratio
- Stock turnover ratio

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A) Total capital turnover ratio:-

This ratio expresses relationship between the amount invested in this assets and the resulting in terms of sales. This is calculated by dividing the net sales by total sales. The higher ratio means better utilisation and vice versa. This ratio shows the firms ability in generating sales from all financial resources committed to total assets.

$$\text{TOTAL ASSETS TURNOVER} = \frac{\text{SALES}}{\text{CAPITAL EMPLOYED}}$$

B) Working capital turnover ratio:-

This ratio majors the relationship between working capital and sales. The ratio shows the number of times the working capital results in sales. Working capital as usual is the excess of current assets over current liabilities. The following formula is used to major the ratio.

$$\text{WORKING CAPITAL TURNOVER RATIO} = \frac{\text{SALES}}{\text{WORKING CAPITAL}}$$

C) Fixed asset turnover ratio:-

The ratio is supposed to major the efficiency with which fixed assets employed a high ratio indicates a high degree of efficiency in asset utilisation and a low ratio reflex in efficient use of assets. However, in interpreting this ratio, one caution should be borne in mind, when the fixed assets of firm are old and substantially depreciated, the fixed asset turnover ratio tends to be high because the denominator of ratio is very low.

$$\text{FIXED ASSET TURNOVER RATIO} = \frac{\text{NET SALES}}{\text{FIXED ASSETS}}$$

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D) Stock turnover ratio:-

The stock turnover ratio reflects the efficiency of inventory management, the higher the ratio, the more efficient the management of inventories and vice versa. However, this may not always be true. A high inventory turnover may be caused by a low level of inventory which may result in frequent stock outs and loss of sales and customer goodwill.

$$\text{STOCK TURNOVER RATIO} = \frac{\text{COST OF GOODS SOLD}}{\text{AVERAGE STOCK}}$$

$$\text{AVERAGE STOCK} = \frac{\text{OPENING STOCK} + \text{CLOSING STOCK}}{2}$$

2

4) PROPERTY RATIO

Profit is the ultimate output of a company and it will have no future if it fails to make sufficient profits. The financial manager should continuously evaluate the efficiency of company in terms of profits. The profitability ratios are calculated to measure the operating efficiency of company. Creditors want to get interest and repayment of principal regularly. Owners want to get a required rate of return on their investment. Profitability ratios can be divided into four types:

- Gross profit ratio
- Operating profit ratio
- Net profit ratio
- Return on investment

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1) Gross profit ratio

first profitability ratio in relation to sales is the gross profit margin the gross profit margin reflects.

A gross margin ratio may increase due to any of following factor; higher sales price cost of goods sold remaining constant, lower cost of goods sold, sales price remaining constant.

The ratio shows the margin left after meeting manufacturing costs it measures the efficiency of production as well as pricing. To analyse the factor underlying the variation in gross profit margin the proportion of various elements of cost to sale may studied in detail.

$$\text{GROSS PROFIT RATIO} = \frac{\text{GROSS PROFIT}}{\text{NET SALES}} * 100$$

2) Operating profit ratio

This ratio expresses the relationship between operating profit and sales it is worked out by dividing operating profit by net sales with the help of this ratio one can judge the managerial efficiency which may not be reflected in the net profit ratio.

$$\text{OPERATING PROFIT RATIO} = \frac{\text{OPERATING PROFIT}}{\text{NET SALES}} * 100$$

3) Net profit ratio:

Net profit is obtained by operating expenses, interest and taxes are subtracted from the gross profit net profit margin ratio established relationship between net profit and sales and indicates management efficiency in manufacturing , administrating and selling products.

This ratio shows the earning left for shareholders as a percentage of net sales. It measures overall efficiency of production, administration, selling, financing, pricing and tax management. Jointly considered the gross and net profit margin ratios provide a valuable understanding of the cost and profit structure of the firm and enable the analyst to identify the source of business efficiency/inefficiency.

$$\text{NET PROFIT RATIO} = \frac{\text{NET PROFIT}}{\text{NET SALES}} * 100$$

4) Return on investment

This is one of the most important profitability ratio. It indicates the relation of net profit

capital employed in business. Net profit for calculating return on investment will mean the net profit before interest, tax and dividend capital employed means long term funds.

$$\text{RETURN ON INVESTMENT} = \frac{\text{EBIT}}{\text{CAPITAL EMPLOYED}}$$

CHAPTER 3

BANK PROFILE

3.1 BANK PROFILE

3.2 ADDRESS OF THE BANK

3.3 BACKGROUND OF THE BANK

3.4 BOARD OF DIRECTORS

3.5 STAFF MEMBERS

3.6 FUNCTIONS OF THE BUSINESS CARRIED

3.7 DEPARTMENTS OF THE BANK

3.8 BANK HAS PROVIDING NUMBER OF FACILITIES TO CUSTOMER

3.9 RECOMMENDATION AND BUILD UP PROPOSAL TO HEAD OFFICE

3.10 CONDUCT OF MEETINGS

3.11 VISION, MISSION AND OBJECTIVES OF THE SOCIETY

3.12 COMPETITORS INFORMATION

3.13 SWOT ANALYSIS

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BANK PROFILE

3.1 BANK PROFILE



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SHRI D.T. PATIL

Founder and Chairman of D.T. Patil Co-op Bank Ltd., Chikodi

Founder of The Liberal Co-Operative Bank Chikodi

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3.2 ADDRESSES OF THE BANK

1	Name of the bank	Shree D T Patil Co-operative Bank Ltd., Chikodi.
2	Year of establishment	1980
3	Nature of business	Banking service
4	Location	943,Guruwarpeth chikodi-591201
5	Telephone no	08338-272249
6	RBI license number	ACD/KA 229/p
7	E-mail	dtpatilbank@rediffmail.com
8	IFSC Code	IBKL01340DT
9	MICR Code	591846202

3.3 BACKGROUND OF THE BANK :

Co-Operative Democratic Governance of money market. Co-Operative is introduced in India mainly as a defensive instrument to solve the problems of rural indebtedness. That is the frequency of mixed ideologies of socialism and Democracy. So Co-Operative is a dynamic Economic Instrument for achieving the Social objective. At present on India there are 5.04 Lakh of different types of Co-Operative with over all membership of 22 cores covering nearly 100% of village So it is the best weapon to reach mass people by whose help we can easily implement our schemes and can get succeeded in achieving Mutual growth.

In the year 1980, Shree D. T. PatilCO-Operative Bank Ltd has established at Chikodi. Only with a share capital of rupees 1,00,000. And increase to rupees 2,84,275 within a period of 6 months only. Now the bank has increased it's the business at the remote and rural area. Now it has increased its strength to 29. 82, 40.000 rupees working capital with 6541 Share holder

✽ ಸಂಚಾಲಕ ಮಂಡಳಿ ✽



ಶ್ರೀ ಎಮ್. ಎಸ್. ಕುಲಕರ್ಣಿ
ನಿರ್ದೇಶಕರು



ಶ್ರೀ ಆರ್. ಡಿ. ಪಾಟೀಲ
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ಶ್ರೀ ಎಮ್. ಡಿ. ಲಾಕರ್
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ನಿರ್ದೇಶಕರು



ಶ್ರೀಮತಿ. ಲಕ್ಷ್ಮಿ ಆರ್. ಪಾಟೀಲ
ನಿರ್ದೇಶಕರು



ಶ್ರೀಮತಿ. ವೀಣಾ ಬಿ. ಕುಲಕರ್ಣಿ
ನಿರ್ದೇಶಕರು

* ಸಂಚಾಲಕರುಗಳು * ಸಂಚಾಲಕರುಗಳು



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ಶ್ರೀ ವಿ. ಎಮ್. ಮಂಜುನಾಥ
ಪ್ರಧಾನ ವ್ಯವಸ್ಥಾಪಕರು ^{ಬಿ.ಸಿ.}

3.5 STAFF MEMBERS:

Shri V. S. Manaturagimath.

Shri A. S. Masti

Shri R.C. Chipre

Shri B. S. Patil

Shri N. S. Patil

Shri S. S. Chougale

Shri V. G. Kavalapure

Shri V. R. Chinivalar

Shri D. D. Kaladagimath

Shri S. Y. Patil

Shri S. A. Palase

Shri R. S. Kotagi

Shri S. S. Patil

Shri A. S. Danappagol

Shri M. M. Kurani

Shri S. D. Kamate

3.6 FUNCTIONS/NATURE OF BUSINESS CARRIED:

Nature of business carried at Co-operative Bank is involved in the activity of providing the services. The process of providing the services includes,
Collecting the money from customer as deposit

Lending the loan to the customers

Re-collecting the loan amount with prescribed interest

Give the money to depositors with prescribed interest after due date

Providing different services to their customers

Providing financial and non-financial facilities to their customers

3.7 DEPARTMENTS OF THE BANKS:

- Credit department

- Operational department

- Marketing department

- Cash department

- Clearing department

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• Credit Department:

This department is mainly concentrating on leading activities to its clients. For smoothening of its activities, this department is further subdivided. This department provides loan. While providing loan evaluates the capability, background of client and analysis the risk involved in re-collecting the same. To operate effectively, it has given maximum decision power by management which will help to run the organization successfully. As it involves more risk and uncertainty towards its clients and customers, so that has also its future plans for achieving its goals.

Functions:

- Examining the proposals
- Documentation
- Disbursement of loans
- Recovering the loan
- Credit appraisal

Operational Department

It is the department which is taking care of daily bank activities for the smooth running of the organization. The operation department has delegated average decision authority in their routine by the management. It works with full co-operation with other departments and also it is necessary other departments for smooth running. The department has been appraised by the management with different criteria, like by customer satisfaction, by branch performance. As it is operation department, so it will contribute to all departments in achieving their planned targets.

Functions:-

- DD Drafting.
- Out station cheque realization.
- Attending customer queries.
- Handling day to day transactions.

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Marketing Department:-

It is the department, which will take care of organization expansion by way of achieving goals. It means, in this department it only concentrates on selling security, acquiring more number of deposits, account etc. The marketing department has been given decision power of 15-19% by the management to achieving their target and makes it success. For achieving of this success, the department has been supporting and co-operating with this department. Hence, the marketing department performance has appraised with technique like, by customer satisfaction, by branch performance, by self-appraisal, by giving targets. Therefore to achieve this target marketing department has its own plan and strategies like,

By obtaining new customers.

By generating new business through existed customers.

Functions:

- Achieving branch target.
- Customer service.
- Operating of new account (building new relation)

Cash Department:-

In this department it evaluated the daily requirements of cash, based on this it is going to maintain liquidity. The department has been given, 50-80% of decision power by management to their routine activities. It has given more contribution to other department in achieving their goals in terms of co-operation. As it is cash department there are no any features plans. But as per present scenario market it is going to act.

Functions:

P.G. Dept. of Commerce and Management K.L.E Society's B.K College,
Chikodi.

- Handling daily cash transactions.
- Balancing cash figure at the end of day.
- Maintaining cash figure at the end of the banks.

Clearing Department:-

It is department which taking care of customer worth regarding receiving out station cheque and odds. The department has given average decision power by the management. Regarding co-operation it has been contributing to other department as much as possible. As it is clearing department, it had no any future plans but it is ready to accept changes towards improvements.

Functions:

- Clearance of out stations cheque.
- Clearance of local cheque.

3.8 BANK HAS PROVIDING NUMBER OF FACILITIES TO CUSTOMERS

They are as follow.

- Bank has introduced RTGS or NEFT and SMS banking facilities.
- 0.5% hike in the interest rates for the fixed deposit by the senior citizens.
- Locker facility is available on all deposits accounts.
- All deposits up to Rs. 1 lakh are insured under deposit Insurance and Credit Guarantee Co-operation.
- 0% NPA
- Audit class "A"
- Nomination facility available on all deposit account and share account

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Basically the D. T. PATIL CO-OPERATIVE BANK has various products following are the some products of the bank.

Retail Banking:-

- Personal Deposit Schemes
- Loans and Advances
- Loans
- Housing Loans
- To all types of Vehicle Loan
- Consumer durables
- Auto Loans
- For purchasing Land and Building

Personal Banking:-

- Accounts
- Terms deposits
- Fixed deposits
- Savings deposits

Corporate Banking:-

- Accounts
- Normal current account
- Services
- Advisory services
- Collections of bill checks and etc.

3.9 RECOMMENDATION AND BUILT-UP PROPOSAL TO HEAD OFFICE

After completing field study Branch Manager forwards to the head office. He has gives his own opinion about loan proposal and recommend on that proposal. His recommendation or opinion is very important to the head office to evaluate the loan proposal. The loan sanction wholly depends upon his recommendation of branch manager. Because he is near to the applicant ability to repayment of interest and principal.

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He must examine consequence of to the loan sanction and highlight risk factors. The Branch Manager will inform to the Head office about applicant and his ability to repayment it. The Branch Manager also highlights true income of the applicant and what would be the income after loan sanction.

Infrastructural Facilities:

- Electricity
- Post and Telephone Facilities
- Technical Education
- Banking infrastructure
- Computerization

3.10 CONDUCT OF MEETINGS

- Annual general meeting- once in every year.
- Board of directors – every month.
- Staff based meeting
- Cluster head meeting – 10th of the every month
- Department head meeting – need based. and every month

The following types of shares

- Equity shares
- Preference shares

3.11 VISION, MISSION AND OBJECTIVES OF THE SOCIETY:

VISION:

A Study on Ratio Analysis At D.T.PATIL Co-operative Bank Ltd.,Chikodi

- "To be prefer brand for total financial banking sole liberal Co-operative ones for both corporate and individuals."

MISSION:

- Customer service and product innovation
- Tuned to diverse needs of individuals and corporate clientele.
- Continuous technology up gradation while maintaining human values.
- Efficiency and effectiveness built on ethical practices.

OBJECTIVES:

- Enhanced Co-operation between everyday involved with an organization.
- repayment it. The Branch Manager also highlights true income of the applicant and what would be the income after loan sanction.

Infrastructural Facilities:

- Electricity
- Post and Telephone Facilities
- Technical Education
- Banking infrastructure
- Computerization

Future growth and prospects:

- To encourage thrift, self-help and co-operation among the members, Associate members, nominal members depositors of the bank.
- To mobilize or borrow funds.
- To prepare and finance projects to improve the economic condition of the members particulars those belonging to weaker section of the society
- To lend money to its members of hire purchase, Hypothecation of the motor vehicles Act.

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- To possess, acquire, alter, or construct site/building etc., for the use and convenience of business of the bank.
- To open branches, sub-branches pay offices within the area of operation of the bank with the prior permission of Reserve Bank of India and to frame rules for their business.
- To issue, to accept, to sell or purchase promissory notes, drafts, warrants, share certificates and other negotiable instruments on behalf of its customers.
- To create funds for promotion of education of member's children subject to the limits prescribed by the board.
- To act as guarantor on behalf of the banks members and customers by issuing guarantee to Govt/semi Govt organizations
- To extend financial and technical assistance to the unemployed to start their own industry / profession.
- To buy or sell foreign exchange including foreign bank notes with the permission of Reserve Bank of India.
- To accept discounting of bills, to provide safe deposit lockers and other minor services.

3.12 COMPETITORS INFORMATION

The competitors are surrounded in the Shri. D. T. Patil Co-operative Bank is as follows

- State Bank Of India
- Corporation Bank
- HDFC Bank
- Union Bank Of India
- IDBI Bank
- Axis Bank
- Federal Bank
- ICICI Bank Ltd.
- Indian Overseas Bank

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THREATS:

- Threats from various competitors
- Government banks e.g. SBI
- Private sector competitors like, HDFC, ICICI etc.
- Threats of default loans issued to the borrowers due to heavy or low rain fall.
- Future market trends. Advent of MNC

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.1 SHOWS THE RATIO OF NET PROFIT TO TOTAL INCOME

4.2 SHOWS THE RATIO OF NET PROFIT TO TOTAL DEPOSIT

4.3 SHOWS THE RATIO OF NET PROFIT TO TOTAL WORKING CAPITAL

4.4 SHOWS THE RATIO OF INTEREST EARNED TO TOTAL INCOME

4.5 SHOWS THE RATIO OF INTEREST PAID TO TOTAL INCOME

4.6 SHOWS THE RATIO OF TOTAL EXPENDITURE OF TOTAL INCOME

4.7 SHOWS THE RATIO OF SALARY TO TOTAL INCOME

4.8 SHOWS THE RATIO OF OTHER EXPENSES TO TOTAL EXPENDITURE

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DATA ANALYSIS AND INTERPRETATION

1) PROFITABILITY RATIO:

Table No –4.1 Shows Ratio of net profit to total income

YEARS	2015-16	2016-17	2017-18	2018-19	2019-20
NET PROFITS	4338000.00	4642000.00	4958000.00	5117000.00	5409000.00
TOTAL INCOME	80000000.00	100000000.00	120000000.00	140000000.00	160000000.00
RATIO	0.05	0.04	0.04	0.03	0.03

Graph No –4.1 Ratio of net profit to total income



Interpretation:

Data in Table No.- 4.1 Shows Ratio of reveals ratio of net profit to total income for study period. In the year 2015-16 the net profit to total income ratio in 0.05 and in the year 2016-17 the net profit to total income ratio in 0.04 and in the year 2017-18 the net profit to total income ratio in 0.04 and in the year 2018-19 the net profit to total income ratio in 0.03 and in the year 2019-20 the net profit to total income ratio in 0.03 the ratio at net profit to total income in two years equal and but last years are decrease. This indicates fluctuations in ratio

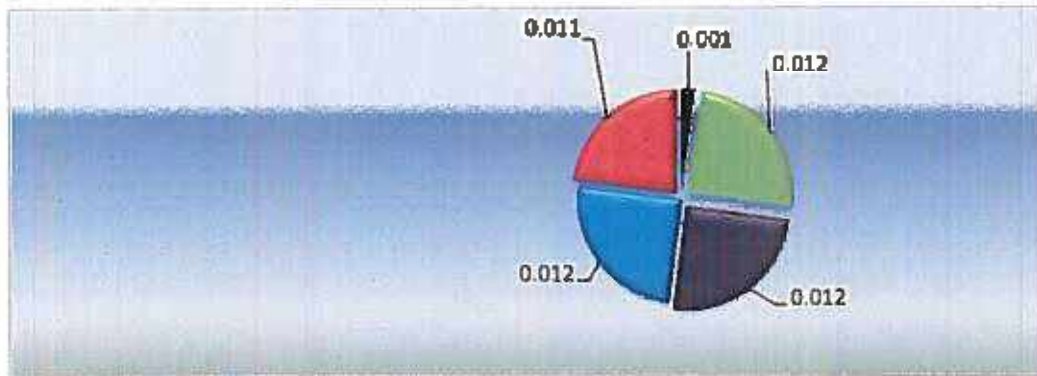
A Study on Ratio Analysis At D.T.PATIL Co-operative Bank Ltd.,Chikodi

Table No -4.2 Shows Ratio of net profit to total deposit

YEARS	2015-16	2016-17	2017-18	2018-19	2019-20
NET PROF-ITS	4338000.00	4642000.00	4958000.00	5117000.00	5409000.00
TOTAL DE-POSIT	341685000.00	369880000.00	396954000.00	417952000	484775000.00
RATIO	0.001	0.012	0.012	0.012	0.011

Graph no 4.2

Ratio of net profit to total deposit



Interpretation

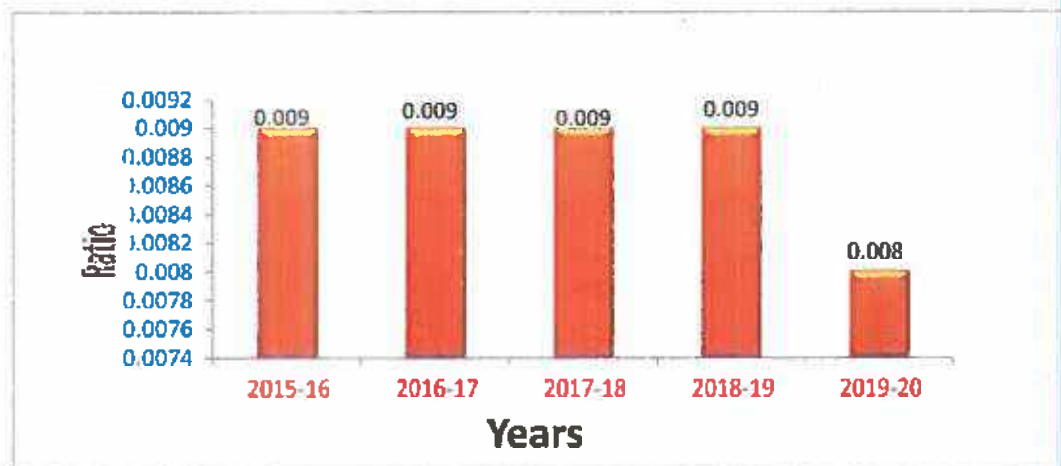
Data in Table No.- 4.2 Shows Ratio of In the year 2015-16 the ratio of net profit to total deposits is 0.001, but in the year 2016-17the ratio of net profit to total deposits in 0.012 , in the year 2017-18 the ratio of net profit to total deposits in 0.012 and in the year 2018-19 the ratio of net profit to total deposits in 0.012.and in the year 2019-20 the ratio of net profit to total deposits in 0.011.

A Study on Ratio Analysis At D.T.PATIL Co-operative Bank Ltd.,Chikodi

Table No –4.3 Shows Ratio of net profit to total working capital:

YEARS	2015-16	2016-17	2017-18	2018-19	2019-20
NET PROF-ITS	4338000.00	4642000.00	4958000.00	5117000.00	5409000.00
TOTAL WORKING CAPITAL	434571000.00	467860000.00	504219000.00	536836000.00	620796000.00
RATIO	0.009	0.009	0.009	0.009	0.008

Graph no 4.3 Ratio of net profit to total working capital



Interpretation :

Data in Table No.- 4.3 Shows Ratio of The ratio of net profit to total working capital is in the year 2016, 2017, 2018 and 2018 as 0.008 increased but it is in the year 2020 as 0.008 decrease to the current year the ratio of net profit to total working capital.

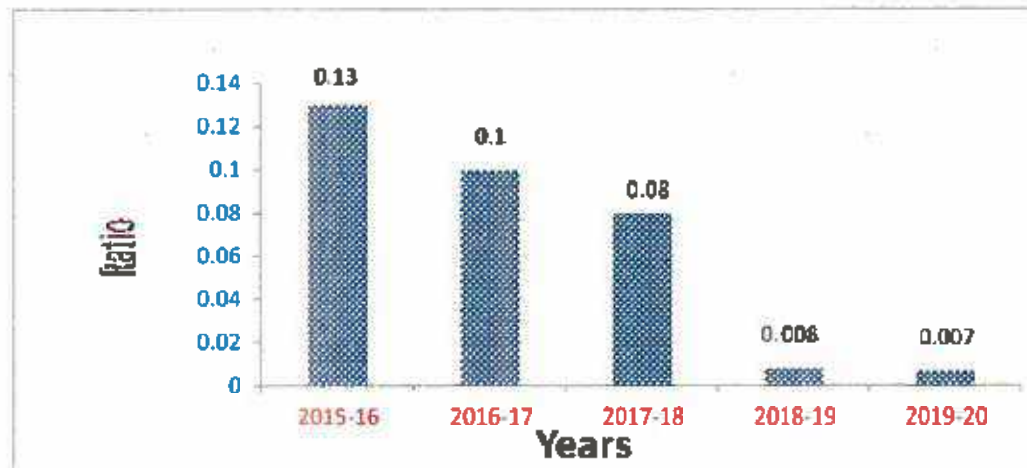
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2. OPERATIONAL RATIO:

Table No –4.4 Shows Ratio of interest earned to total income

YEARS	2015-16	2016-17	2017-18	2018-19	2019-20
INTEREST EAREND	10545025.00	10512554.00	10555020.00	1145354.00	1125254.00
TOTAL INCOME	80000000.00	100000000.00	120000000.00	140000000.00	160000000.00
RATIO	0.130	0.100	0.080	0.008	0.007

Graph no 4.4 Ratio of interest earned to total income



Interpretation :

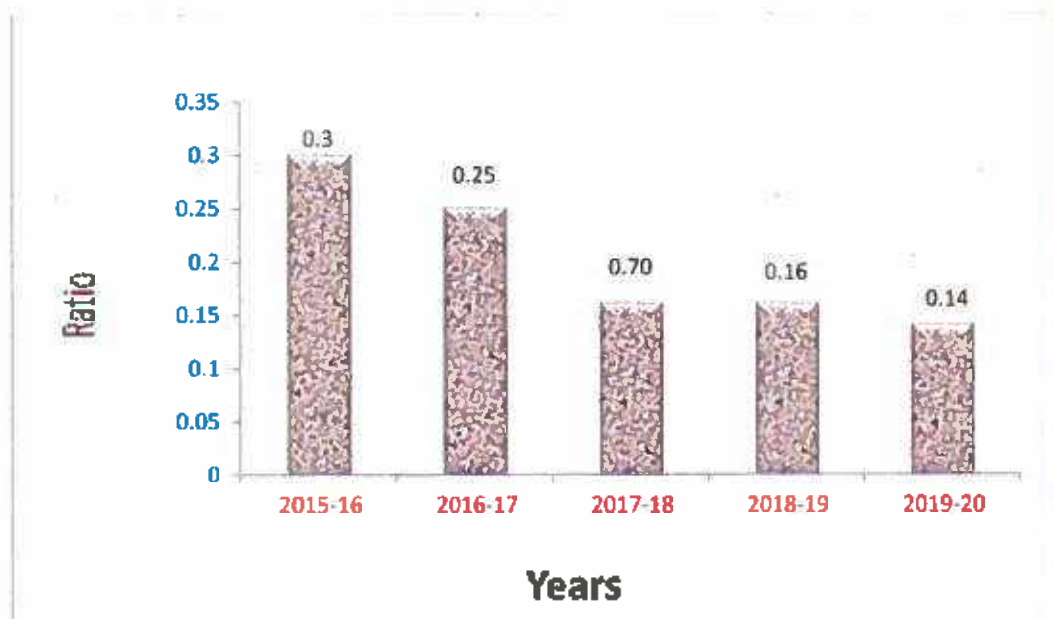
Data in Table No.- 4.4 Shows Ratio of the ratio of interest earned to total income is in the year 2016 at 013%, 2017 at 0.01%, 2018 at 0.08% 2019 at 0.008% and 2020 at 0.007% the ratio of interest earned to total income is decreased at 0.001% the compared to current year 2020.

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Table No –4.5 Shows Ratio of interest paid to total income

YEARS	2015-16	2016-17	2017-18	2018-19	2019-20
INTER-EST PAID	24002560.00	25250050.00	20215050.00	22402020.00	23000000.00
TOTAL INCOME	80000000.00	100000000.00	120000000.00	140000000.00	160000000.00
RATIO	0.30	0.25	0.16	0.16	0.14

Graph no 4.5 Ratio of interest paid to total income



Interpretation :

Data in Table No.- 4.5 Shows Ratio of Interest paid to total income ratio in the year 2016 as 0.03%, 2017 as 0.25%, 2018 as 0.70%, 2019 as 0.16% but in the current year 2020 it is 0.14%. The interest paid to total income ratio is decreased in the year.

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Table No –4.6 Shows Ratio of total expenditure of total income

YEARS	2015-16	2016-17	2017-18	2018-19	2019-20
TOTAL EX-PENDITURE	79100200.00	79300500.00	80500400.00	90400200.00	94920210.00
TOTAL IMCOME	80000000.00	100000000.00	120000000.00	140000000.00	160000000.00
RATIO	0.98	0.79	0.67	0.64	0.59

Graph no 4.6 Ratio of total expenditure of total income



Interpretation :

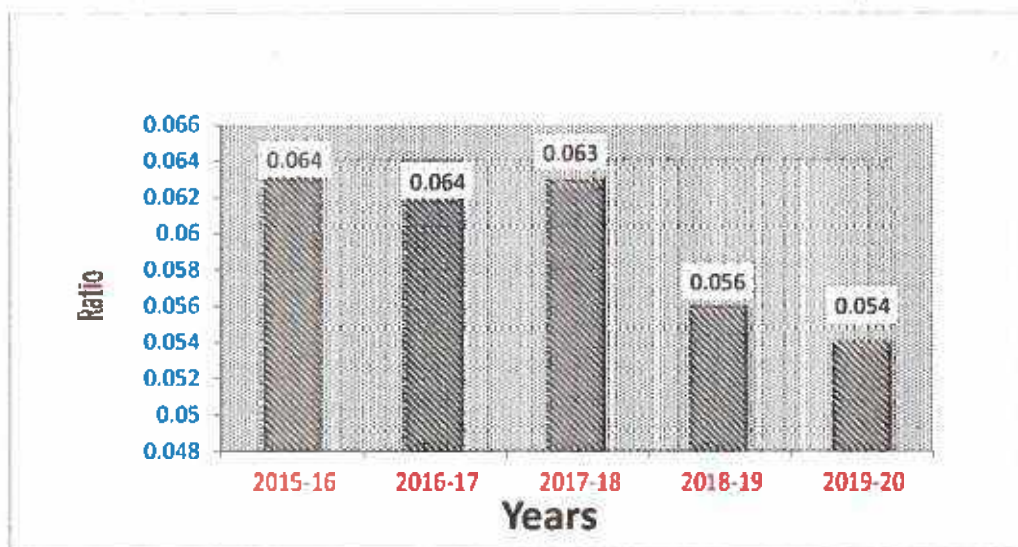
Data in Table No.- 4.6 Shows Ratio of total expenditure of total income ratio in the year 2016 as 0.98%. and 2017 as 0.79%, 2018 as 0.67% and 2018 as 0.64% In the current year it is as 0.59%. Therefore the ratio of total expenditure to total income is decreased in the year 2015 as compared to the current year.

A Study on Ratio Analysis – D. T. Patil Bank chikodi

Table No –4.7 Shows Ratio of salary to total expenditure

YEARS	2015-16	2016-17	2017-18	2018-19	2019-20
SALARY	5088091.00	5113659.00	5113660.00	5139357.00	5165053.00
EXPENDITURE	79100200.00	79300500.00	80500400.00	90400200.00	94920210.00
RATIO	0.064	0.064	0.063	0.056	0.054

Graph no 4.7 Ratio of salary to total expenditure



Interpretation :

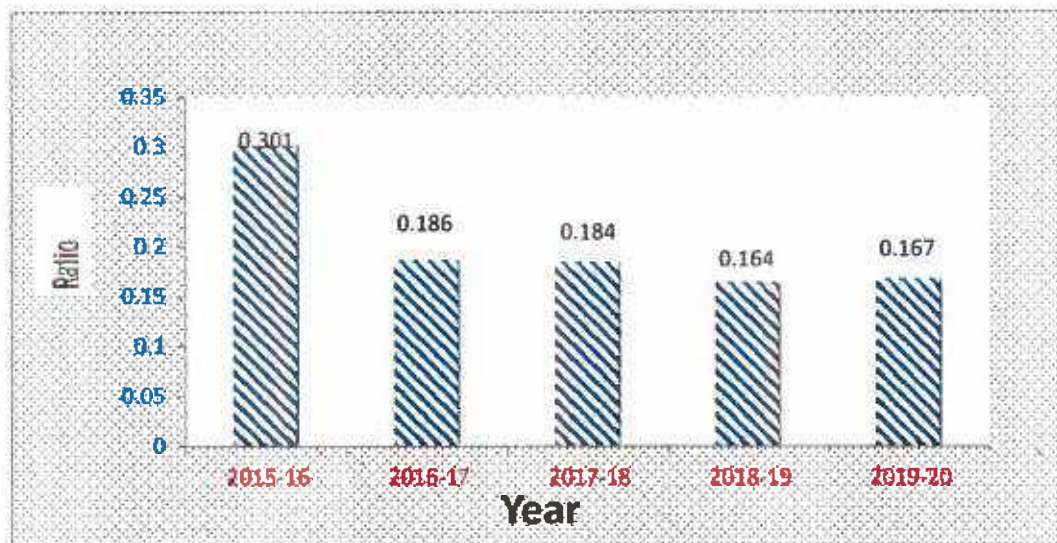
Data in Table No.- 4.7 Shows Ratio of the ratio of salary to total expenditure in the year 2015 at 0.064, 2017 at 0.064, 2018 at 0.068 and 2019 at 0.1056. But it is at 0.054 in the current year 2020 the ratio of salary to total expenditure is decreased in the current year as compared to previous year.

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Table No –4.8 Shows Ratio of other expenses to total expenditure

YEARS	2015-16	2016-17	2017-18	2018-19	2019-20
OTHER EX-PENSES	23810000.00	14800000.00	14850050.00	14855700.00	15853750.00
EXPENDITURE	79100200.00	79300500.00	80500400.00	90400200.00	94920210.00
RATIO	0.301	0.186	0.184	0.164	0.167

Graph no 4.8 Ratio of other expenses to total expenditure



Interpretation :

Data in Table No.- 4.8 Shows Ratio of other expenses to total expenditure is 0.167 in the current year 2020. But it is 0.164 in the year 2019 and in the year 2016, 2017 and 2018 at 0.301, 0.186 and 0.184. The ratio of other expenses to total expenditure is decreased in the year 2019 and 2020 .but in the year 2016 it was 0.301.

CHAPTER 5

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

5.2 SUGGESTIONS

5.3 CONCLUSION

A Study on Ratio Analysis – D. T. Patil Bank chikodi

FINDING, SUGGESTIONS AND CONCLUSIONS

5.1 FINDINGS

On the basis of Data analysis and Interpretation the following findings were found.

1. The percentage of profit to total Income in the year 2015-16 is 0.05%. It is decrease up to 0.03% in the year 2019-20. This shows the decreasing trend in percentage of profit to total income.
2. It is observe that the Credit Deposit Ratio is increase year to year. In the year 2016-17, 2017-18 and 2018-19 it is 0.012% and in the year 2019-20 it is 0.011%. This showing decreasing trend in Credit Deposit Ratio.
3. It observes that the Working Capital ratio in the year 2015, 2016, 2017 and 2018 t is 0.009 %. It is decrease year to year. In the year 2019-20 it is 0.008%. This shows that the deceasing trend in Working Capital Ratio.
4. It observes that the interest earned ratio in the year 2015-16 is 0.130 % but in the year 2019-20 it is 0.007%. This showing decreasing trend in Interest Earned Ratio.
5. It observes that the Interest Paid Ratio in the year 2015-16 is 0.3% and in the year 2019-20 it is 0.14%. This showing increasing trend in Interest Paid Ratio..
6. The total expenditure Ratio is fluctuating year to year. The expenditure Ratio in the year 2015-16 is 0.98% and in the year 2019-20 it is 0.59%.
7. The salary to total expenditure Ratio in the year 2011-12 is 0.120 %. It is decreased up to 0.90 % in the year 2015-16.
8. The other expenses ratio in the year 2013-14 is 0.197%.it decreased in the year 2015-16 is 0.001%.

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**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON GOODS AND SERVICE TAX "
AND
IT'S IMPACT ON INDAIN ECONOMY**

**Submitted to
RANI CHANNAMMA UNIVERSITY, BELAGAVI**



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

**Miss. Sujata Patil
M.COM-IV SEMESTER**

REGISTER NO: MC191622

UNDER THE GUIDANCE OF

SHRI. V. S. KHOT

**K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that Miss. Sujata Patil has satisfactorily completed the Project Report Entitled "A Study on Goods and Service Tax and It's Impact on Indian Economy" for the partial fulfilment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year 2020-2021.

SHRI. V. S. KHOT

PROJECT GUIDE

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DECLARATION

I declare that the project report entitled "A Study on Goods and Service Tax and Its Impact on Indian economy" is a record of independent research work carried out by me and submitted in partial fulfillment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. V. S. Khot, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 31/8/2021

Place: Chikodi



Miss. Sujata Patil

Register No: MC191622

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Miss. Sujata Patil

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CHAPTER – 1
INTRODUCTION

- 1.1 Introduction**
- 1.2 Review of literature**
- 1.3 Statement of the problem**
- 1.4 Need of the study**
- 1.5 Objectives of the study**
- 1.6 Scope of the study**
- 1.7 Research methodology**
- 1.8 Limitations of the study**
- 1.9 Chapter scheme**

A Study on Goods and Service Tax and It's Impact on Indian Economy

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRIDUCTION:

GST is an indirect tax imposed on the supply of goods and services in India. GST is value additional tax imposed at all point in the supply chain, with credit allowed for any tax paid on input acquired for use in making the supply. In 2000, the then Prime Minister introduced the concept of GST and set up a committee to develop the country's GST model. In 2003, the Central Government set up a task force on fiscal responsibility and budget management, which in 2004 proposed that Goods and Service Tax replace the existing tax regime by introducing a comprehensive tax on all goods and services to replace the central rate of VAT and the national level of VAT. It proposed that all indirect taxes, including customs duties, be replaced by value added tax on all goods and services with total value added tax at all stages of the value chain. The GST movement was articulated by the then Union Finance Minister in his 2006-07 budget speech. It was initially proposed that GST be implemented as of 1 April 2010.

The Empowered Committee of State Finance Ministers (EC) which formulated the definition of State VAT was asked to draw up a GST roadmap and structure. Joint working groups of officials with representatives of the States and the Centre were set up to discuss various aspects of GST and to draw up reports explicitly on exemptions and thresholds, taxation of goods and taxation of inter-State supplies. On the basis of consultations within and between the EC and the Central Government, the EC released its First Discussion Paper (FDP) upon GST in November 2009.

2017 will be engraved forever in Indian history as the year in which significant and most important economic reforms have been introduced since independence-the Goods and service tax (GST). The reforms that took more than a decade of intense debate was finally implemented with the effect of 1 July 2017, subsuming almost all indirect taxes at the Central and state levels. The GST, published by the government as 'one country one tax' aim to provide a streamlined, single tax structure in line with the tax mechanism existing in a number of major countries' economies across the Globe. This single tax helped streamline various indirect taxes and brought in more efficiencies in business. In India, GST law is a complex, multi-stage, destination-based tax levied on any added value.

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The implantation of the GST got overwhelming support from the industry. This was seen as an opportunity by the industry to redefine the supply chain model, optimize IT systems, and review internal and external agreements to maximize interest and reduce tax costs.

As the GST journey progressed, its far-reaching impact was increasingly realized. Industry faced various challenges, from new and unique technologies, complicated paperwork, high tax rates for certain goods and services to complex and ambiguous handling of several commercial transactions.

In other words, goods and service (GST) is an indirect tax levied on the supply and services. This law has substituted numerous indirect many indirect tax laws that previously existed in India. GST is unique indirect tax for the entire nation. Under the GST regime, the tax is charged at every point of sale. In the situation of intra-state sales, central GST and State GST are charged. Interstate sales are chargeable to integrated GST.

It would apply for both goods as well as services in a comprehensive manner, with exemption restricted to a minimum. With federal structure of India, it is proposed that the GST will be levied concurrently by the central government (CGST) and state government (SGST). It is expected that the base and other essential design features would be common between Central Goods and Service Tax and State Goods and Service Tax for individual states. The inter-state supplies within India would be attract an integrated GST (IGST), which is the aggregate of CGST and the SGST of the destination state.

To remove cascading effect of taxes and also to provide for a common national market for goods and services, the Government of India proposed for amendments to introduce the goods and services tax for conferring concurrent taxing powers on the union as well as states including union territory with legislature to make laws for levying goods and services tax on every transaction.

GST is an indirect tax has introduced on 1 July 2017 in India and was applicable throughout India which replaced multiple cascading taxes levied both by central and state governments.

A Study on Goods and Service Tax and It's Impact on Indian Economy

1.2 REVIEW OF LITEERATURE:

- a) **Rathad M (2017)** in his paper "An Overview of Goods and Service Tax (GST) In India" concludes that GST will be a step towards a developed India benefiting too many parties and entire nation.
- b) **Nitia Kumar (2014)** mentioned in his research paper that implementation of GST will try to remove all the shortcomings of present tax structure in India in his research paper "Goods and Service Tax in India-A Way Forward"
- c) **Monika Sehrawat and Upasana Dhandu (2015)** in "GST in India: A key tax reform" concluded that introduction of GST will undoubtedly boost the Indian economy but focus should be given on rational design of GST model and timely implementation.
- d) **Munasi Shah (May20-2017)** "GST Impact Analysis on the Indian Hospitality Industry's" Author concluded that the 18 per cent GST will result in banquets being fair as a result of providing a huge amount of money to the hospitality industry. In short, the GST will have a positive influence on the Indian hospitality industry. If these countries still want to adopt GST, the growth rate of GST should be less than 10%.
- e) **Nayyar (2018)** concluded that all sectors in India - manufacturing, service, telecom, automobile and small SMEs will bear the impact of GST. One of the biggest taxation reforms- GST will bind the entire country under a single taxation system rate. As predicted by experts, GST will improve tax collections and boost up India's economic development and discontinue all tax barriers between State and Central Government.
- f) **Dr. Manoj Kumar Agarwal 2017** In authors report, author indicated that the government should take action to make people understand about GST. The government should also keep people aware that GST will not affect small businesses. Those who have knowledge of GST also need to spread the same information to the public, so that a lot of wrong awareness can be removed.
- g) **Schrawat & Dhandu (2015)** conducted a study focusing on the advantages and challenges of GST facing India in its implementation. We concluded that the Indian economy requires a streamlined and straightforward tax system. Pointing out the various advantages they said that GST would provide India with a world-class tax structure and a seamless tax system, but it would rely on the efficacy of its implementation.

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- h) **R. Vasanthagopal (2011)** reviewed "GST in India: A Great Leap in the Indirect Taxation System" and concluded that moving to GST from the existing complicated indirect tax process in India would be a positive step in the booming Indian economy. Progress of GST will lead to adoption by more than 140 countries around the world, as well as a new preferred form of indirect tax structure in Asia.
- i) **Nishitha Gupta (2014)** Author's study claimed that the introduction of GST in the Indian context would lead to commercial benefits that were untouched by the VAT process and would, in turn, lead to economic growth. GST may therefore give rise to the possibility of collective profit for industry, trade, agriculture and common consumers, as well as for the Central Government and the Government of the State.
- j) **Agogo Mawull (May 2014)** studied, "Goods and Service Tax-An Appraisal" and found that GST is not good for low-income countries and does not provide broad based growth to poor countries. If still these countries want to implement GST, then the rate of GST should be less than 10% for growth.
- k) **Nitla Kumar (2014)** reviewed "Goods and Service Tax-A Way Forward" and concluded that the introduction of GST in India is helping to remove economic inequalities by the existing indirect tax regime and is supposed to promote an objective tax structure that is insensitive to geographical locations.
- l) **Jaiprakash (2014)** suggested in his research study that GST at central and state level is expected to provide more relief to industry, trade, agriculture and consumers through a more detailed and wider scope of input tax set-offs and service tax set-offs, subsuming many GST taxes and phase-out of CST.
- m) **Saravanan Venkatachalam (2014)** Author studied the post-effect of the Goods and Service Tax (GST) on domestic growth in Asian countries using the Least Squares Dummy Variable Model (LSDVM) in his research paper. He said that seven of the ten ASEAN nations are already implementing the GST. He also recommended that household final consumption expenditure and general government consumption expenditure are positively associated to the gross domestic product as required and support economic theories. However, the impact of post-GST varies from country to country.

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- n) **Pinki, Supriya kamma and Richa Verma (2014)** concluded in their research paper named "Goods and Services Tax—panacea for indirect tax system in India" that the NDA government in India is more interested towards implementation of GST and it is beneficial for the both of central and State governments and as well as for consumers in long run if its implementation is backed by strong IT structure.

1.3 STATEMENT OF THE PROBLEM:

In India we have rigid and time-consuming taxation system. Because of its Indians are going to face many problems, especially in case of indirect tax system. The main problems are multiplicity of taxes, dominance of indirect taxes, complexity and corruption etc. In order to overcome these problems, there is a need of one tax reform., that reform takes place recently is called GST.

GST was essential for the Indian Economy and now whole the economy is dependent on the success of the GST but after 4 Years of its introduction GST is not fully settled in the country and now the Trade and Industry in the country is facing so much problems from the GST and its stringent procedures. So, in this study we are trying to understand the impact of GST on Indian economy.

1.4 NEED OF THE STUDY:

An analysis of the GST's influence on the Indian economy. The purpose of this research was to find out how the implementation of GST affected various sectors of the Indian economy. The research primarily looked at changes to past taxing rates as well as newly imposed tax rates.

In the last two decades there has been significant transformation in the tax systems of various countries with a far-reaching economic reform. The broad objectives of these reforms have varied across different nations depending on their development strategies. In a number of so called less developed economies, the need for tax reforms is aimed at enhancing revenues so as to achieve their fiscal objectives. However, in recent times the main reasons for tax reforms in many developing countries has been to design a tax system so as to meet the challenges of international competitiveness. In India as well, the transition from a planned economy to market economy, has taken place based on resource allocation.

A Study on Goods and Service Tax and It's Impact on Indian Economy

In order to push growth, the tax system needs to be rationalised not only for raising adequate revenue but also for providing the basic infrastructure, both social and physical, as also to minimize distortions. Such a transition would surely call for new design of taxation system that is familiar to the rest of the world and at the same time it is efficient in the country of its adoption. There is therefore need to study the features of present GST model and do a gap analysis.

1.5 OBJECTIVES OF THE STUDY:

- To know the concept of GST and its features.
- To study the importance of GST.
- To study the impact of GST on Indian Economy.
- To analyse the how the GST is helpful than earlier tax system.

1.6 SCOPE OF THE STUDY:

The scope of the study is restricted to Impact of GST on Indian Economy whether it be positive or negative. Would be dependent on the rate of GST and over time what economic internalities it can secure.

1.7 RESEARCH METHODOLOGY:

The impact of GST on several sectors of the Indian economy is described in this study, which is descriptive in nature. The secondary source approach was used to gather data for the research study.

Primary data: Primary data refers to the first-hand data gathered by the researcher himself.

Secondary data: Secondary data means data collected by someone else earlier.

For the purpose of analysis and interpretation, the research relies on secondary. Magazines, articles, and research papers published online and offline, newspapers and websites, and magazines are examples of secondary sources.

A Study on Goods and Service Tax and It's Impact on Indian Economy

1.8 LIMITATIONS OF THE STUDY:

- Whatever the study done is related to Indian Tax System not to other country.
- The information and data collected is from secondary source.
- The data will be outdated, when the amendments will be implemented in future.
- The data analysis part has been done on tax rates of previous tax system and present tax system only and it's limited.

1.9 CHAPTER SCHEME:

The plan of analysis is made chapter wise. Here we have included 5 chapters, where each chapter will be discussed in detail with the data.

Chapter 1: Introduction and research design:

In this chapter we will know about what Goods and Service Tax and objectives, scope, limitation and such as.

Chapter 2: Conceptual Framework:

In this chapter we will know about introduction meaning and definition of the study. Furthermore, factors influencing on Indian economy.

Chapter 3: Study Area Profile:

In this chapter we will know about area of study. It's all about Taxation and it's systems.

Chapter 4: Data Analysis and Interpretations:

In this chapter we will know about how the Data is being analysed and the results of it.

Chapter 5: Summary of Findings, Suggestion and Conclusions:

In the last chapter we will know about the findings of the research and conclusions from the study undertaken.

CHAPTER – 2

CENCEPTUAL FRAMEWORK

- 2.1 Introduction**
- 2.2 Meaning and definition of goods and service tax**
- 2.3 Factors influencing Indian economy**
- 2.4 Industry scenario**
- 2.5 Difference between GST and old tax system (VAT)**
- 2.6 Rates of GST**
- 2.7 Theoretical background of the study**

A Study on Goods and Service Tax and It's Impact on Indian Economy

CENCEPTUAL FRAMEWORK

2.1 INTRODUCTION:

GST is an indirect tax imposed on the supply of goods and services in India. GST is value additional tax imposed at all point in the supply chain, with credit allowed for any tax paid on input acquired for use in making the supply.

In other words, goods and service (GST) is an indirect tax levied on the supply and services. This law has substituted numerous indirect many indirect tax laws that previously existed in India. GST is unique indirect tax for the entire nation. Under the GST regime, the tax is charged at every point of sale. In the situation of intra-state sales, central GST and State GST are charged. Interstate sales are chargeable to integrated GST.

It would apply for both goods as well as services in a comprehensive manner, with exemption restricted to a minimum. With federal structure of India, it is proposed that the GST will be levied concurrently by the central government (CGST) and state government (SGST). It is expected that the base and other essential design features would be common between Central Goods and Service Tax and State Goods and Service Tax for individual states. The inter-state supplies within India would be attract an integrated GST (IGST), which is the aggregate of CGST and the SGST of the destination state.

Twenty-seven months later India's biggest and boldest tax improvement hit the ground, the challenges have spread from the discontentment of small traders to more systemic issues slow growth of GST collections, the emergence of nation-wide fake invoices racket and the failure to reach a consensus on rationalisation of rates and the inclusion of items such as petroleum products and electricity in the GST submit.

Originally, the tardy growth of the GST revenue collections has pushed the states and the Centre into a corner. In the month of August, the GST income collections stood at Rs 98,202 crore, a below the psychologically important one lakh crore mark. It was up by an unimpressive 4.5% likened to August 2018. Compared with this year's high of Rs 113,865 crore collected in April, the income in August was down 13.7%.

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One has to however account for the fact that demand in August a month before the festive shopping spree begins has traditionally been sluggish. This year, due to the ongoing slowdown in consumer demand, the effect is amplified. The second major challenge that the GST is facing today could potentially drag down total revenue.

Early this week, the Directorate General of GST Intelligence unearthed a Rs 400 crore fraud of overvaluing and faking invoices to claim refund of input tax credit. The input tax credit is a mechanism that allows businesses to receive refunds on GST paid for the purchase of goods or services so as to prevent cascading taxation. To be fair, in the last two years, the GST Council has responded to the concerns of businesses, modifying select processes and tax rates. For a company with less than Rs 2 crore annual turnover, there is now no need to file monthly or quarterly returns though it has to pay the tax every month.

Further, many items such as nuclear fuel, non-branded paneer, non-branded natural honey, jaggery, salt, agricultural implements, sanitary napkins and rakhi, all of which originally attracted GST, were later shifted to the zero slab, meaning no tax would be charged on them.

2.2 MEANING AND DEFINATION OF GOODS AND SERVICE TAX:

Meaning: The goods and services tax (GST) is a value-added tax levied on most goods and services sold for domestic consumption. The GST is paid by consumers, but it is remitted to the government by the businesses selling the goods and services.

Definition:

GST defines as "Goods and Services Tax charged on the supply of material(s) and services. The term "GST" shall be construed to include the Integrated Goods and Services Tax or Central Goods and Services Tax or State Goods and Services Tax or Union Territory Goods and Services Tax depending upon the import / interstate or intrastate supplies, as the case may be. It shall also mean GST compensation Cess, if applicable".

2.3 FACTORS INFLUANCING INDIAN ECONOMY:

India, a developing country, a country that attracts huge business because of its large population. Economic growth in India has been one of the many positives that have existed since its independence. India witnessed in economic revolution in late 1980's and early 90's.

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Since then, the economy has only grown and India is currently among the fastest growing GDP nations in the world. There have been any recent blames on government about the economic slowdown but slowdowns like these are just an indication of the major changes that are about to come, we'll let us have a look at some of the factors that affect the Indian economy.

1) Capital flow and stock exchange Market.

India attracts investors. With such a huge population there is a huge chance for a thriving business opportunity. Owing to these factors the capital keeps flowing in India and the foreign exchange rates also help. Even if the market falls, India has less to worry about as the currency will still be overhauled.

2) Political changes.

This is among the major factors that affect the economic growth in India. The new governance brings in new changes and new policies. These policies play a major role in changing the import/export scenario which in turn plays a major part in the economy. The relation between the various foreign ministers also plays a very important role.

3) Global currency trends.

The currency of India is more or less interlinked with other major countries like USA, UK and Japan. If the domination value of these countries falls, then the value of INR is bound to fall. Similarly, if the value rises, then it affects the Indian economy as so much money is dependent on foreign exchange. Thus, foreign exchange is another major factor.

4) Demographic and Poverty Rates.

India has taken out millions of people out of poverty after independence. The result of this reflects on the positive economic growth. With India being such a huge international market, it cannot afford people staying in poverty. With people out of poverty the value of India enhances internationally. If poverty somehow rises then it is bound to take the economy down.

5) Energy and OIL

India is among the major oil importing countries in the world. When the price of oil fluctuates and it gets inflated then the INR is bound to get disturbed. It takes an unstable route which is not very good for such a fast-growing economy.

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6) The RBI banks.

RBI has almost everything to do with Indian economy. A slight change in the assessment ranking of RBI has a major impact on the INR. It can lead to over assessment or under ranking of the rupee.

7) Taxation system.

Taxation system impacts hugely the economy of a country. The easier, simple and stricter tax system is implemented in the country, the better will be the cash flow.

Citizens will be bound to stay corrupt free and honest. All this can only be implemented with the help of an open system. Once the taxation system is smooth, the country's economy will surely grow.

2.4 INDUSTRY SCENARIO:

A consulting firm offers suggestions and actionable solutions for businesses to enhance their performance or efficacy in a specific area, such as advertising and technology, legal advisory. Company executives are often the ones who employ consultants to provide them with industry-specific and operational guidance. The purpose of the consultants is to provide a process to be followed in order for the business to achieve its objectives.

'Legal Services' means any service provided in relation to counsel, advice or assistance in any field of law, in any form and including representation services Legal Services may be any service provided by the company in the course of the practice.

1. Advice or consultation before any government authority
2. Monthly computations, fillings etc

Exemptions and other provisions relating to legal services shall be enforced only in the sense of firms

1. A Chartered Accountant providing legal advice in relation to commercial law, and subject to the concept of legal services, but not to the terms of any reverse charge mechanism (RCM) or exemption provisions.

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2.3.1 GLOBAL FRAMEWORK OF GST:

1. FRANCE

a. Rate of GST 19.6%

b. France was the first country to introduce GST in 1954

Worldwide, almost 150 countries have introduced Goods and Service Tax in one or the other since now.

Most of the countries have a unified Goods and Service Tax system Brazil and Canada follow a dual system vis a vis India is going to introduce. In China, Goods and Service Tax applies only to goods and the provision of repairs, replacement and processing services.

2. AUSTRALIA

a. Rates of GST %

b. GST is administrated by the tax office on behalf Australia Government, and is appropriated to the states and territories.

c. Every company whose turnover exceeds \$75000 is liable for registration under GST and in default 1/11th of the income and some amount is firm of penalty.

3. CANADA

a. Goods and Service Tax is imposed at 5%in part of the excise tac act. Goods and Service Tax is levied on goods and service made in Canada except items that are either exempt or zero rated.

b. When a supplier makes a zero-rated supply, he is eligible to recover any GST paid on purchases but the supplier who makes a supply of exempt goods he is not eligible take input tax credit on purchases for the purpose of making the exempt goods and services.

4. NEW ZEALAND

a. Rate of GST 12.5%

b. Exemption are rent collected on residential rental properties, donation and financial services.

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5.MALAYSIA:

Goods and Services Tax (GST) in Malaysia is the elimination of VAT. GST is imposed on most transactions in the production process, but is reimbursed to all parties in the production chain other than the final consumer with the exception of Blocked Input Tax.

2.3.2 INDIAN FRAMEWORK OF GST:

2017 will be engraved forever in Indian history as the year in which significant and most important economic reforms have been introduced since independence-the Goods and service tax (GST). The reforms that took more than a decade of intense debate was finally implemented with the effect of 1 July 2017, subsuming almost all indirect taxes at the Central and state levels. The GST, published by the government as 'one country one tax' aim to provide a streamlined, single tax structure in line with the tax mechanism existing in a number of major countries' economies across the Globe. This single tax helped streamline various indirect taxes and brought in more efficiencies in business. In India, GST law is a complex, multi-stage, destination-based tax levied on any added value.

The implantation of the GST got overwhelming support from the industry. This was seen as an opportunity by the industry to redefine the supply chain model, optimize IT systems, and review internal and external agreements to maximize interest and reduce tax costs. As the GST journey progressed, its far-reaching impact was increasingly realized. Industry faced various challenges, from new and unique technologies, complicated paperwork, high tax rates for certain goods and services to complex and ambiguous handling of several commercial transactions.

Some of the emerging challenges that businesses should be aware of are the matching concept for claiming credits, adverse and opposite advance ruling, ambiguity on aspects related to anti-profiting, GST refunds, etc.

Nevertheless, it should also be noted that by releasing a series of alerts, clarifications, press releases and FAQs, the authorities are able to address public concern in order to solve a wide range of issues. There is hope that GST 2.0, which is currently at work, will be much better than the first edition. The government has emerged with a new process of return filing. Specific goods have been through multiple times in the tax rate. The government has also introduced the E Way bill system throughout India to track the movement of goods with the aim of curbing tax evasion.

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2.5 DIFFERENCE BETWEEN GST AND TAX SYSTEM (VAT):

PARAMETERS	VAT	GST
Structure	Under the old taxation system, the central taxes applicable were custom duty/central excise duty, central sales tax on commodities and services, surcharge and cesses. The state taxes included state VAT, WCT, entertainment tax, luxury tax, tax on gambling, betting and lottery, sales tax deducted at source, and surcharge and cesses.	Under GST, all the central and state taxes will be subsumed and a single tax will be levied on all commodities and services apart from motor spirit, petroleum, natural gas and high-speed diesel.
Basis of Levy	Under VAT, tax will be levied at the place where goods are manufactured or sold, or the place at which services are rendered.	Under GST, tax will be levied at the place of consumption, like a destination-based tax.
Registration	Under VAT, the registration is decentralised under state and central authorities.	Under GST, there will be uniform e-registration depending upon the PAN of the entity.
	Under VAT, the system will partly validate the returns, and full verification will be subject to assessments by state or central authorities.	Under GST, the validation will take place on the system, and consistency checks will be carried out on input credit

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Validation		availed, tax payments, and utilization.
Filing of Returns and Collection of Tax	Under the old scenario, service tax and central excise were uniform, but VAT varied from state to state.	Under GST, the process is uniform and the dates for collecting or depositing tax and filing returns are common.
Service Tax	Under VAT, the centre charges service tax on a list of services under the Finance Act on provision/payment basis.	Under GST, the State GST subsumes service tax depending upon rules relating to Place of Supply.
State VAT	Under VAT, all commodities apart from those exempts are taxed.	Under GST, the State GST subsumes this tax
Excise Duty	Under VAT, excise duty will be levied up to the point of manufacturing.	- Under GST, the excise duty will be replaced by Central GST and tax will be levied up to retail level.
Basic Customs Duty	- Under VAT, the centre charges tax on imports under a separate act.	No change.
Special Additional Duty	Under Vat, the centre charges tax on imports separately.	- Under GST, this duty is subsumed by State GST.

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Entry Tax	- Under VAT, entry tax is charged by certain states for inter-state transfers, detained as import in local area.	- Under GST, entry tax is not applicable, but an additional 1% will be levied as tax on inter-state supply of certain commodities.
Central Sales Tax	Under VAT, CST is charged at a concessional rate of 2% so far as inter-state transfers are concerned against C-Forms. The full rate applicable otherwise ranges from 5% to 14.5%.	Under GST, the Integrated GST subsumes CST.
Cascading Effect	Under VAT, credit between service tax and excise duty is available, but there is no set-off against VAT on excise duty.	Under GST, credit available on the whole amount of taxes up to retailer.
Threshold limits for levy of tax	- Under VAT, the threshold for central excise is Rs.1.5 crore, and the threshold for VAT ranges between Rs.5 lakh to Rs.20 lakh depending upon the state. The threshold for service tax is Rs.10 lakh.	Under GST, the State GST will range between Rs.10 lakh to Rs.20 lakh based on recommendations of the GST Council.

2.6 RATES OF GST

The IGST and CGST Acts do not indicate GST structure.

As per section 9 of CGST act will be notified by central/state government. The rate shall not exceed 20%. Same provision will be in SGST Act each state. Thus, total GST rate for intra-

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states supplies will not exceed 40% [20% CGST and 20% SGST]. As per section 5 of IGST Act, rate GST will be as notified by Central Government. The rate shall not be exceeding 40%. CGST and IGST rates will be common all over India. State Goods and Service Tax rates are also expected to be mutual all over India. However, since State Government have sovereign power to levy GST, the SGST rates may vary from State to State, though presently they are same.

The GST rates on goods are notified based on customer Tariff Act, which is based on HSCN code. However, though customer Tariff has eight-digit code, only first four digits are used to notify GST rates. Thus, in many cases, for same four-digit item, GST rates may vary depending on description of goods.

In case of services, classification code is a 6-digit code. First 2 digit are always '99'. Broadly the IGST rates are as follows [for supply within State/Union territory, 50% of IGST rate is CGST rate and 50% of IGST rate is SGST/UTGST rate] [as amended up to 15-11-2017].

Nil – Fresh meat, Fish, Chicken, Eggs, fresh milk, butter milk, live animal, live poultry, curd, natural honey, unpacked wheat, unpacked rice, fresh fruits, and vegetables, coffee beans, wheat, rye, rice, flour, all kind of salts, jaggery, hulled cereal grains, along with bindi, sindoor, kajal, bangles, drawing and coloring books, stamp, judicial paper, printed books, newspaper, jute and handloom, hotels and lodges with tariff below INR 1000 so on.

0.1% - Supply of goods by DTA unit (Domestic Tariff Area i.e., in India) to Marchant exporter who is going to export the goods supplies by DTA unit (w.e.f. 23-10-2017)

0.25% - Rough diamonds, rough precious or semi-precious stones falling under 7102, 7103 and 7104.

3% - Gold, silver and jewelry, platinum, imitation jewelry, pearl, diamonds, synthetic stone, precious stones.

5% - Packaged foods, fish filet, cream, skimmed milk powder, eggs, brunded paneer, frozen vegetables, coffee, tea, spices, pizza bread, rusk, cashew nuts, edible oils, sabudana, kerosene oil PDS, coal, ores, specified medicines, stent, life boats, handnade safety matches, newsprint, footwear below Rs 500, sugar, cotton, yarn, natural fibre, silk yarn, silk woven fabric, cotton fabric, embroidery, readymade garments up to Rs1000, railway locomotives and parts.

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GST rates in case of food and drinks supplied in running trains and platforms is uniform @ 5% without Input Tax Credit. E-waste, Khakhra, plain, plain chapatti or roti, Unbranded Namkeen, bhujia, mixture, chabena and similar edible, preparation in ready for consumption form, other than put up in unit container-inserted w.e.f. 13-10-2017.

12% - Live horses, condensed milk, butter, cheese, ghee, dry fruits in packaged form, Animal Fat, sausage, fruit juices, branded namkeens, bhujia in unit containers, Ayurvedic medicines, tooth powder, tableware, fixed speed diesel engine, exercise books and note books, glasses for corrective spectacles and flint buttons, spoons, forks, ladles, skimmers, cake servers, fish knives, tongs, intraocular lens, two-way radio (walkie talkie) used by defense, police and paramilitary forces etc. LED lamps, cell phones, agricultural machine, table kitchen, permanent transfer of IPR (except software).

18% - Flavored refined sugar, pasta, sugar, confectionery, cornflakes, pastries and cakes, preserved vegetables, jams, sauces, soups, ice creams, instant food mixes, mineral water, ethyl alcohol, slag perfumes, fireworks, steel products, printed circuits, camera, speaker, monitors, biscuits, footwear Rs 500 and above, tendu leaves, artificial fiber, synthetic yarn like nylon, polyester, computers, hand tools, Machinery for industrial use, machine tools. Ball bearings and roller bearings, CCTV, printed circuits, spectacles, clocks, watches, permanent transfer of IPR of software, all other goods not elsewhere specified.

28% - Molasses, pan masala, aerated water, tobacco products, Portland cement, paints, tires, IC engines, refrigerators, air conditioning machines, water heaters, washing machine, motor vehicles, motor cycles, aircrafts for personal use, revolvers, video games.

Lottery tickets – GST rate will be 12% in case of state-run lotteries and 28% in case authorized by state Government. Tax on lottery will be collected at first stage under reverse charge. Later, there will be no GST on subsequent sale of lottery tickets. The valuation will be 100/112 or 100/128 of face value.

GST compensation cess - In addition, there will be GST cess of 1% on small cars, 3% on mid-sized cars and 22% on luxury cars. Motor cycles above 350cc will attract 3% GST compensation cess is also payable on aerated waters, cigarettes and pan masala.

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Exemption to goods supplied for petroleum operation – Goods supplied for petroleum operation have been exempted vide Notification No. 3/2017-CT (rate) dated 28-6-2017 and No. 3/2017 IT (rate) dated 28-6-2017.

GST Rates on services –

- The GST rates are notified in Notification Nos. 11/2017-CT (Rate) and 8/2017-IT (Rate) both dated 28-6-2017 effective from 1-7-2017. Parallel notification is issued under UTGST and SGST Acts also.
- SGST/UTGST and SGST rates are presently 50% IGST rates.
- Central rate of IGST on services is 18%. The IGST rate of 18% will apply to banking and insurance services, courier and postal services, gas and water distribution services, legal and accounting services, telecommunication services, R&D services, software.
- In case of transport of goods by rail and vessel, IGST will be 5% with ITC of input services only. IN case of transport of goods by rail in containers (by other than Indian railways), IGST rate 12% with full ITC.
- In case of transport by road (GTA i.e., Goods Transport Agency and transport of household goods). GST rate is 5% without input tax credit. There is provision of reserve charge in case of GST. The recipient paying tax under reverse charge can avail its input tax credit as it is his eligible input service in many of the cases.

The GTA has option to pay GST @ 12% under forward charge. In that case, he can take Input Tax Credit of goods and services.

- In case of transaction of passengers, GST rate is 5% (with ITC of input services) in following cases – (a) Air-conditioned contract or stage carriage (b) radio taxi (c) by rail in AC or first class [exemption to non-AC travel] (d) by air in economic class.
- GST rate on transport of passengers in any motor vehicle designed to carry passengers, where cost of fuel is included in the consideration charged from the service recipient is 5% (2.5% CGST and 2.5% SGST) or 5% IGST. ITC on goods or services is not available.
- If fuel is supplied by recipient of services, the GST rate will be 18% (9% CGST and 9% SGST) or 18% IGST. This is the residual rate of tax.
- Leasing of aircraft – IGST 5% with ITC of input services.
- Sale of space for advertisement in print media – IGST 5% with full ITC.

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- Job works of tailoring – 5% w.e.f. 25-01-2018
- Counter sale of foods items attracted GST rate of 5%.
- Forman of chit funds – IGST @ 12% with ITC of input services.
- Some infrastructure related construction services and works contract service have been exempted or rate reduced to 12% w.e.f. 22-08-2017
- Temporary or permanent transfer of IPR related services (except software) – 12% with full ITC. In case of copyright, there is reverse charge, IGST of software service is 18% [9% CGST plus 9% SGST/UTGST].
- For all other recreational, cultural and sporting services, the GST rate is 18% (CGST 9% and SGST 9%) or IGST rate 18%.

Exemption form GST on services –

Exemption for services is given in Notification NO. 12/2017-CT (Rate) and 9/2017-IT (Rate) both dated 28-06-2017. Many of earlier exemption are continuing under GST. Construction services relating to canals, dams, public roads are exempt from GST w.e.f. 22-08-2017. Works contract services to railways attract lower rate of GST.

Pure labor contract relating to construction under Housing for all (Urban) Mission, Pradhan Mantri Awas Yojana and single residential unit (other than as part of residential complex) are exempt from GST.

Major exemption to tax on services – Following are important exemption;

- Agricultural related services (up to first stage)
- Toll for road or bridge [services of collection of tolls will be taxable]
- Services by recognized educational institutes [certain services provided to educational institution are also exempt]
- Interest on loans, deposits or advances is exempt [but not on credit card or for late payment of invoices]
- Services to UN agencies and by UN Agencies are exempt by way of refund.

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2.7 THEORETICAL BACKGROUND OF THE STUDY

In 2000, the then Prime Minister introduced the concept of GST and set up a committee to develop the country's GST model. In 2003, the Central Government set up a task force on fiscal responsibility and budget management, which in 2004 proposed that Goods and Service Tax replace the existing tax regime by introducing a comprehensive tax on all goods and services to replace the central rate of VAT and the national level of VAT.

It proposed that all indirect taxes, including customs duties, be replaced by value added tax on all goods and services with total value added tax at all stages of the value chain. The GST movement was articulated by the then Union Finance Minister in his 2006-07 budget speech. It was initially proposed that GST be implemented as of 1 April 2010.

The Empowered Committee of State Finance Ministers (EC) which formulated the definition of State VAT was asked to draw up a GST roadmap and structure. Joint working groups of officials with representatives of the States and the Centre were set up to discuss various aspects of GST and to draw up reports explicitly on exemptions and thresholds, taxation of goods and taxation of inter-State supplies.

On the basis of consultations within and between the EC and the Central Government, the EC released its First Discussion Paper (FDP) upon GST in November 2009.

The implementation of the Goods and Services Tax (GST) is a very significant step forward in the area of indirect tax reform in India. Through amalgamating a large number of central and state taxes into a single tax, GST would substantially reduce the ill effects of cascading or double taxation and pave the way for a common national market.

From the point of view of consumers, the biggest advantage would be to reduce the overall tax burden on goods, which is currently estimated to be around 25%-30%. It would also mean that the real cost of indirect taxes on goods and services would be much clearer to the customer.

The implementation of GST would also make Indian goods competitive in domestic and international markets by completely neutralizing input taxes across the value chain of production and distribution. Studies show that this would have a boosting effect on economic growth. Last but not least, because of its straightforward and self-policing nature, this tax would be easier to administer. It would also encourage a shift from the informal economy to the formal economy. The Government proposes to introduce GST with effect from 1 July 2017.

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GST and Centre-State Financial Relations

Today, fiscal powers between the Centre and the States are clearly demarcated in the Constitution, with almost no overlap between the respective jurisdictions. The Center has the authority to levy taxes on the production of products (with the exception of alcoholic beverages for human consumption, morphine, cocaine, etc.) while States have the right to levy taxes on the sale of goods.

In the case of cross-state sales, the Center has the power to levy a tax (Central Sales Tax) but the tax is collected and retained entirely by the originating States. As far as utilities are concerned, it is the Center alone that is empowered to impose utility taxes. Because States are not allowed to impose any tax on the sale or purchase of products in the course of their importation into or exports from India, the Center levies and collects this tax in addition to the Basic Customs Duty.

This additional customs duty (commonly referred to as CVD and SAD) balances the excise duty, sales tax, state VAT and other taxes imposed on the same national product. The implementation of the GST included changes to the Constitution in order to allow the Center and the States to administer and receive GST at the same time.

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The way GST Impact on Indian Economy:

- **Simplification of the tax structure:** Reduces tax burden on producers and fosters growth through more production. The current taxation structure, pumped with myriad tax clauses, prevents manufacturers from producing to their optimum capacity and retards growth. GST will take care of this problem by providing a tax credit to the manufacturers.
- **Enhanced pan India operations:** Different tax barriers, such as check posts and toll plazas, lead to wastage of unpreserved items being transported. This penalty transforms into major costs due to the higher needs of buffer stock and warehousing costs. A single taxation system will eliminate this roadblock.
- **Transparency in the GST system:** There will be more transparency in the system as the customers will know exactly how much taxes they are being charged and on what base.
- **Increased revenues:** GST will add to government revenues by extending the tax base.
- **Fostering production:** GST will provide credit for the taxes paid by producers in the goods or services chain. This is expected to encourage producers to buy raw material from different registered dealers and is hoped to bring in more vendors and suppliers under taxation purview.
- **Increase in Exports:** GST will remove the custom duties applicable to exports. The nation's competitiveness in foreign markets will increase on account of the lower costs of the transaction.
- **SME support:** Under the Composition Scheme introduced by GST, the small and medium-sized enterprises (SME's) can now register. According to their annual turnover, they can pay taxes through this scheme.

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State-wise growth of GST Revenues during March 2021

SL NO.	STATE	MAR-20	MAR-21	GROWTH (%)
1	Jammu and Kashmir	276.17	351.61	27
2	Himachal Pradesh	595.89	686.88	15
3	Punjab	1180.81	1361.85	15
4	Chandigarh	153.26	165.27	8
5	Uttarakhand	1194.74	1303.57	9
6	Haryana	4874.29	5709.6	17
7	Delhi	3272.99	3925.97	20
8	Rajasthan	2820.44	3351.79	19
9	Uttar Pradesh	5293.72	6265.01	18
10	Bihar	1055.94	1195.75	13
11	Sikkim	189.33	213.66	13
12	Arunachal Pradesh	66.71	92.03	38
13	Nagaland	38.75	45.48	17
14	Manipur	35.89	50.36	40
15	Mizoram	33.19	34.93	5
16	Tripura	67.1	87.9	31
17	Meghalaya	132.72	151.97	15
18	Assam	931.72	1004.65	8
19	West Bengal	3582.26	4386.79	25
20	Jharkhand	2049.43	2416.13	18
21	Odisha	2632.88	3285.29	25
22	Chhattisgarh	2093.17	2544.13	22
23	Madhya Pradesh	2407.4	2728.49	13
24	Gujrat	6820.46	8197.04	20
25	Daman and Diu	94.91	3.29	-97
26	Maharashtra	15002.1	17038.5	14
27	Karnataka	7144.3	7914.98	11
28	Goa	316.47	344.28	9
29	Lakshadweep	1.34	1.54	15
30	Kerala	1475.25	1827.94	24
31	Tamil Nadu	6177.82	7579.18	23
32	Puducherry	149.32	161.04	8
33	Andaman and Nicobar Islands	38.58	25.66	-33
34	Telangana	3562.56	4166.42	17

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GST Revenue Collection and growth:

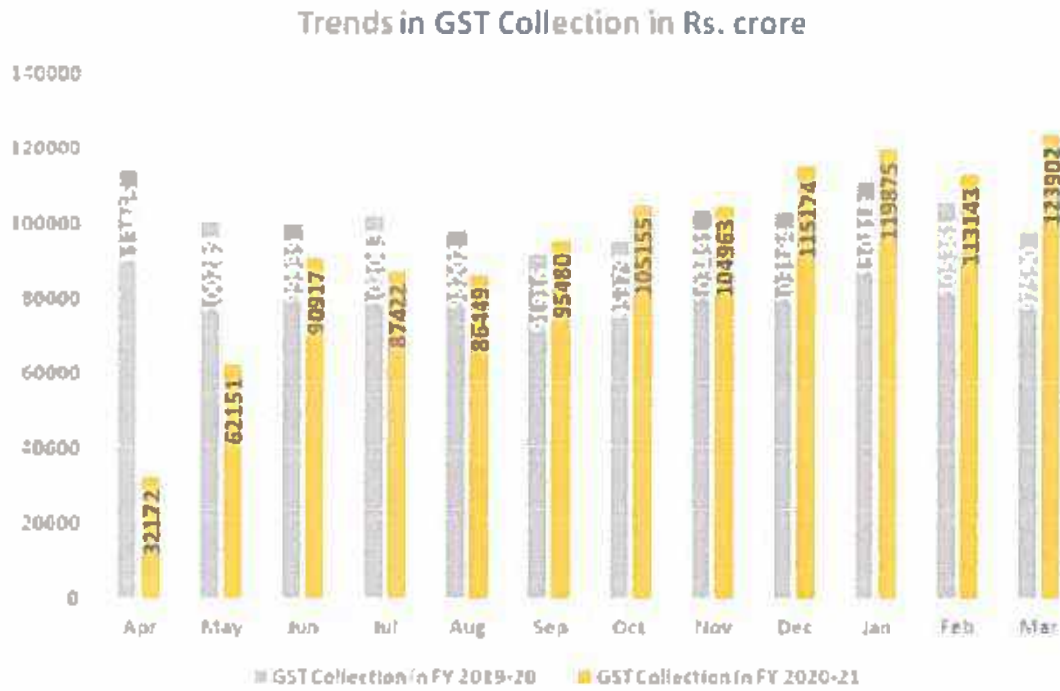
The gross GST revenue collected in March 2021 is at a record of ₹ 1,23,902 crore of which CGST is ₹ 22,973 crore, SGST is ₹ 29,329 crore, IGST is ₹ 62,842 crore (including ₹ 31,097 crores collected on import of goods) and Cess is ₹ 8,757 crore (including ₹ 935 crores collected on import of goods). The government has settled ₹ 21,879 crores to CGST and ₹ 17,230 crores to SGST from IGST as regular settlement. In addition, the Centre has also settled ₹ 28,000 crores as IGST ad-hoc settlement in the ratio of 50:50 between Centre and States/UTs.

The total revenue of the Centre and the States after regular and ad-hoc settlements in March 2021 is ₹ 58,852 crore for CGST and ₹ 60,559 crores for the SGST. The Centre has also released a compensation of ₹ 30,000 crores during March 2021. The GST revenues during March 2021 are the highest since the introduction of GST. In line with the trend of recovery in the GST revenues over the past five months, the revenues for March 2021 are 27% higher than the GST revenues in the same month last year.

During the month, revenues from import of goods were 70% higher and the revenues from the domestic transaction (including import of services) are 17% higher than the revenues from these sources during the same month last year. The GST revenue witnessed a growth rate of (-) 41%, (-) 8%, 8%, and 14% in the first, second, third, and fourth quarters of this financial year, respectively, as compared to the same period last year, clearly indicating the trend in the recovery of GST revenues as well as the economy as a whole.

GST revenues crossed above ₹ 1 lakh crore mark at a stretch for the last six months and a steep increasing trend over this period are clear indicators of rapid economic recovery post-pandemic. Closer monitoring against fake billing, deep data analytics using data from multiple sources including GST, Income-tax, and Customs IT systems, and effective tax administration have also contributed to the steady increase in tax revenue over the last few months.

1. The chart below shows trends in monthly gross GST revenues during the current year. The table shows the state-wise figures of GST collected in each State during March 2021 as compared to March 2020.



CHAPTER – 3
STUDY AREA PROFILE

3.1 Indian Economy

3.2 Structure of Indian Economy

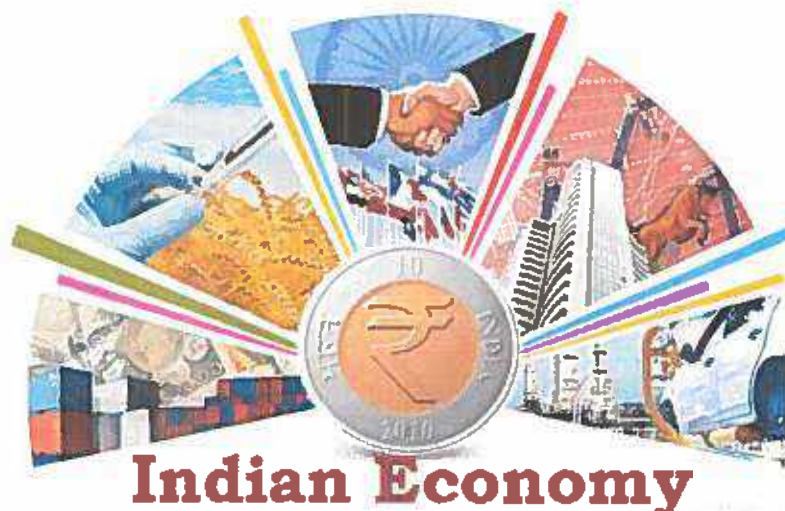
3.3 Other classification of Economy

3.4 Systems of Indian Economy

STUDY AREA PROFILE

3.1 INDIAN ECONOMY:

Over years, the Indian economy has experienced a gradual structural change. Though the pace of the structural transformation was more or less slow throughout the pre-reform period, it has become rapid after the introduction of new economic reforms in the decade of the nineties. At the time of independence, Indian economy was predominantly rural and agricultural. At the beginning years of the First Five-year Plan, contribution of the primary sector (agriculture, forestry and logging, fishing) in GDP at factor cost was largest followed by tertiary sector and secondary sector respectively. Thereafter the major drive towards diversification and modernization of the Indian economy in the following plans resulted in increased shares of the secondary and tertiary sectors and declined share of the primary sector in the national product. The share of the primary sector in GDP at factor cost declined from 54.56% in 1950-51 to 27.87% in 1999-00 while share of the secondary sector was 16.11% in 1950-51 and increased to 25.98% in 1999-00. The share of the tertiary sector increased from around 29% to 46% during this period. Indian economy also experienced a major structural change within the industrial sector as a result of the major drive for industrial diversification in the mid-fifties. While the share of the capital goods industries and the basic goods industries in the total industrial value added increased more or less rapidly, the share of the consumer goods in total industrial value added declined considerably over the years.



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However, the pace of transition of the Indian economy from an agricultural economy to an industrial one was quite slow since 1951. It was in the decade of the eighties the economy emerged from the phase of slow growth rate and deceleration. Finally, a major shift in the macroeconomic policies in the decade of the nineties accelerated the pace of the structural transformation of the Indian economy and set India on a high growth trajectory. In terms of average growth rate, the performance in the nineties (6.5%) was better than that recorded in the eighties (5.8%). While both the industrial and service sectors registered relatively high growth rates during recent period, agriculture and allied activities experienced a relatively low rate of growth as compared to the eighties. This underlines a major structural shift in the Indian economy in recent years, with economic growth becoming more vulnerable to the performance of industrial and service sectors and less to the performance of the agricultural sector. In order to keep the momentum of the structural transformation of the Indian economy, investment should be concentrated to those sectors which are strongly integrated with the rest of the economy and have a larger multiplier effect on growth and development.

In other words, the key or priority sectors are those which can stimulate greater economic activities in other sectors and investment should be concentrated to these sectors, particularly to achieve the target rate of growth of 8% of real GDP as envisaged in the Tenth Five-year Plan. This paper has studied the structure of the Indian economy with an objective to identify the key sectors which could accelerate the overall growth rate of the economy in the post-liberalization period. While exploring the structure of the Indian economy a new scheme of classification of sectors based on the factors of production used intensively in the production process of different sectors, has been used. All economic activities are classified into three broad categories - Ricardo sectors (natural resource intensive), High-Technology sectors (high-technology intensive) and Heckscher - Ohlin sectors (capital-labour intensive), on the basis of inputs (natural resource, research & development and labour & capital) used intensively in the production process. Such classification is completely different from the usual way of classifying the sectors like primary sector, secondary sector and tertiary sector. The input-based scheme for classification of the sectors in the study of the structure of the Indian economy is expected to reveal the importance of the resource intensive, technology intensive and labour and capital-intensive sectors in the production structure of the Indian economy. The structural relationship of an economy can be examined by using the input-output tables.

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The study of the sectoral linkages and the identification of the key sectors based on the input-output technique shows the nature and the degree of interdependence of an economy.

Thus, in order to study the structure of the Indian economy with the classification of sectors based on input usage input-output technique is appropriate. For this purpose, we have used the Indian Input-Output Transaction Table of the year 1993-1994, sourced from Central Statistical Organization, Ministry of Statistics and Programme Implementation, Government of India. All the figures are given in Rs(lakh). We have aggregated the commodities and reduced the transaction matrix into a (72 x 72) one. The aggregation scheme is given in the appendix table A. All the subsequent analysis has been in terms of aggregated transaction matrix. India is likely to be the third largest economy with a GDP size of \$15 trillion by 2030. The economy of India is currently the world's fourth largest in terms of real GDP (purchasing power parity) after the USA, China and Japan and the second fastest growing major economy in the world after China. Indian economy growth rate is estimated to be around seven to eight percent by year 2015-16. Let's look at some facts from history regarding India as an Economy. Dadabhai Naoroji is known as the Father of Indian Politics and Economics, also known as the 'Grand Old Man of India'. Dadabhai Naoroji was the first to calculate the national income of India. In his book "Poverty and Un-British Rule in India" he describes his theory, i.e., the economic exploitation of India by the British. His theory is popularly called the Economic Drain Theory.

That's when economy of India came into discussion as an entity, prior to that it was just a scramble of princely states and colonisers. That's all the history there for time being.

Agriculture in Indian economy: -

While Indian economy introduction is started, the major focus is always on the agriculture sector. This is because Indian economy is based on agriculture. 52% of the total population of India depends on agriculture. According to the 2011-2012 survey of Indian agriculture contributes 14.1% of the Gross Domestic Product (GDP). It was 55.4% in 1950-1951. India is the second largest sugar producer in the world (after Brazil). In tea production, India ranks first (27% of total production in the world). Wheat production: Uttar Pradesh is the largest producer. Punjab and Haryana are then the second and the third largest producer of wheat. Rice production: The principal food grain in India is rice. West Bengal is the largest producer. Uttar Pradesh is the second largest producer of Punjab and is the third largest producer of rice.

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Agriculture is an important sector of Indian economy as it contributes about 17% to the total GDP and provides employment to over 60% of the population. Indian agriculture has registered impressive growth over last few decades. The food grain production has increased from 51 million tonnes (MT) in 1950-51 to 250 MT during 2011-12 highest ever since independence. The production of oilseeds (nine-major oilseed) has also increased from 5 MT to 28 MT during the same period. The rapid growth has helped Indian agriculture mark its presence at global level. India stands among top three in terms of production of various agricultural commodities like paddy, wheat, pulses, groundnut, rapeseeds, fruits, vegetables, sugarcane, tea, jute, cotton, tobacco leaves, etc (GOI, 2008-09). However, on marketing front, Indian agriculture is still facing the problems such as low degree of market integration and connectivity, accessibility of reliable and timely information required by farmers on various issues in agriculture.

Also, the agricultural marketing sector is characterized by fragmented supply chain. Huge postharvest losses, multiple market intermediaries, higher transaction cost, lack of awareness and several other socio-economic factors are some of the acute problems being faced by the Indian agriculture. Agricultural commodities produced have to undergo a series of operations such as harvesting, threshing, winnowing, bagging, transportation, storage, processing and exchange before they reach the market, and as evident from several studies across the country, there are considerable losses in crop output at all these stages. A recent estimate by the Ministry of Food and Civil Supplies, Government of India, puts the total preventable post-harvest losses of food grains at 10 per cent of the total production or about 20 million Mt, which is equivalent to the total food grains produced in Australia annually. In a country where 20 per cent of the population is undernourished, post-harvest losses of 20 million Mt annually is a substantial avoidable waste. According to a World Bank study (1999), post-harvest losses of food grains in India are 7-10 per cent of the total production from farm to market level and 4-5 per cent at market and distribution levels. For the system as a whole, such losses have been worked out to be 11-15 million Mt of food grains annually, which included 3-4 million Mt of wheat and 5-7 million MT of rice. With an average per capita consumption of about 15 kg of food grains per month, these losses would be enough to feed about 70-100 million people, i.e., about 1/3rd of India's poor or the entire 2 population of the states of the Bihar and Haryana together for about one year.

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Thus, it is evident that the post-harvest losses have impact at both the micro and macro levels of the economy. Horticulture, being one of the important sectors of Indian agriculture, plays an important role in the economy of the country.

There are several horticulture crops suitable for almost all the Agro-climatic zones of the country. Currently horticulture contributes 28 per cent of agricultural GDP.

Country has emerged as the world's largest producer of Mango, Banana, Coconut and the second largest producer and exporter of Tea, Coffee, Cashew and Spices.

About 39 per cent mango and 23 per cent banana of the world are produced in India. The country has recorded highest productivity (25.4 tonnes/ha) in the case of grapes in the world. Only 2 per cent of horticulture produce is processed, 0.4 per cent is exported and about 20-30 per cent is lost or gets wasted in market chain. Exports of fresh and processed fruits, vegetables, cut flowers, dried flowers have also been picking up. Production of Fruits and Vegetables in India currently pegged at level of 202.68 million tonnes (NHB, 2008), which was planned to be increased to 300 million tonnes by 2012 (GOI, 2002).

Electricity sector in Indian Economy

Primary energy consumption of India is the third-largest after China and the US with 5.3% global share in the year 2015. Coal and crude oil together account for 85% of the primary energy consumption of India. India's oil reserves meet 25% of the country's domestic oil demand. As of April 2015, India's total proven crude oil reserves are 763.476 million metric tons, while gas reserves stood at 1,490 billion cubic metres (53 trillion cubic feet). Oil and natural gas fields are located offshore at Bombay High, Krishna Godavari Basin and the Cauvery Delta, and onshore mainly in the states of Assam, Gujarat and Rajasthan. India is the fourth-largest consumer of oil and net oil imports were nearly ₹8,200 billion (US\$110 billion) in 2014-15, which had an adverse effect on the country's current account deficit. The petroleum industry in India mostly consists of public sector companies such as Oil and Natural Gas Corporation (ONGC), Hindustan Petroleum Corporation Limited (HPCL), Bharat Petroleum Corporation Limited (BPCL) and Indian Oil Corporation Limited (IOCL). There are some major private Indian companies in the oil sector such as Reliance Industries Limited (RIL) which operates the world's largest oil refining complex.

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India became the world's third-largest producer of electricity in 2013 with a 4.8% global share in electricity generation, surpassing Japan and Russia. By the end of calendar year 2015, India had an electricity surplus with many power stations idling for want of demand.

The utility electricity sector had an installed capacity of 303 GW as of May 2016 of which thermal power contributed 69.8%, hydroelectricity 15.2%, other sources of renewable energy 13.0%, and nuclear power 2.1%. India meets most of its domestic electricity demand through its 106 billion tonnes of proven coal reserves

Engineering in Indian Economy

Engineering is the largest sub-sector of India's industrial sector, by GDP, and the third-largest by exports. It includes transport equipment, machine tools, capital goods, transformers, switchgear, furnaces, and cast and forged parts for turbines, automobiles, and railways. The industry employs about four million workers. On a value-added basis, India's engineering subsector exported \$67 billion worth of engineering goods in the 2013–14 fiscal year, and served part of the domestic demand for engineering goods.

The engineering industry of India includes its growing car, motorcycle and scooters industry, and productivity machinery such as tractors. India manufactured and assembled about 18 million passenger and utility vehicles in 2011, of which 2.5 million were exported. India is the largest producer and the largest market for tractors, accounting for 29% of global tractor production in 2013. India is the 12th-largest producer and 7th-largest consumer of machine tools. The automotive manufacturing industry contributed \$79 billion (4% of GDP) and employed 6.76 million people (2% of the workforce) in 2016.

Pharmaceuticals in Indian Economy

The Indian pharmaceutical industry has grown in recent years to become a major manufacturer of health care products for the world. India holds a 20% market share in the global supply of generics by volume. The Indian pharmaceutical sector also supplies over 62% of the global demand for various vaccines. India's pharmaceutical exports stood at \$17.27 billion in 2017–18 and are expected to reach \$20 billion by 2020.

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The industry grew from \$6 billion in 2005 to \$36.7 billion in 2016, a compound annual growth rate (CAGR) of 17.46%. It is expected to grow at a CAGR of 15.92% to reach \$55 billion in 2020. India is expected to become the sixth-largest pharmaceutical market in the world by 2020. It is one of the fastest-growing industrial sub-sectors and a significant contributor to India's export earnings. The state of Gujarat has become a hub for the manufacture and export of pharmaceuticals and active pharmaceutical ingredients (APIs).

Mining and Construction in Indian economy

Mining contributed \$63 billion (3% of GDP) and employed 20.14 million people (5% of the workforce) in 2016. India's mining industry was the fourth-largest producer of minerals in the world by volume, and eighth-largest producer by value in 2009. In 2013, it mined and processed 89 minerals, of which four were fuel, three were atomic energy minerals, and 80 non-fuels. The government-owned public sector accounted for 68% of mineral production by volume in 2011–12.

In fiscal year 2014–15, India was the third-largest producer of raw steel and the largest producer of sponge iron. The industry produced 91.46 million tons of finished steel and 9.7 million tons of pig iron. Most iron and steel in India are produced from iron ore.

The construction industry contributed \$288 billion (13% of GDP) and employed 60.42 million people (14% of the workforce) in 2016.

3.2 STRUCTURE OF INDIAN ECONOMY:

Primary Sector

The primary sector in India is the sector which is largely dependent on the availability of natural resources in order to manufacture the goods and also to execute various processes. The services in this sector are entirely dependent on the availability of the natural resources in order to keep the day-to-day operations running. As we have the clear idea of this sector is, the best example to discuss in this sector is the agriculture sector. The other examples in this sector include fishing and forestry, but agriculture accounts for the largest in this sector. One of the major problems that this sector faces is the underemployment and the disguised employment. Underemployment accounts for the workers not working to the best of their capabilities while the latter accounts for the workers not working to their true potential.

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As a solution to the problems, the state, as well as the national government, can increase the funds for the irrigation facilities and provide loans for buying high-quality seeds and fertilizers.

Secondary Sector

The economy in the sector is dependent on the natural ingredients which are used to create the services and products offered and which at the end are used for consumption. In terms of value added to the products and services, this sector is the best sector. The major examples that fall under this category are transportation and manufacturing.

Both these sectors end product is the consumption by the people. This sector is responsible for the employment of almost 14 percent of the entire workforce currently working in India. The secondary sector also contributes to almost 28 percent of the share of GDP. This sector is the backbone of Indian economy and there are more development and growth in the near future.

Tertiary Sector

This sector contributes the largest in terms of share in GDP in India. The sector is also the service sector and is important when you consider the development of the other two sectors. Like the previous sector, this sector also adds the value to the products. This sector is responsible for employing 23 percentage of the workforce out of the total workforce currently working in India. The example of this sector is all service sectors which IT services, consulting, etc. This sector contributes to almost 59 percent of the total share of GDP. The main problem that this sector is that the jobs which involve lower salaries do not attract much employment. And this remains the future dilemma as India is looking for double-digit growth in the near future.

3.3 OTHER CLASSIFICATION OF ECONOMY

In Indian economy introduction, the sectors of economy based on other basis is also required to get a clear picture of the strengths of Indian Economy.

1. **Organized Sector:** The sector which carries out all activity through a system and follows the law of the land is called organized sector. Moreover, labour rights are given due respect and wages are as per the norms of the country and those of the industry.

Labour working organized sector get the benefit of social security net as framed by the Government. Certain benefits like provident fund, leave entitlement, medical benefits and insurance are provided to workers in the organized sector.

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These security provisions are necessary to provide source of sustenance in case of disability or death of the main breadwinner of the family without which the dependents will face a bleak future.

2. **Unorganized Sector:** The sectors which evade most of the laws and don't follow the system come under unorganized sector. Small shopkeepers, some small-scale manufacturing units keep all their attention on profit taking and ignore their workers basic rights. Workers don't get adequate salary and other benefits like leave, health benefits and insurance are beyond the imagination of people working in unorganized sectors.
3. **Public Sector:** Companies which are run and financed by the Government comprises the public sector. After independence India was a very poor country. India needed huge amount of money to set up manufacturing plants for basic items like iron and steel, aluminium, fertilizers and cements.
Additional infrastructure like roads, railways, ports and airports also require huge investment. In those days Indian entrepreneur was not cash rich so government had to start creating big public sector enterprises like SAIL (Steel Authority of India Limited), ONGC (Oil & Natural Gas Commission).
4. **Private Sector:** Companies which are run and financed by private people comprise the private sector. Companies like Hero Honda, Tata are from private sectors.

3.4 SYSTEMS OF INDIAN ECONOMY

There are many types of economies around the world. Each has its own distinguishing characteristics, although they all share some basic features. Each economy functions based on a unique set of conditions and assumptions. Economic systems can be categorized into four main types: traditional economies, command economies, mixed economies, and market economies.

1. Traditional economic system

The traditional economic system is based on goods, services, and work, all of which follow certain established trends. It relies a lot on people, and there is very little division of labour or specialization. In essence, the traditional economy is very basic and the most ancient of the four types. Some parts of the world still function with a traditional economic system.

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It is commonly found in rural settings in second and third world nations, where economic activities are predominantly farming or other traditional income-generating activities. There are usually very few resources to share in communities with traditional economic systems. Either few resources occur naturally in the region or access to them is restricted in some way.

Thus, the traditional system, unlike the other three, lacks the potential to generate a surplus. Nevertheless, precisely because of its primitive nature, the traditional economic system is highly sustainable. In addition, due to its small output, there is very little wastage compared to the other three systems.

2. Command economic system

In a command system, there is a dominant centralized authority – usually the government – that controls a significant portion of the economic structure. Also known as a planned system, the command economic system is common in communist societies since production decisions are the preserve of the government. If an economy enjoys access to many resources, chances are that it may lean towards a command economic structure. In such a case, the government comes in and exercises control over the resources. Ideally, centralized control covers valuable resources such as gold or oil. The people regulate other less important sectors of the economy, such as agriculture.

In theory, the command system works very well as long as the central authority exercises control with the general population's best interests in mind. However, that rarely seems to be the case. Command economies are rigid compared to other systems. They react slowly to change because power is centralized. That makes them vulnerable to economic crises or emergencies, as they cannot quickly adjust to changing conditions.

3. Market economic system

Market economic systems are based on the concept of free markets. In other words, there is very little government interference. The government exercises little control over resources, and it does not interfere with important segments of the economy. Instead, regulation comes from the people and the relationship between supply and demand.

The market economic system is mostly theoretical. That is to say, a pure market system doesn't really exist. Why? Well, all economic systems are subject to some kind of interference from a central authority.

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For instance, most governments enact laws that regulate fair trade and monopolies. From a theoretical point of view, a market economy facilitates substantial growth. Arguably, growth is highest under a market economic system. A market economy's greatest downside is that it allows private entities to amass a lot of economic power, particularly those who own resources of great value. The distribution of resources is not equitable because those who succeed economically control most of them.

4. Mixed economic system

Mixed systems combine the characteristics of the market and command economic systems. For this reason, mixed systems are also known as dual systems. Sometimes the term is used to describe a market system under strict regulatory control.

Many countries in the developed western hemisphere follow a mixed system. Most industries are private, while the rest, composed primarily of public services, are under the control of the government.

Mixed systems are the norm globally. Supposedly, a mixed system combines the best features of market and command systems. However, practically speaking, mixed economies face the challenge of finding the right balance between free markets and government control. Governments tend to exert much more control than is necessary.

Economic systems are grouped into traditional, command, market, and mixed systems. Traditional systems focus on the basics of goods, services, and work, and they are influenced by traditions and beliefs. A centralized authority influences command systems, while a market system is under the control of forces of demand and supply. Lastly, mixed economies are a combination of command and market systems.

CHAPTER – 4

DATA ANALYSIS AND INTERPRETATION

4.1 Food products and hotels

4.2 Pharma products

4.3 Metals and minerals

4.4 Construction products

4.5 Life style and home

4.6 Beauty and personal care products

4.7 Consumer goods / consumable products

4.8 Kitchenware and appliance

4.9 Other products

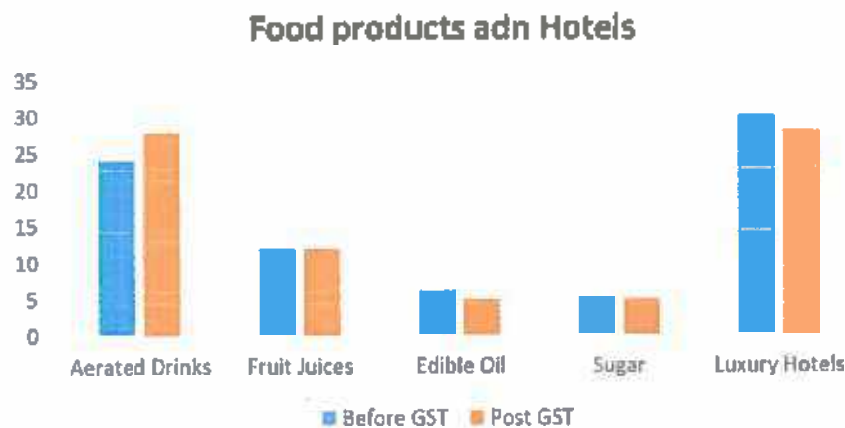
4.10 Services

DATA ANALYSIS AND INTERPRETATION

Table 4.1 Shows the rates of food products and hotels

Items	Pre GST (%)	Post GST (%)
Aerated Drinks	24	28
Fruit Juices	12	12
Edible Oil	6	5
Sugar	5	5
Luxury Hotels	30	28

Graph 4.1 Represents a graphical representation of Rates



Interpretation:

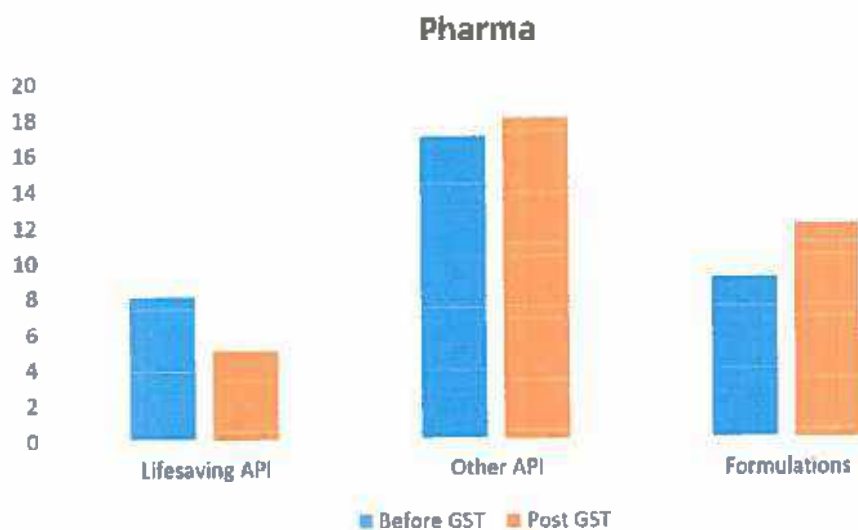
The above table shows the rates of the specified items, such as fruit juices and sugar, are identical to the present tax rates, as shown in the graph above. In comparison to the previous tax bracket, aerated drinks have climbed by 4%, while luxury hotels have fallen by 3%. The above picture shows, that the GST hasn't made a significant change in the prices of food and lodging. Because it is comparable to the current tax rates.

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Table 4.2 Shows the rates of Pharma Products

Items	Pre GST (%)	Post GST (%)
Lifesaving API	8	5
Other API	17	18
Formulations	9	12

Graph 4.2 Represents Rates of Pharma products



Interpretation:

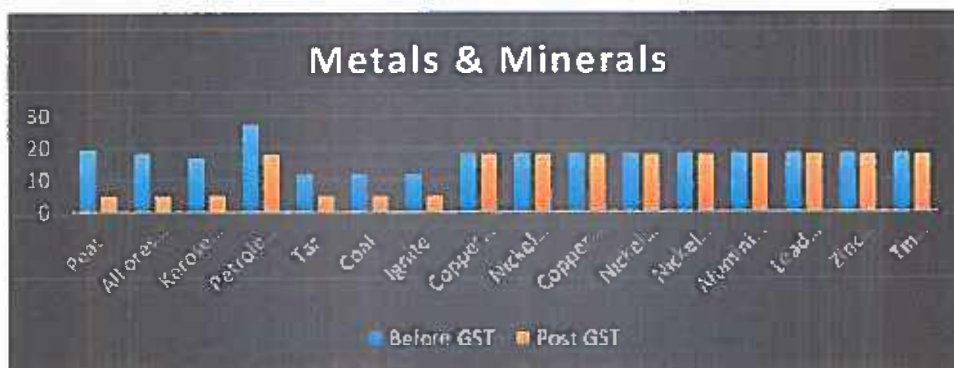
The above table shows the tax rates on pharmaceutical items are depicted in the graph above. The rates for lifesaving APIs have been decreased by 3%, the rates for other APIs have been improved by 1%, and the rates for formulation products have been boosted by 3%. GST, once again, has had no good influence on this circumstance. Because it is comparable to the current tax rates. Because it is comparable to the current tax rates.

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Table 4.3 Shows the rates of Metals and Minerals

Items	Pre GST (%)	Post GST (%)
Peat	19.5	5
All ores and concentrations	18.5	5
Kerosene PDS	17	5
Petroleum coke, petroleum bitumen	27.5	18
Tar	12	5
Coal	12	5
Ignite	12	5
Copper bars, rods, wires	18.5	18
Nickel bars, rods, wires	18.5	18
Copper Screw, nuts, bolts	18.5	18
Nickel Screw, nuts, bolts	18.5	18
Nickel Tubes, pipes, netting	18.5	18
Aluminium ingots, rods, wires	18.5	18
Lead plates, sheets, strips	18.5	18
Zinc Goods	18.5	18
Tin bars, rods	18.5	18

Graph 4.3 Represents rates of Metals and Minerals



Interpretation:

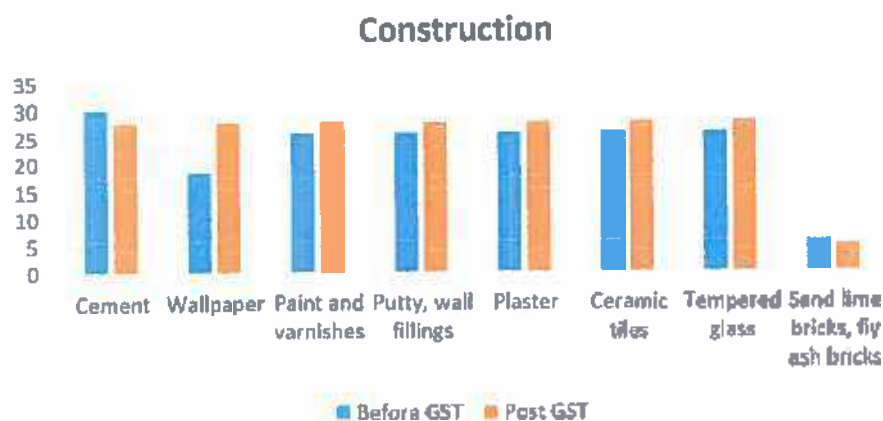
The above table shows the graphs and table above clearly demonstrate that the GST has had a favourable impact on metals and mineral goods. The average product rate has been cut by 0.5 percent, with certain items being dropped by as much as 7 percent, and other products being reduced by over 12 percent. In the metals and minerals industry, GST has had some beneficial effects. Because it is comparable to the current tax rates.

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Table 4.4 Shows the rates of Construction products

Items	Pre GST (%)	Post GST (%)
Cement	30	28
Wallpaper	18.5	28
Paint and varnishes	26	28
Putty, wall fillings	26	28
Plaster	26	28
Ceramic tiles	26	28
Tempered glass	26	28
Sand lime bricks, fly ash bricks	6	5

Graph 4.4 Represents the rates of Construction products.



Interpretation:

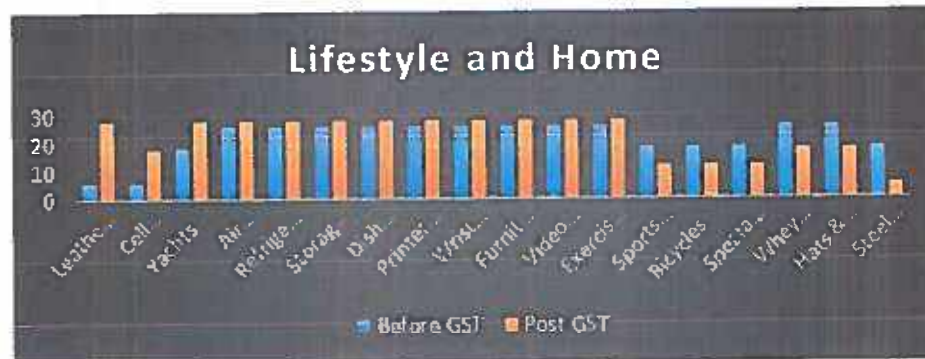
The above table shows Construction-related items have been negatively impacted by GST compared to the rates of the above-mentioned products, as seen in the table and graph. Aside from cement and sand-lime bricks, the exceptional product rates for fly ash bricks have been greatly enhanced. If we look at the average rise in product rates, it's about 2%. And there's cement and sand. Furthermore, cement, sand-lime bricks, and fly ash bricks have been lowered by 2% and 1%, respectively. Because it is comparable to the current tax rates.

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Table 4.5 Shows the rates of Lifestyle and Home

Items	Pre GST (%)	Post GST (%)
Leather bags	6	28
Cell phones	6	18
Yachts	18.5	28
Air conditioners	26	28
Refrigerators	26	28
Storage water heaters	26	28
Dishwashing machine	26	28
Printer, photocopier, fax machines	26	28
Wrist watches	26	28
Furnitures	26	28
Video game console	26	28
Exercise equipment's	26	28
Sports goods	18.5	12
Bicycles	18.5	12
Spectacle lens	18.5	12
Whey protein & fitness supplements	26	18
Hats & headgears	26	18
Steel utensils	18.5	5

Graph 4.5 Represents the rates of Lifestyle and Home



Interpretation:

The above table shows the rates of Lifestyle and Home are represented in the table and graph above, where we can see a clear picture of an increase in the rates of most Lifestyle and Home have been increased by an average of 2%, while the remaining products rate, which is listed last in the table, has been reduced by an average of 9%. Because it is comparable to the current tax rates.

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Table 4.6 Shows the rates of beauty and personal care products

Items	Pre GST (%)	Post GST (%)
Manicure, pedicure sets	26	28
Perfumes	26	28
Beauty or makeup preparations	26	28
Skincare items including sunscreen	26	28
Shampoos, hair creams, hair dyes	26	28
Wigs, eyelashes, false beards	26	28

Graph 4.6 represents the rates of beauty and personal care products



Interpretation:

The above table shows, GST has a negative influence on the items specified. Comparatively, the present beauty and personal care product tax rates have been raised by 2 percent. Beauty and personal care items have seen an increase in price as a result of the GST. Because it is comparable to the current tax rate.

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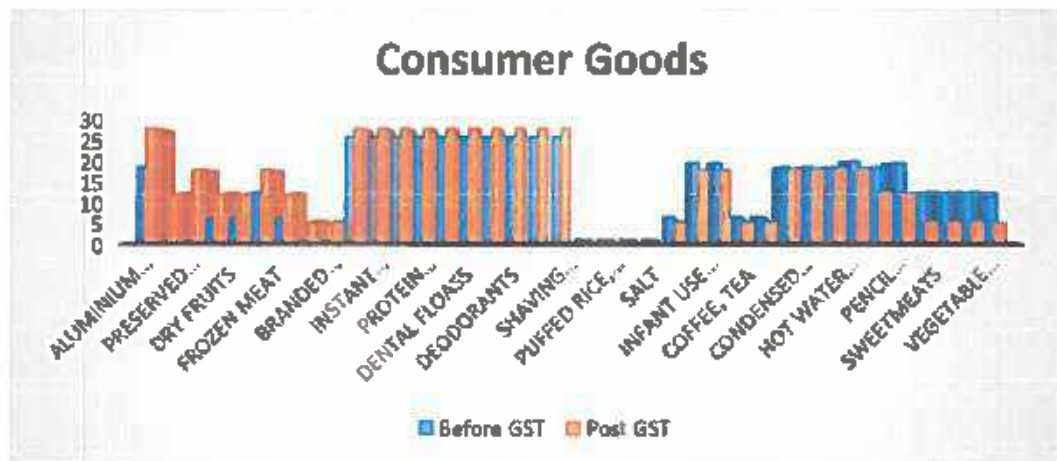
Table 4.7 Shows rates of consumer goods/ consumable goods

Items	Pre GST (%)	Post GST (%)
Aluminium Foil	18.5	28
Agarbati	0	12
Preserved vegetables	0	18
Butter, ghee, cheese	6	12
Dry fruits	6	12
Jams, jellies	12	18
Frozen Meat	6	12
Branded paneer	0	5
Branded cereals	0	5
Cocoa butter, oils, chocolates	26	28
Instant aroma coffee	26	28
Coffee concentrates, custard powder	26	28
Protein concentrates, sugar syrups	26	28
Razors	26	28
Dental Floss	26	28
Toothpaste	26	28
Deodorants	26	28
Aftershave	26	28
Shaving Cream	26	28
Cereals	0	0
Puffed rice, papad, bread	0	Exempt
Aquatic / poultry/cattle feed	0	Exempt
Salt	0	Exempt
Soyabean, groundnut, sunflower	6	5
Infant use preparations	19.5	18
Pasta, Corn flakes, cakes	19.5	18

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Coffee, Tea	6	5
Frozen vegetables	6	5
Condensed Milk	18.5	18
Toilet paper	18.5	18
Hot Water bottles	18.5	18
Petroleum jelly, paraffin wax	20	18
Pencil sharpener, knives	18.5	12
Meats & fish preparations	19.5	12
Sweetmeats	12	5
Bakery mixes, doughs, pizza bread	12	5
Vegetable fats & oils	12	5
tea concentrates, sauces, soups	12	5

Graph 4.7 Represents presents the rates pf consumer goods/ consumable goods



Interpretation:

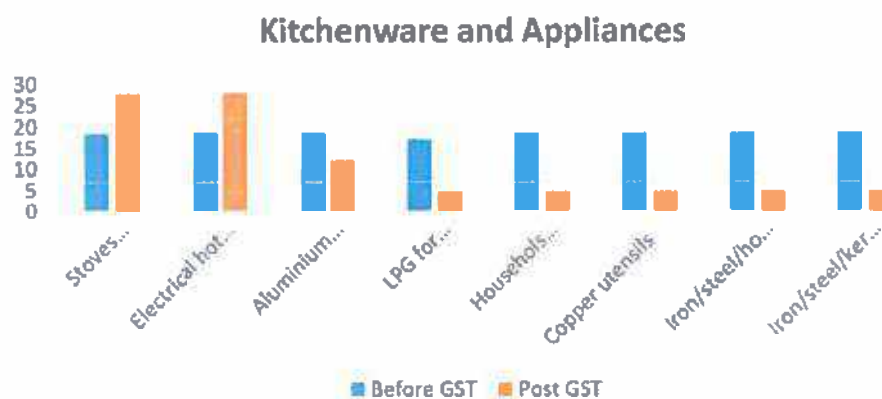
The above table shows Half of the products included in the table have had their tax rates raised by an average of 2%, which is rather considerable. According to the table and graph, the tax rates on the products specified later have been reduced by an average of 10%. Some goods are exempted from tax brackets in the middle of the table. When it comes to consumer goods, the GST has had an uneven impact on tax rates. Because it is comparable to the current tax rates.

A Study on Goods and Service Tax and It's Impact on Indian Economy

Table 4.8 Shows the tax rates of kitchenware and appliances

Items	Pre GST (%)	Post GST (%)
Stoves (except kerosene, LPG)	18.5	28
Electrical hot plates	18.5	28
Aluminium utensils	18.5	12
LPG for domestic supply	17	5
Households copper articles	18.5	5
Copper utensils	18.5	5
Iron/steel/household articles	18.5	5
Iron/steel/kerosene stoves	18.5	5

Graph 4.8 Represents tax rates of kitchenware and appliances



Interpretation:

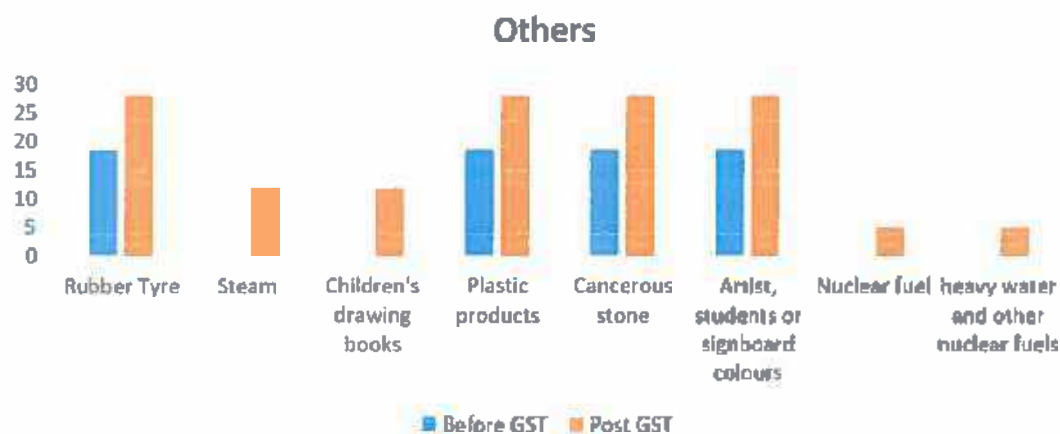
The above table shows the GST tax rate bracket on stoves (excluding kerosene and LPG) and electrical hot plates has been raised by approximately 10%. Except for the aforementioned items, the tax rates on the remaining items have been decreased by an average of 13%, resulting in lower prices for kitchenware and appliances when compared to the previous tax band. GST has had a beneficial influence under this product's heading. Because it is comparable to the current tax rates.

A Study on Goods and Service Tax and It's Impact on Indian Economy

Table 4.9 Shows the tax rates of the other products none than the above-mentioned products

Items	Pre GST (%)	Post GST (%)
Rubber Tyre	18.5	28
Steam	0	12
Children's drawing books	0	12
Plastic products	18.5	28
Cancerous stone	18.5	28
Artist, students, or signboard colors	18.5	28
Nuclear fuel	0	5
heavy water and other nuclear fuels	0	5

Graph 4.9 Represents the rates of other products mentioned in the list



Interpretation:

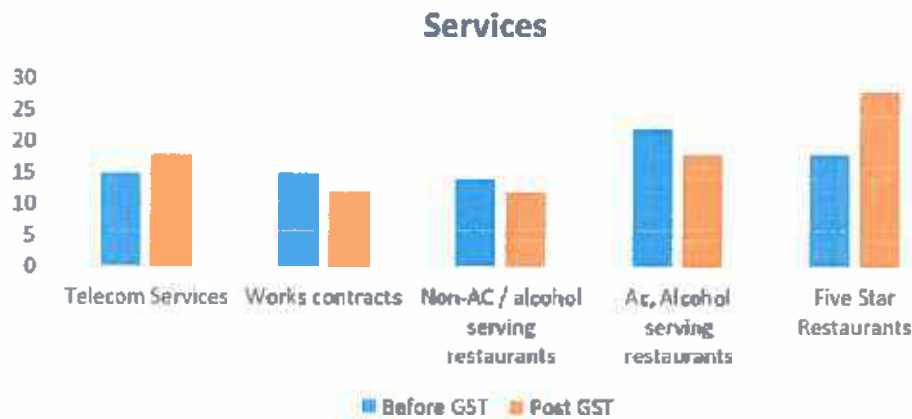
The above table shows the tax rates on the items listed in the table have been raised by an average of 10%. The GST has had a detrimental influence on this product sector, causing the specified items to be more expensive than before. Because it is comparable to the current tax rates.

A Study on Goods and Service Tax and It's Impact on Indian Economy

Table 4.10 Shows the tax rates of Services

Items	Pre GST (%)	Post GST (%)
Telecom Services	15	18
Works contracts	15	12
Non-AC / alcohol-serving restaurants	14	12
Ac, Alcohol serving restaurants	22	18
Five Star Restaurants	18	28

Graph 4.10 Represents the tax rates of services



Interpretation:

The above table shows, based on the statistics above, the GST has had some good and some negative effects on the services indicated. The tax rates on telecommunication services and five-star restaurants have been raised by an average of 8%. The remainder of the services tax rates has been decreased by an average of 2%. GST has been in the natural gear in this case. Because it is comparable to the current tax rates.

CHAPTER – 5

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 Findings

5.2 Suggestions

5.3 Conclusion

A Study on Goods and Service Tax and It's Impact on Indian Economy

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

- From the above study, we found that the tax rates of food products and hotels are almost the same, except for some minor fluctuations.
- Under the Pharma products, there is an upward change in the tax rates of concerned products.
- The goods and services tax (GST) has helped metals and minerals. Mineral and metals tax rates are nearly identical to those already in place, with minor exceptions.
- According to the results of the prior study, the tax rates on construction-related commodities have skyrocketed since the implementation of the goods and services tax.
- The home and lifestyle commodity tax rates were partially increased and partially lowered, but the bulk of adjustments were negative, resulting in higher product costs than previously.
- The tax rate on beauty and personal care goods has been significantly increased by 2% for the whole list of products indicated above.
- The study found that half of the tax rates of consumer goods/consumable items have been raised, while the other half has been reduced. In addition, some taxable items are exempt from the tax rate.
- The tax rates on kitchen and appliance items have been lowered, with just 20% of products increasing over the aforementioned list.
- The tax rates on the items mentioned in the other products section have been raised in comparison to prior tax rates.

A Study on Goods and Service Tax and It's Impact on Indian Economy

- The Goods and Service Tax has had a small impact on services; not all, but certain services tax rates have been raised by an average of 8%, while others have been reduced by an average of 2%.

5.2 SUGGESTIONS

The study looked at the impact of the Goods and Services Tax on the Indian economy. As a researcher, I would want to provide some ideas for improving the Indian economy with the aid of GST based on information gathered from secondary sources.

Rates should be rationalized and decreased to make India more competitive and to promote compliance and economic progress.

- The maximum rate should be kept around 18%, with only a few products falling into the 28 percent slab. Soaps, cremes, cinema tickets, and electrical products should not be taxed at 28 percent.
- All agricultural-related goods and services should be rated at zero or exempt.
- Daily-necessary goods and services should be taxed at a lower rate since GST is more helpful to the country's ordinary people.
- As a researcher, I believe that luxury products and services should be included in the highest tax bracket.
- The petrol and petroleum products should bring under the GST.
- The tobacco and alcoholic products should be brought under GST umbrella and taxed at higher rates.

A Study on Goods and Service Tax and It's Impact on Indian Economy

5.3 CONCLUSION

Study was done to determine how GST will affect India's economic growth. Almost all indirect taxes were merged under a single GST tax umbrella, bringing the country closer together. GST would make tax administration more transparent and devoid of corruption, addressing existing flaws in the indirect tax system. GST is anticipated to strengthen each of these stakeholders' responsibilities in India significantly. It has been discovered, based on the analysis carried out as part of the study objective, that Indian economy benefits greatly from the introduction of GST.

GST generates more money for the economy since products and services are taxed at different rates.

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CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON CUSTOMER SATISFACTION"
TOWARDS BHARTI AIRTEL AT CHIKODI**

Submitted to

RANI CHANNAMMA UNIVERSITY, BELAGAVI



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

Miss. Sumayya Bagwan

M.COM-IV SEMESTER

REGISTER NO: MC191623

UNDER THE GUIDANCE OF

SHRI. S. M. BHOSAGE

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Ref. No.

Date : 09/09/2021



CERTIFICATE

This is to certify that **Miss Sumayya Bagwan** bonafied Student of **Meom IV Semester** Student Of **K.L.E Society's Basavaprabhu Kore Arts Science & Commerce College Chikodi** undergone the internship project in our Organization from **21/07/2021 to 25/8/2021**. She has completed the project on **"A study on Customer Satisfaction Towards Bharti Airtel with special reference to Vaishali Enterprises Chikodi"**.

We found him sincere during his project tenure.

Date: 09/09/2021

Mr.Surendra Khot

(Territory Sales Manager)

For Vaishali Enterprises

DECLARATION

I declare that the project report entitled "A Study on Customer Satisfaction Towards Bharti Airtel At Chikodi" is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. S. M. Bhosage, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 17/5/21
Place: Chikodi


Miss. Sumayya Bagwan
Register No: MC191623

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

I sincerely express my deep sense of gratitude and appreciation to Internal Guide **Shri. S. M. Bhosage**, for his careful and valuable guidance, never ending patience and constant encouragement throughout the project.

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At the outset, I would like to thank all the teaching faculty of PG Department of Commerce and Management for their valuable suggestions during project work.

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Finally I owe my deep sense of gratitude to my parents, friends and relatives for their constant encouragement and support.

Miss. Sumayya Bagwan

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CHAPTER 1

INTRODUCTION AND RESEARCH DESIGN

- 1.1 INTRODUCTION**
- 1.2 REVIEW OF LITERATURE**
- 1.3 STATEMENT OF THE PROBLEM**
- 1.4 SCOPE OF THE STUDY**
- 1.5 OBJECTIVE OF THE STUDY**
- 1.6 OBJECTIVE OF THE STUDY**
- 1.7 LIMITATIONS OF THE STUDY**
- 1.8 CHAPTER SCHEME**

CHAPTER 1

INTRUDUTION AND RESEARCH DESIGN

1.1 INTRODUCTION

Now a day, no one is living without mobile phone. Many number of network services are available in this world. Especially, the study is focused on Bharti Airtel network which is has been founded in 7 July 1995. It is an Indian global telecommunications services company based in new Delhi, India. It operates in 18 countries across South Asia and Africa, and also in the Channel Islands. Airtel provides GSM, 3G,4G LTE, 4G+ mobile services, fixed line broadband and voice services depending upon country operation. Airtel had also rolled out its VOLTE technology across all Indian telecom circles. It is the second largest mobile network operator in India and the second largest mobile network operator in the world with over 457.96 million (45.796 crore) subscribers. Airtel was named India's 2nd most valuable brand in the first ever Brands ranking by Millward Brown and WPP plc. Bharti Airtel has appointed Sachin Tendulkar as their Brand Ambassador.

Bharti Airtel has cover its networks over a 18 countries. It has 160000 base stations to provide better services. The company has a good customer base and it covers over 23000 cities and towns and over 500000 villages of India. The Bharti Airtel has Total Assets of Rs. 2751975 million (US\$39 Billion)(2019), operating income has Rs.17318 million (240 US\$ million) and it has 14818 number of employees in their company (2019). Bharti Airtel has (4th generation) high speed internet connectivity, rich communication services and various digital services on pan India basis in key domains such as education , healthcare, security, financial services, government citizen interfaces and entertainment.

1.2 REVIEW OF LITERATURE

Buyaneswari and R. PrakashBabu(2013)

In their article entitled, "Study on Customer Satisfaction towards Cellular Service with Special Reference to Airtel at Mannargudi Town" have found that telecommunications companies also talk of their customers being their most important assets like companies in other business domains. Airtel cellular service in Mannargudi

A Study On Customer Satisfaction Towards Bharti Airtel Chikodi

Town the subscription by the people is satisfactory and is steadily increasing. The company has wider scope in the market of cellular service by extending its value added services, according to preference of the respondents.

Debarun Chakraborty (2013),

In his article determined the customer satisfaction & expectation towards a telecommunication company in West Midnapore which is a district of West Bengal. A descriptive study was conducted to achieve the objectives. In total 250 respondents filled a wellstructured questionnaire having a list of statements pertaining to products, services & facilities provided by the service provider. Further results show that there is a significant relation between the brand name and the preference of customers. Hence, it has been recommended that telecom companies should focus on connectivity, call rate, coverage and network quality.

P.Chandiran (2005)

In his article entitled, "Product Life Cycle and Promotion Strategies in Cellular Telecom Industry" brings to light the various promotion strategies followed by the cell phone services during the growth stage. Brand building, emotional bondage and mass media are the effective advertising strategies adopted as promotional tools. As sales promotion strategies, the schemes, tariff plans, event sponsoring, special package for the corporate world, and co-promotion should be given importance during the growth stage of the cell phone services. In the personal selling process, the suitable strategies to be followed are focused personal selling and corporate accounts strategy.

J. Pakola, M. Pietila and R.Svento (2003)

In their article titled, "An Investigation of Customer Behaviour in Mobile Phone Markets in Finland" have indicated that price and properties are the major influential factors affecting the purchase of a new mobile phone, whereas audibility, price and friends are regarded as the most important in choice of the mobile phone operators. He has stated that customers with prior experience about a product can be able predict their choices relatively well but tend to overestimate the importance of a monthly access fee, mobile-to-mobile rates and connection fees.

Vidha Sanchar Nigam Limited (VSNL) 16th Annual Report (2002)

India like many other countries has adopted a gradual approach to telecom sector reform through selective privatization and managed competition in different segments of the telecom sector. India introduced private competition in value-added services in 1992 followed by opening up of cellular and basic services for local area to competition. Competition was also introduced in National Long Distance (NLD) and International Long Distance (ILD) at the start of the current decade.

According to Willena's and Stern (2001)

Information is regarded today as a fundamental factor of production, alongside capital and labour. The information economy accounted for one-third to one-half of gross domestic product (GDP) and of employment in Organization for Economic Cooperation and Development (OECD) countries in the 1980s and is expected to reach 60 percent for the European Community in the year 2000. Information also accounts for a substantial proportion of GDP in the newly industrialized economies and the modern sectors of developing countries.

National Telecom Policy (1999)

National Telecom Policy (1999) projected a target 75 million telephone lines by the year 2005 and 175 million telephone lines by 2010 has been set. Indian telecom sector has already achieved 100 million lines. With over 100 million telephone connections and an annual turnover of Rs. 61,000 crores, our present tele density is around 9.1%. The growth of Indian telecom network has been over 30% consistently during last 5 years.

Muller (1990)

Muller (1990) in a research focuses that the success of the mobile commerce can be attributed to the personal nature of wireless devices. Adding to this are its unique features of voice and data transmission and distinct features like localization, feasibility and convenience. The sustained growth of the mobile commerce around the world has been more because of the transfer of technology according to the needs of local geography.

1.3 STATEMENT OF THE PROBLEM

The project report entitled "A Study On Customer Satisfaction Towards Bharti Airtel At Chikodi" is carried out with an objective to determine the preferences and satisfaction. The primary objective of this study is to find out the consumer preferences and satisfaction towards Airtel services. For distribution of questionnaire to the consumer convenience sampling method was used to select the consumer and survey was taken among those select users. After collecting the data from the respondents it was analyzing using simple percentage method for analyzing the collected data.

1.4 SCOPE OF THE STUDY

This study covers customer about Bharti Airtel in the area of Chikodi city. The study makes effort to ascertain the satisfaction level of customer of Bharti Airtel. Through survey so that company would be able to come up to know the expectation level of customer. The company can come up to the expectation only by finding out the problem that customer are facing during their purchase of Airtel products.

The subject has been taken for the research as it plays key role in the success of telecom sector. No company can think of selling their products without having satisfied customer. No company can survive in long run without coming up to the satisfaction level of customer. In short it is the level of satisfaction that is link between end user and company. As long as the company is able to satisfy its customer, customer would remain in the bracket of loyal customer. Hence it is very essential to understand the customer satisfaction and to measure the satisfaction level time to time as there is always scope of improvement. The research will also be adopted in analyzing the overall market position of the company and measure which should be adopted by the Bharti Airtel to increase their market share in the region of Chikodi.

1.5 OBJECTIVES OF THE STUDY

- To study the importance and development of the telecommunication industry in India
- To study about the company profile of Bharti Airtel
- To determine customer satisfaction towards Bharati Airtel
- To Suggest measures to Bharati Airtel Company to increase customer satisfaction.

1.6 RESEARCH METHODOLOGY

DATA COLLECTION

Research was conducted using the survey method. The research instrument was a structured questionnaire and responses were collected with the help of this questionnaire.

INTRODUCTION "Marketing research means the systematic gathering, recording, analyzing of data about problem relating to the marketing of goods and services".

METHODOLOGY ADOPTED

Research methodology is a way to systematically solve the research problem . here we study the various steps generally by the researcher in studying the research method to continue a part of research methodology.

In this research both primary and secondary data taken into consideration. The project would be executed through primary data i.e. Questionnaires, discussion with various age group of students and employees and internet data's.

PRIMARY DATA

Types of Research	Descriptive Research Design
Source of data	Primary data and secondary data
Primary data	Questionnaires
Secondary data	Websites
Data collection method	Survey method (Questionnaires)
Survey instruments	Questionnaires (open ended)
Method of communication	Collect the data through survey of the employees and the students in the organization
Sample size	50 respondents
Sample unit	Here the researcher has randomly selected the respondents of the Chikodi area.
Sampling design	Convenient sampling (sample collection)

This is those, which are collected as fresh and for the first time and thus happen to be original in character. There are many ways of data collection of primary data like questionnaires, observation method , interview method, consumer panel etc.

SECONDARY DATA

These are those data which are not collected a fresh and are used earlier also and thus they cannot be considered as original in character. These are many ways of data collected of secondary data like publication of the websites, journals, report prepared by researcher etc.

1.7 LIMITATIONS OF THE STUDY

- 1) The first problem I faced is in getting the co operation of the customers. Many of the respondents I approached did not agree to the need and utility of the project and hence did not agree to provide me with information.
- 2) The behavior of the customer is unpredictable which may result in the lacking of accuracy in the data.
- 3) Level of respondents is low because fear and illiteracy of respondents.

1.8 Chapter Scheme

Chapter 1 Introduction and Research Design

The first chapter gives details about Introduction of the study, Statement of the problem, Need of the study, Objectives of the study, Scope of the study, Research methodology and limitations of the study

Chapter 2 Conceptual Framework

It gives detailed information about Airtel Company and Customer Satisfaction in India.

Chapter 3 Company Profile

It gives the profile of the Company where the project is conducted. It also explains about future plan of the Company.

Chapter 4 Data Analysis and Interpretation

This chapter gives details regarding the analysis and interpretation of data. It also consists of the tables, graphs, and its interpretation.

Chapter 5 Findings, Suggestions and conclusion

This chapters includes findings, suggestions based on the findings and conclusion.

CHAPTER 2

CONCEPTUAL FRAME WORK

2.1 INTRODUCTION

2.2 CUSTOMER SATISFACTION

2.3 CUSTOMER EXPECTATION

2.4 CUSTOMER PERCEPTION

2.5 CUSTOMER LOYALTY

2.6 BHARTI AIRTEL HIGHEST CUSTOMER SATISFACTION INDEX 2019-20

CHAPTER 2

CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

In today's competitive environment delivering high quality service is the key for a sustainable competitive advantage, customer satisfaction does have a positive effect on an organization's profitability. Satisfied customers form the foundation of any successful business because customer satisfaction leads to repeat purchases, brand loyalty and positive word of mouth. There are numerous studies that have looked at the impact of customer satisfaction on repeat purchases, loyalty and retention. Many researchers point out the fact that satisfied customers share their experiences with other people to the order of perhaps five or six people. On the contrary, dissatisfied customers are more likely to tell another ten people of their experiences with product or services.

Customer satisfaction is the outcome felt by those that have experienced a company's performance that have fulfilled their expectations. Many researchers and academicians highlight the importance of customer satisfaction. Many researchers see that customer satisfaction has a positive effect on organization's profitability. Much empirical evidence also shows the positive connection between customer satisfaction, loyalty and retention. Now days all companies are realizing the significance of delivering and managing service quality, which leads to customers satisfaction. Service quality that is delivered can meet or exceed customer's expectations are mainly influenced by customer's prior expectations.

According to Hansemark and Albinson (2004) "satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some needs, goals or desires". Customer loyalty on the other hand refers to a deeply held commitment to re-buy a preferred product or service in the future despite situational influences and marketing efforts having the potential to cause switching behavior (Oliver,1997).

In order to fulfill the research on measuring and evaluating customer satisfaction towards customer service provided at the three mobile telecommunication companies, ACSI for measuring the overall satisfaction was chosen. These measurement models are used because their use is appropriate and corresponds to the research problem. ACSI is used to measure overall customer satisfaction with service delivery because it combines responses to three questions that ask about same idea , i.e., overall satisfaction. It is also relatively easy to apply as the weight of each response can be determined by the researcher irrespective of which industrial context it is used.

2.2 CUSTOMER SATISFACTION

Customer satisfaction has been a central concept in marketing literature and is an important goal of all business activities. Today, companies face their toughest competition, because they move from a product and sales philosophy to a marketing philosophy, which gives a company a better chance of out performing competition (Kotler,2000). Overall customer satisfaction translates to more profits for companies and market share increase. The importance of customers has been highlighted by many researchers and academicians. The principal concern of marketing is to connect with customer by building a strong customer relationship in order to meet their expectations. Therefore, managers who see customer as the only way of profit, they consider the traditional chart in figure 2 a pyramid with the president at the top, management in the middle, and front line people and customers at the bottom.

Figure 2 Traditional Organizational Chart



Source : Kotler et al. (2000)

Companies that pretend to be successful invert the chart. At the top are customers, next according to the importance are front -line people who meet, serve, and satisfy customers, under them are middle managers, whose job is to support the front line people so they can serve customers well, and at the base is top management, whose job is to hire and support good middle managers. For customer centered companies, customer satisfaction is both a goal and a marketing tool. Therefore, companies need to be concerned about the customer satisfaction level, because of the internet technology which enables the quick spread of bad word of mouth marketing, as well as good of word of mouth to the rest of the world.

Researchers have tried to define customer satisfaction and in general they have defined it as transaction process.

Oliver(1981) defined satisfaction “ as a summary of psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the customers prior feelings about the consumption experience”.

Kotler (2000) defined satisfaction as : “ A person’s feelings of pleasure or disappointment resulting from comparing a product perceived performance (or outcome) in relation to his or her expectations”.

A Study On Customer Satisfaction Towards Bharti Airtel Chikodi

According to Hansemark and Albinson (2004) " Satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some need, goal or desire".

Further more, researchers differentiate between attitude and satisfaction. So an attitude is a perceived service quality whereas, satisfaction is related to a specific transaction.

Oliver (1981) summarizes the transaction specific nature of satisfaction, and differentiates it from attitude, as follows; Attitude is the customer's relatively enduring affective orientation for a product, store, or process (e.g., customer services) while satisfaction is the emotional reaction following a disconfirmation experience which acts on the base attitude level and is consumption specific.

Parasuraman et al. (1988) distinguish service quality and satisfaction : " perceived service quality is a global judgment, or attitude, relating to the superiority of the service, whereas satisfaction is related to a specific transaction". Customer satisfaction as an attitude is like a judgment following a purchase act or based on series of consumer product interactions (Yi,1989).

Customer satisfaction has a positive effect on an organization's profitability. The more customers are satisfied with products or services offered, the more are chances for any successful business as customer satisfaction leads to repeat purchase, brand, loyalty, positive word of mouth marketing. Customer satisfaction leads to repeat purchases, loyalty and to customer retention (Zairi, 2000).

Satisfied customers are more likely to repeat buying products or services. They will also tend to say good things and to recommend the product or service to others. On the other hand dissatisfied customers respond differently. Dissatisfied customers may try to reduce the dissonance by abandoning or returning the product, or they may try to reduce the dissonance by seeking information that might confirm its high value (Kotler, 2000)

Companies need to develop strategies of how to handle dissatisfied customers. Business cannot afford under any condition to lose customers, because the cost of replacing the lost customer with a new customer is bigger. Therefore, companies must find ways of winning back the unsatisfied customers by designing special programs for service recovery. Companies should handle customer with care and not seeing them as a time consuming.

2.3 CUSTOMER EXPECTATIONS

Expectations play an important role in the satisfaction formation. The extent to which a product or service fulfills a customer's need and desire may play an important role in forming feeling of satisfaction because of the impact of confirmation or disconfirmation that have on satisfaction.

Consumers expect to be delivered quality products and services; therefore companies try to offer quality products and services. The term expectations really matters to companies because they want to know what customers' expectations are. The term "expectations" has different uses, in the satisfaction literature, it is viewed as a prediction made by a consumer about what is likely to happen during an exchange or transaction. According to Oliver (1981)" expectations' are consumer-defined probabilities of the occurrence of positive and negative events if the consumer engages in some behavior "

In the contrast, in the service quality literature it is defined as desires and wants, what a service provides should offer rather than would offer. Customers form their expectations from past experience, friends, advice and marketers and competitors information and promises (Kotler,2000). Therefore, perceived service quality is viewed as the difference between customers perceptions and expectations for the service provided. Organizations in order to keep expectations from rising, they have to perform services properly from the first time (parasuraman et al. 1988). Thus, customer expectations for the service are likely to rise when the service is not performed as promised. Expectation serve as reference points in customer's

assessment of performance (Cronin & Taylor, 1992). Thus, retailers can increase customer satisfaction by decreasing customer expectations.

2.4 CUSTOMER PERCEPTION

Perception is an opinion about something viewed and assessed and it varies from customers to customers, as every customer has different beliefs towards certain services and products that play an important role in determining customer satisfaction. Customer satisfaction is determined by the customers perceptions and expectations of the quality of the products and services. In many cases, customer perceptions is subjective, but it provides some useful insights for organization to develop their marketing strategies. Providing high level of quality service has become the selling point to attract customers attention and is the most important driver that leads to satisfaction. Therefore, customer perception and customer satisfaction are very closely linked together, because if the perceived service is close to customers expectations it leads to satisfaction. Satisfied customers provide recommendations; maintain loyalty towards the company and customers in turn are more likely to pay price premiums.

2.5 CUSTOMER LOYALTY.

Customer loyalty is a crucial factor in companies growth and their performance. Loyalty is linked with the repeat business. Thus, a customer is loyal when he is frequently repurchasing a product or services from a particular provider. Oliver defines loyalty as "A deeply held commitment to re buy or re patronize a preferred product or service in the future despite situational influences and marketing efforts having the potential to cause switching behavior".

The perceived value from the product and the service affects customer judgment about his / her satisfaction or loyalty with the product or the services. The significance of customer loyalty is that it is closely related to the company's continued survival and to strong future growth (Fornell, 1992). Customers that are very satisfied with a company are very likely to remain with that company that leads to future revenue for the company. It is now a widely accepted business theory that customer retention optimizes profitability; the cost of acquiring new customers is higher than the cost of

retaining existing customer. Therefore, the aim of service company is to satisfy their customers in order to stimulate them to retain and to repeat their service purchase.

2.6 BHARTI AIRTEL HIGHEST CUSTOMER SATISFACTION INDEX 2019-20

Bharti Airtel NSE -1.27 % is likely to gain 30 million mobile users in FY21, Fitch Ratings said, adding that it has a stable outlook on the telco following its tariff increases and equity injection.

“Bharti will add at least 30 million subscribers in FY21 — mostly from Vodafone Idea — which is likely to add about \$450 million in annual Ebitda, assuming an incremental Ebitda margin of 60%,” Fitch said in a report Thursday.

Airtel had over 283 million mobile subscribers in India at the end of December. Vodafone Idea’s subscriber base has eroded to about 300 million from over 420 million when Vodafone India and Idea Cellular NSE -1.56 % merged in August 2018. Fitch said its stable outlook for Bharti Airtel reflects its view that the equity injections and tariff increases are more than sufficient to offset the rise in debt to pay regulatory dues based on adjusted gross revenue (AGR) of up to \$4.9 billion (₹35 000crore). The telco raised \$7.6 billion in equity through a \$3.5 billion rights issue, sale of shares in its African subsidiary of \$1.5 billion, an IPO of Airtel Africa for \$680 million and another \$2 billion through an equity injection in January 2020, the rating company said.

Total remuneration of Bharti Airtel NSE -1.99 % chairman Sunil Bharti Mittal remained almost flat at about Rs 30.19 crore in 2017-18 compared to the previous year as the company reported the lowest annual profit in a decade at Rs 1,099 crore for the year.

However, the remuneration of Bharti Airtel Managing Director and CEO Gopal Vittal increased by around 37 per cent to Rs 16.97 crore on account of increase in salary and stocks option, according to the company's report.

Mittal's total remuneration from Airtel was Rs 30.14 crore and Vittal was paid Rs 12.4 crore in 2016-17. Bharti Airtel granted average increase of 7.1 per cent in the remuneration of employees excluding key managerial (KMP) during 2017-18 and the average increase in the remuneration of KMPs was 4.84 per cent.

During the year 2017-18, Airtel permanent workforce reduced by around 800 to 8,453 from 9,279 in 2016-17.

"The telecom industry faced an extraordinarily turbulent year in India through unprecedented disruption," Mittal said in the report.

He said that extreme pricing pressure accelerated market exits and industry consolidation, which evolved towards a 3 plus 1 structure which is three private telecom operators and one public sector firm.

"Even though the transition is turning out to be stressful entailing massive dislocation in the short run, the new industry structure will ultimately prove beneficial for the sector," Mittal said.

While total customer base of the company continued to rise every year to reach the highest ever level of 413 million at the end of 2017-18, the consolidated revenue of the company was the lowest in last four fiscal years at Rs 83,688 crore at the end of March 2018.

Mittal said strategy of Airtel is to grow share of high average revenue per user (ARPU) customers and improving customer stickiness by offering new products.

"Aggressive network rollout continued to be an overriding priority for us as a record 110,000 mobile sites were rolled out during the year to strengthen our 4G footprint," he said. He said it was gratifying to see the way Airtel held itself as pressure mounted on the top line of mobility business.

Vittal said to grow share of high ARPU customers, Airtel focused on grabbing increased share of 4G devices through alliances and simplified pricing, driving data

A Study On Customer Satisfaction Towards Bharti Airtel Chikodi

consumption through alliances and simplified pricing, driving data consumption through intense focus on SIM consolidation led by bundled pricing plans and increasing postpaid connection adoption.

CHAPTER 3

COMPANY PROFILE

- 3.1 Historical background**
- 3.2 Vision and Mission**
- 3.3 Organizational structure**
- 3.4 Product/ service profile:**
- 3.5 Area of operations**
- 3.6 Current status**
- 3.7 Future plan**
- 3.8 Awards**
- 3.9 SWOT analysis**

CHAPTER 3

COMPANY PROFILE

Name	Bharti Airtel Limited
Business Description	<p>Bharti Airtel limited is a leading global telecommunication company with operations in 20 countries across Asia and Africa. Headquartered in new Delhi, India, the company ranks amongst the top 4 mobile service providers globally in terms of subscribers. In India, the company's product offerings include 2G, 3G, and 4G wireless services, mobile commerce, fixed line services high speed DSL broadband, DTH, enterprise services including national and international long distance services to carries. In the rest of the geographies, it offers 2G, 3G and 4G wireless services and mobile commerce. Bharthiairtel had nearly 351 million customers across its operations at the end of Dec 2017</p>
Established	July 07, 1995, as a public limited company
ISIN	ISIN397D01024
Proportionate revenue	Rs. 955.9 billion ended Dec 2017 audited As per IFRS
Operating income	RS. 354 billion (2017)
Net income	Rs. 42.4 billion (2017)
Total assets	Rs. 2,327 billion (2017)
Total equity	Rs. 743 billion (2017)
Total equity	25,400 (2016)

Total employees	Bombay stock exchange limited
	National stock exchange of India limited
Listing	NSE - BHARTIAIRTEL
	BSE - 532454
Stock exchange symbol	India: 243,289,000 GSM; 3,597,000-Tele media customers and 11,106,000-Digital TV services
Market capitalization	
customer base	Bharti Crescent, 1 Nelson Mandela Road, Vasantkunj, New Delhi- 110 070
Registered office	

3.1 Historical background

Bharti Airtel Limited is a leading global telecommunications company with operations in 16 countries across Asia and Africa. Headquartered in New Delhi, India, the company ranks amongst the top 3 mobile service providers globally in terms of subscribers. In India, the company's product offerings include 2G, 3G and 4G wireless services, mobile commerce, fixed line services, high speed home broadband, DTH, enterprise services including national & international long distance services to carriers. In the rest of the geographies, it offers 2G, 3G, 4G wireless services and mobile commerce. Bharti Airtel had over 413 million customers across its operations at the end of March 2018

In 1984, Sunil Mittal started assembling push-button phones in India, which he earlier used to import from a Taiwan company, Kingtel, replacing the old fashioned, bulky rotary phones that were in use in the country then. Bharti Telecom Limited (BTL) was incorporated and entered into a technical tie up with Siemens AG of Germany for manufacture of electronic push button phones. By the early 1990s, Bharti was making fax machines, cordless phones and other telecom gear. He named his first push-button phones as 'Mitbrau'.

A Study On Customer Satisfaction Towards Bharti Airtel Chikodi

In 1992, he successfully bid for one of the four mobile phone network licences auctioned in India. One of the conditions for the Delhi cellular license was that the bidder have some experience as a telecom operator. So, Mittal clinched a deal with the French telecom group Vivendi. He was one of the first Indian entrepreneurs to identify the mobile telecom business as a major growth area. His plans were finally approved by the Government in 1994 and he launched services in Delhi in 1995, when Bharti Cellular Limited (BCL) was formed to offer cellular services under the brand name Airtel. Within a few years Bharti became the first telecom company to cross the 2 million mobile subscriber mark. Bharti also brought down the STD/ISD cellular rates in India under brand name 'Indiaone'.

1999, Bharti Enterprises acquired control of JT Holdings, and extended cellular operations to Karnataka and Andhra Pradesh. In 2000, Bharti acquired control of Sky cell Communications, in Chennai. In 2001, the company acquired control of Spice Cell in Calcutta. Bharti Enterprises went public in 2002, and the company was listed on Bombay Stock Exchange and National Stock Exchange of India. In 2003, the cellular phone operations were re-branded under the single Airtel brand. In 2004, Bharti acquired control of Hexacom and entered Rajasthan. In 2005, Bharti extended its network to Andaman and Nicobar. This expansion allowed it to offer voice services all across India.

Airtel launched "Hello Tunes", a caller ring back tone service, in July 2004 becoming to the first operator in India to do so. The Airtel theme song, composed by A.R. Rahman, was the most popular tune in that year.

In 2009, Bharti negotiated for its strategic partner Alcatel-Lucent to manage the network infrastructure for the fixed line business. Later, Bharti Airtel awarded the three-year contract to Alcatel-Lucent for setting up an Internet Protocol access network across the country. This would help consumers access internet at faster speed and high quality internet browsing on mobile handsets.

In 2009, Airtel launched its first international mobile network in Sri Lanka. In June 2010, Bharati acquired the African business of Zain Telecom for \$10.7 billion making it the largest ever acquisition by an Indian telecom firm. In 2012, Bharti tied up with Wal-Mart, the US retail giant, to start a number of retail stores across India. In 2014, Bharti planned to acquire Loop Mobile for ₹7 billion (US\$97 million), but the deal was called off later.

A Study On Customer Satisfaction Towards Bharti Airtel Chikodi

Bharti Airtel Limited ("Airtel"), the world's third largest mobile operator with operations in 20 countries across Asia and Africa, said that its Treasury division has been adjudged as a highly commended winner of the Top Treasury Team (Asia) Awards at the Adam Smith Asia Awards 2015.

Airtel will be the most loved brand, enriching the lives of millions' inspiring and directing all stakeholders for the next stage of growth. Also, they lunched their vision for Africa 'by 2015 airtel will be the most loved brand in the daily lives in African people'. In august 27, 2010, acquired the 100% interest in telecom Seychelles Ltd, a telecom operates of Seychelles, for an enterprise value of USD62 million. In September 2011, the company choose ericsson India, Nokia siemens network and Huawei technologies as network partners to launch 3G service in India. These partners will plan, design, deploy and maintain a 3G HSPA network in bhartiairtel 3G license circles. In January 2011, the company and state bank of India entered into a joint venture agreement to make available banking service to India's unbanked millions. The newly formed entity will harness the power of state bank's strength and airtel's mobile telephony to add value to the banking and financial services sector and empower millions of financially excluded in the country enhance their livelihood and quality of life.

Airtel India

Airtel India is the second largest provider after Vodafone Idea Ltd of mobile telephony and second largest provider of fixed telephony in India, and is also a provider of broadband and subscription television services. It offers its telecom services under the airtel brand and is headed by Sunil Bharti Mittal.

Corporate structure

AIRTEL is credited with pioneering the business strategy of outsourcing all of its business operations except marketing, sales and finance and building the 'minutes factory' model of low cost and high volumes. The strategy has since been adopted by several operators. AIRTEL's equipment is provided and maintained by Ericsson and Nokia Solutions and Networks whereas IT support is provided by IBM. The transmission towers are maintained by subsidiaries and joint venture companies of Bharti including Bharti Infratel and Indus Towers in India.

Telemedia

Under the Telemedia segment, Airtel provides broadband internet access through DSL, internet leased lines and MPLS (multiprotocol label switching) solutions, as well as IPTV and fixed line telephone services. Until 18 September 2004, Bharti provided fixed line telephony and broadband services under the Touchtel brand. Bharti now provides all telecom services including fixed line services under the common brand airtel. As of September 2012, Airtel provides Telemedia services to 3.3 million customers in 87 cities. As on 30 November 2012, Airtel had 1.39 million broadband subscribers.

In May 2012, Airtel Broadband and some other Indian ISPs temporarily blocked file sharing websites such as vimeo.com, mejavideo.com, and thepiratebay.se, without giving any legal information to customers. Airtel will be launching its Voice over LTE calling service in Mumbai and Kolkata.

In June 2011 the *Economic Times* reported that Telemedia Business was merged with Mobile, DTH and Business in three separate parts respectively.

Digital television

The Digital television business provides Direct-to-Home (DTH) TV services across India under the brand name Airtel digital TV. It started services on 9 October 2008 and had about 7.9 million customers at the end of December 2012.

Mobile data service

Services under mobile data include BlackBerry services; a web-enabled mobile email solution working on 'push technology'; a USB modem that helps in getting instant access to Internet and corporate applications; Airtel Data Card, which enables accessing the internet anytime; Easy Mail, a platform that provides access to personal/corporate e-mails independent of handset operating system; and application services that shorten the queues at the billing section, off-load the pressure on the billing staff and bring convenience to the user.

Business

Airtel Business consists largely of six products: cloud and managed services, digital signage, NLD/ILD connectivity (VSAT/ MPLS/ IPLC and Ethernet products), Wi-Fi dongles, voice solutions (like toll free numbers, TracMate, and automated media reading) and conferencing solutions (VoIP, audio, video, and web conferencing) serving industry verticals like BFSI, IT/ITeS, manufacturing, hospitality and government.

Airtel Business, the B2B arm of Bharti Airtel, has rolled out a first of its kind dedicated digital platform to serve the growing connectivity, communication and collaboration requirements of emerging businesses, including SMEs and startups. The digital platform will offer solutions to emerging enterprises to enable ease of business and faster time to market.

Android-based tablet

Beetel Teletech Ltd., a unit of Bharti Enterprises Ltd., on 18 August 2011, launched a ₹9,999 (US\$140) 7-inch tablet in India based on Google Inc.'s Android operating system. The offering is intended to capitalise on the expected demand for cheap computing devices in the world's fastest-growing and second-largest mobile phone market.

Airtel will be the most loved brand, enriching the lives of millions inspiring and directing all stakeholders for the next stage of growth

3.2 Vision and Mission

Vision

- Our vision is to enrich the lives of our customer.
- Our focus is to win customers for life by offering an exceptional experience.

Mission

- Hunger to win customers for life.

A Study On Customer Satisfaction Towards Bharti Airtel Chikodi

Objectives

- Growth revenue
- Grow market share
- Grow margins

Values

- Alive and optimistic
- Inclusive culture
- Respectful to all stakeholders

About Bharti Airtel

Customer care number :121

Complaint related :198

OFFICE ADDRESS

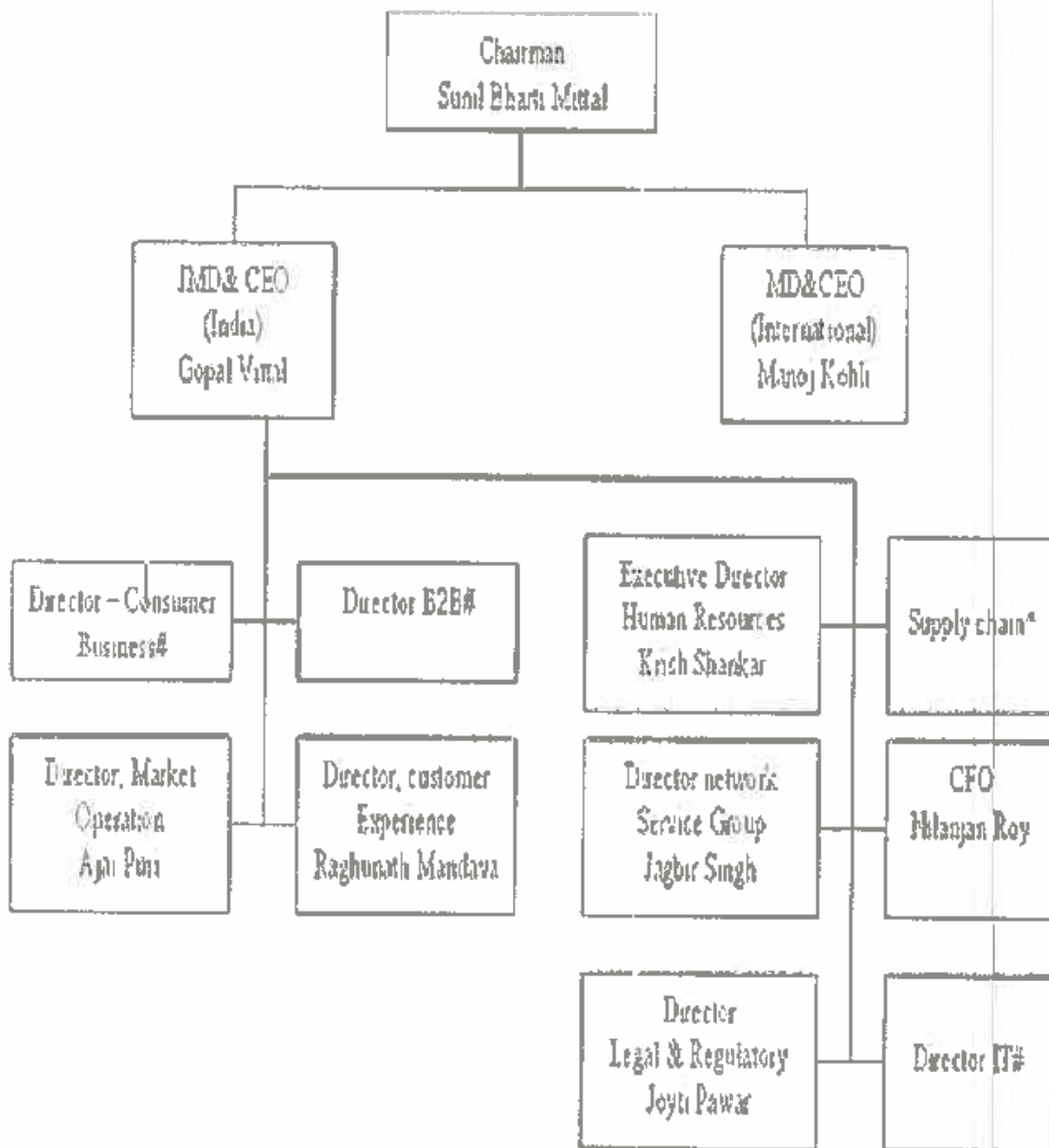
Registered Office (New Delhi)	Bharti Crescent, 1, Nelson Mandela Rode, Vasantkunj, Phase II, New Delhi- 110070
Karnataka	Bharti Airtel Limited,55, Divyasree Towers, Bannerghatta Rode, Bangalore-560 029
Chikodi	Shah Complex, Opp. Syndicate Bank. K. C. Rode Chikodi- 591201



Fig.4.2 Airtel Centre, Gurgaon,

source: secondary data

3.3 Organizational structure



* Moti Gyamlani (Global Head - Supply Chain) reports to the MD of Bharti Airtel Ltd with direct responsibility for India SCM function

To be appointed

Fig. 4.3

source: secondary data

3.4 Product/ service profile:

Bharti Airtel Operates Four Main Business Segments, Namely, Mobile Services, Telemedia Services, Enterprise Services and Digital Tv Services. Bharti airtel products and services portfolio includes mobile services, home phones, broadband, calling cards, DTH, IPTV, MPLS services, satellite services, data transport solution and conferencing services. The mobile services segments offer mobile and fixed wireless services using GSM technology across 22 telecom circles. The telemedia service offered broadband and telephone services in 15 circles across 95 cities. The enterprises services business provides long distance wholesale and data services to carrier customers and VCC services in the overseas markets. The company also launched world first virtual windows based online desktop powered by Microsoft and Nivio for easy and affordable access to computing and broadband in India. In October 8 airtel signed agreement with IBM provide IT support for its operations in Sri Lanka which is an extension of software major's contract in India. During FY08, the company transferred its telecom infrastructure operations to Bharti Infratel Ltd.

Product and Services of Bharti Airtel Limited

- Prepaid
- Postpaid
- Broadband
- Mobile services
- Telemedia services
- Airtel business
- Digital TV services

3.4 Area of operations

The study covers Chikodi city area and its nearby villages which come under rural area of Chikodi. The following services are provided at the store

- Prepaid
- Postpaid
- Broadband

- Mobile services
- Telemedia services
- Airtel business
- Digital TV services

Marketing practice in Bharti Airtel

Marketing concept: the job of marketing is not to find the right customer for your product, but to find the right product for your customer. The marketing concept hold that the key to achieving organisational goals is being effective than competitors.







Marketing mix:

- Prepaid
- Postpaid
- Broadband
- Mobile services
- Telemedia services
- Airtel business
- Digital TV services
- **Price:** customer based pricing strategies flexible pricing mechanism controlled by TRAL PRODUCT and services airtel postpaid airtel live.
- **Promotion:** large scale print and video advertising big and celebrates like SPK, Sachin are roped in to endorse the product. in 2002 airtel got its signature tune in INDIA.
- **Place:** it has wide and extensive presence even in the remotest areas. It has distributors like grocery store, chemist, outlet etc.














Bharti airtel limited has different business operations such as

1. Bharti Airtel: Leading Telecommunication Company.
2. Bharti Infatel Limited
3. Indus Towers
4. Bharti Realty Limited
5. Bharti Softbank Holdings
6. Bharti Retail
7. Bharti AXA General Insurance
8. Bharti AUX Life Insurance
9. Centum Learning Limited
10. Field Fresh Foods Pvt Ltd
11. Beel Telotech Limited
12. Gourmet Investment

Airtel operates in the following country

Country	Site	Remarks
 <u>Burkina Faso</u>	Airtel Burkina Faso	Airtel Burkina Faso is the dominant player with 1,433,000 customers representing 50% market share.
 <u>Chad</u>	airtel Chad	Airtel Chad is the No. 1 operator with 69% market share.
 <u>Democratic Republic of the Congo</u>	airtel DRC	Airtel is the market leader with almost 5 million customers at the end of 2010.
 <u>Gabon</u>	airtel Gabon	Airtel Gabon has 829,000 customers and its market share stood at 61%.
 <u>Ghana</u>	airtel Ghana	Airtel Ghana had about 1.76 million customers at the end of 2010.
 <u>India</u>	<u>airtel India</u>	Airtel is the market leader with almost 280.3 million customers as of October 2017.

A Study On Customer Satisfaction Towards Bharti Airtel Chikodi

 <u>Kenya</u>	airtel Kenya	Airtel Kenya is the second largest operator and has 4 million customers.
 <u>Madagascar</u>	airtel Madagascar	Airtel is the market leader in Madagascar with 39% market share and 2.5 million customers.
 <u>Malawi</u>	airtel Malawi	Airtel Malawi is the market leader with a market share of 72%.
 <u>Niger</u>	airtel Niger	Airtel Niger is the market leader with a 68% market share.
 <u>Nigeria</u>	airtel Nigeria	
 <u>Republic of the Congo</u>	airtel Congo B	Airtel Congo is the market leader with a 55% market share.
 <u>Rwanda</u>	airtel Rwanda	Airtel launched services in Rwanda on 30 March 2012.
 <u>Seychelles</u>	airtel Seychelles	Airtel is the leading comprehensive telecommunications services providers with over 55% market share of mobile market in Seychelles.
 <u>Sierra Leone</u>	Airtel Sierra Leone	
 <u>Sri Lanka</u>	airtel Sri Lanka	Airtel Sri Lanka commenced operations on 12 January 2009. It had about 1.8 million mobile customers at the end of 2010.
 <u>Tanzania</u>	airtel Tanzania	Airtel Tanzania is the market leader with a 38% market share.
 <u>Uganda</u>	airtel Uganda	Airtel Uganda stands as the No. 2 operator with a market share of 38%.
 <u>Zambia</u>	airtel Zambia	Airtel Zambia is the market leader with 69%

<p>Channel Islands† : ✕ Jersey + Guernsey</p>	<p>Airtel-Vodafone</p>	<p>market share. Airtel operates in the Channel Islands under the brand name Airtel-Vodafone through an agreement with Vodafone.</p>
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3.5 Current status

- Current status of Chikodi distributor
- Overall market conditions were good compare to competitors
- It has high market share
- Daily more than 400 sims are activated from Chikodi area its good compare to competitors.
- Daily easy recharge collection was more than lacks
- In a store one manager, 2 clerks, 2 officers, 7 Field sales executes working there.

3.6 Future plan

- Future plan as per chikodi area
- Divided the distributor in rural area (5 villages one distributors)
- Appoint new promoters for rural area.
- Who are doing more then 9 activation in a month give them authority of sim swapping.
- Who all are using demo card give them activation authority.
- Start the programs for motivate retailers, like buddy gift etc.

3.7 Awards

2000

- The golden peacock national quality award

2002

- Sunil Mittal, chairman & MD of the company, big businessman of the year award by business India.

2004

- India's leading cellular company Bharti Tele Venture has bagged the "Asian mobile news operator of the year" Award in India and the subcontinent.

2005

- Silver trophy at the confederation of Indian industry National Six Sigma Award.
- World communication "Best Brand of The Year" award by London based E-map communication group.
- Sunil Bharti Mittal gets the "Best Asian Telecom CEO" Award 2005

2006

- Telecom Asia award-one of the most prestigious award in the telecom sector.
- Sunil Bharti Mittal gets the "Best Asian Telecom CEO" award 2006.
- Bharti is the only Indian telecom to figure in this year's telecom asia award.
- Bharti Airtel on Feb 11 has been awarded QCL-DL shah national award on Economics of quality.

2011

- Bharti Airtel awarded licenses to operate 2G and 3G mobile services in Rawanda.

2012

- Bharti airtel gets Euro Finance Treasury award.

4.11 SWOT analysis

Strengths

- **Renowned telecom company:** with its 21+ years of rich experience in telecom industry this MNC had travelled far to become world's 3rd telecom operator overseas with operations in nearly 20 countries

- **High brand equity:** it is one of the pioneer brands in telecommunication having a high brand recall with a whopping subscriber base.
- **Extensive infrastructure:** with the formation of Indus tower and due to its partnership with Idea and Vodafone, the infrastructure of Airtel has extended in all parts of the country resulting into nationwide penetration.
- **Strategic alliances:** the company has top notch stakeholders, namely Sony Ericsson, Nokia and Singtel, and recent one being Apple. Such strategic alliances boost the brand equity and the bottom line of the company.
- **Torchbearer of the telecom industry:** with its number 1 spot due to its excellent services in the developing economies, Airtel has interconnected the life of people in an highly efficient way.

Weaknesses

- **Outsourced operations:** outsourcing operations helped Airtel in lowering its cost. But on the other hand, they are running the risk of being dependent on other companies which may affect its operations.
- **Venturing into African operations:** although it's been 6 years that Airtel has acquired Zain's Africa business, but Airtel is still struggling to run around the unit which was bought at a who pay 9 billion dollars.
- **High debt:** with its acquisition turning out to be a bad investment, and credit being high and margins being low, Airtel operates under high debt. Airtel does not have as deep pockets as Vodafone.

Opportunities

Strategic partnership

- Market development
- Vas (value added services)
- Untapped geography of the current market
- LTE (long term evaluation or 4G)

Threats

- Government regulatory framework
- Competition
- MNP (mobile number portability)

Opportunities

Strategic partnership

- Market development
- Vas (value added services)
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- LTE (long term evaluation or 4G)

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- Government regulatory framework
- Competition
- MNP (mobile number portability)

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

TABLE NO. 4.1: AGE OF RESPONDENTS

TABLE NO. 4.2: SHOWS OCCUPATION OF THE RESPONDENTS.

TABLE NO. 4.3 : SHOWS AWARE ABOUT AIRTEL

TABLE NO. 4.4 :SHOWS RESPONDENTS TOWARDSUSING AIRTEL

TABLE NO. 4.5 : SHOWS OPERATORS SERVICES FOR BEFORE USING

TABLE NO. 4.6:SHOWS MONTHLY EXPENDITURE FOR MOBILE

TABLE NO. 4.7 RESPONDENTS TOWARDS KIND OF SERVICES

TABLE NO. 4.8 SHOWS CUSTOMER TOWARDS CUSTOMER CARE

TABLE NO. 4.9: SHOW RESPONDENTS TOWARS CALL AT CUSTOMER CARE

TABLE NO. 4.10: SHOW RESPONDENTS SATISFIED ABOUT AIRTEL

TABLE NO. 4.11: SHOW OPINION ABOUT AIRTEL

TABLE NO. 4.12: SHOWS NETWORK COVERGE

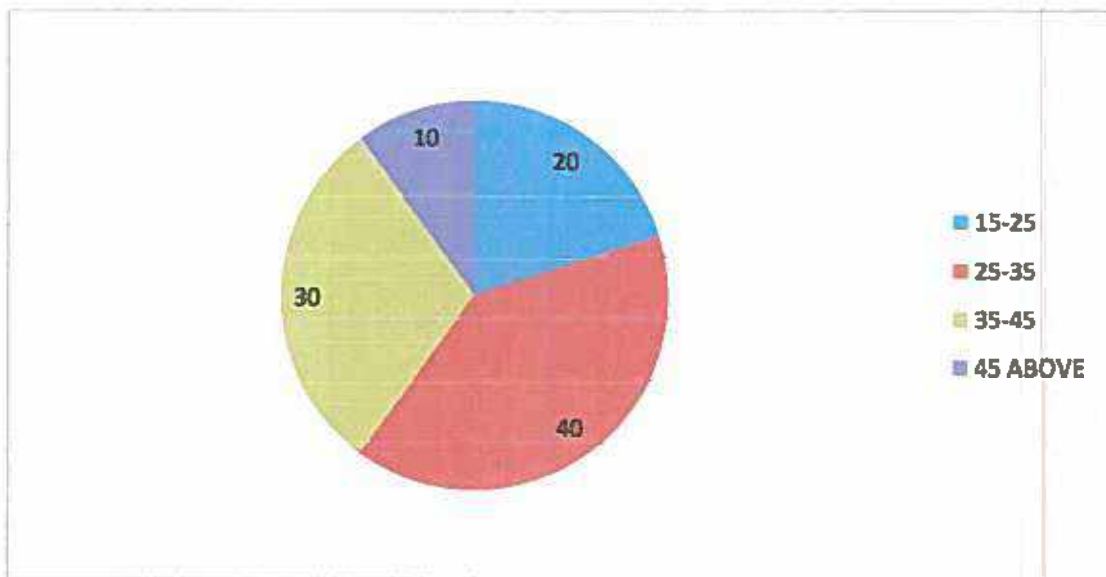
CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

TABLE NO. 4.1 Shows Age of Respondents

SL NO.	AGE	NO. OF RESPONDENTS	% OF RESPONDENTS
1.	15-25	10	20%
2.	25-35	20	40%
3.	35-45	15	30%
4.	Above 45	5	10%
	Total	50	100%

CHART NO. 4.1 : Shows Age Of Respondents

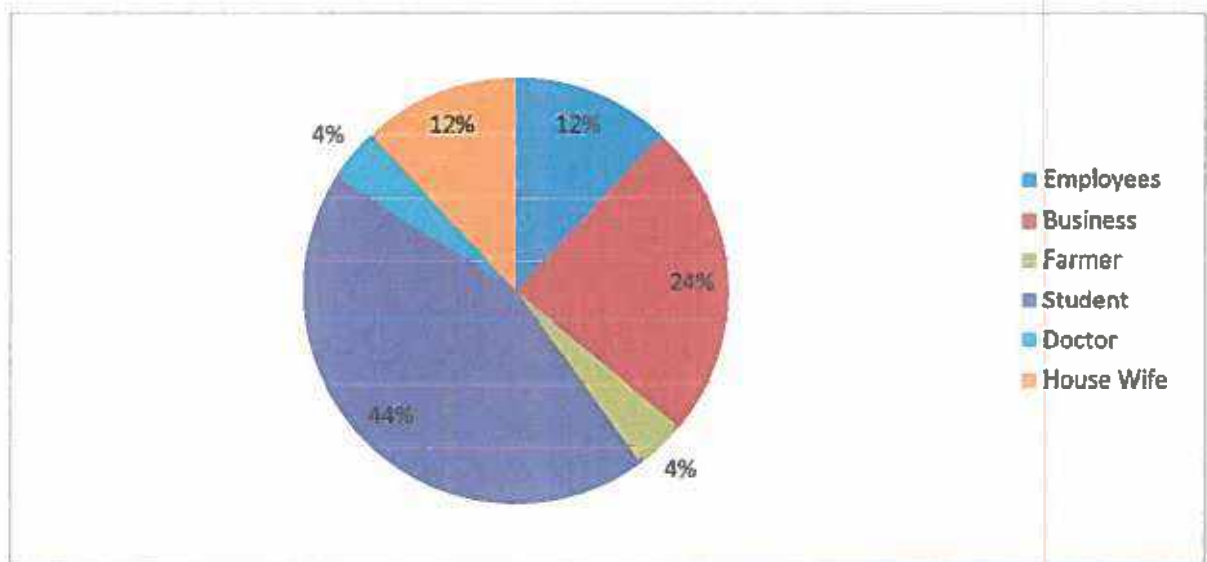


Interpretation : From the above table is revealed that 20% of the respondents are between the age group 15-25 years, 40% lies in the age group of 25-35 years 30% lies in the age group of 35-45 years and 10% lies in the age group of above 45 years age. From the above chart 25-35 age group using more services compare to rest age group.

TABLE NO. 4.2 Shows Occupation of the Respondents.

SL NO.	OCCUPATION	NO.OF RESPONDENTS	%OF RESPONDENTS
1	Employees	06	12%
2	Business	12	24%
3	Farmer	02	04%
4	Student	22	44%
5	Doctur	02	04%
6	House wife	06	12%
TOTAL		50	100%

Source : Survey.



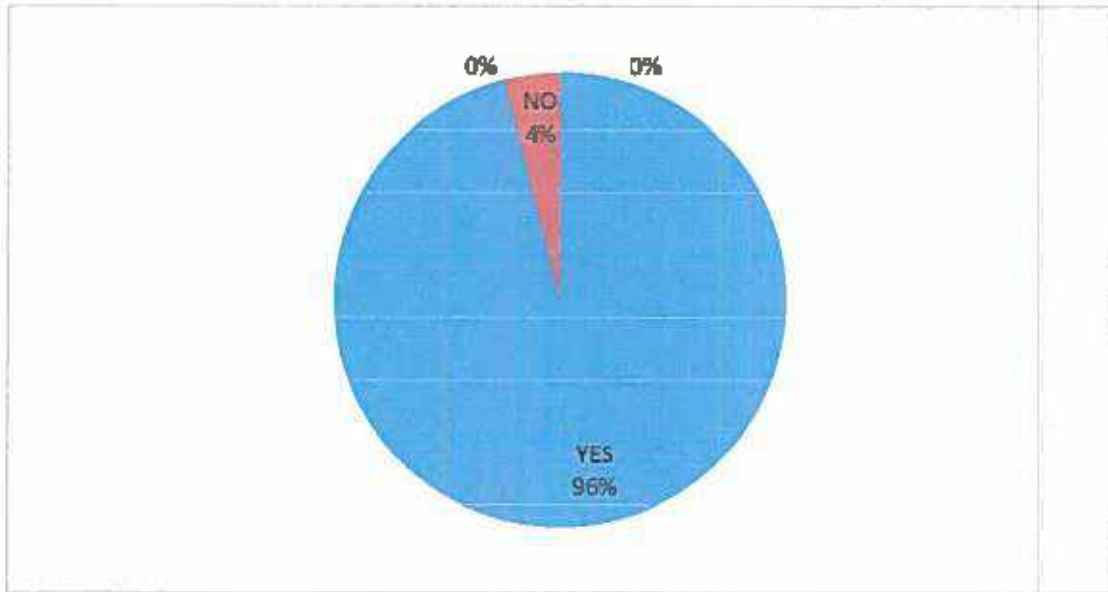
Interpretation :

It is revealed that out of total respondents , 12% of the respondents are Employees, 24% of the respondents are Business persons, 4% of the respondents are Farmers, 44% of the respondents are students, 4% of the respondents are Doctors and 12% of the respondents are House Wife. From this we can tell that most of the students and business persons are interested. We can say that 44% customers are students and 24% customers are business persons in the survey.

TABLE NO. 4.3 Shows Aware About Airtel

SL NO.	AWARENESS	NO. OF THE RESPONDENTS	% OF THE RESPONDENTS
1	Yes	48	96%
2	No	02	04%
	Total	50	100%

Source : Survey.



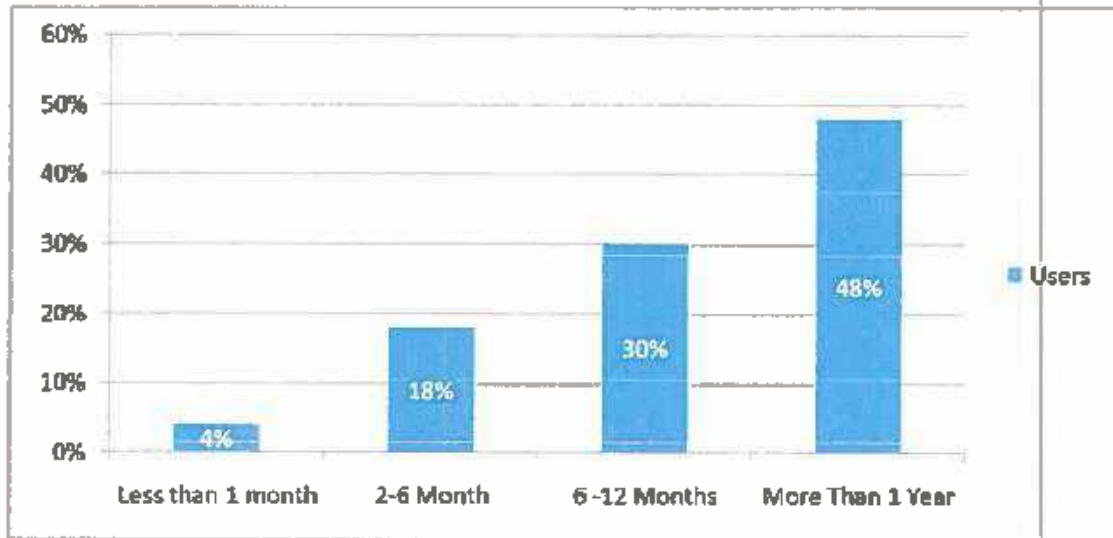
Interpretation :

From the above table out of 50 respondents aware about airtel 96% of respondents yes and 4% of not aware about airtel. Majority of respondents i.e.,96% of respondents aware about airtel.

TABLE NO. 4.4 Shows Respondents Towards Using Airtel

SL NO.	LONG USE OF AIRTEL	NO. OF THE RESPONDENTS	%OF THE RESPONDENTS
1	Less than 1 month	02	04%
2	2-6 months	09	18%
3	6 – 12 months	15	30%
4	More than 1 year	24	48%
Total		50	100%

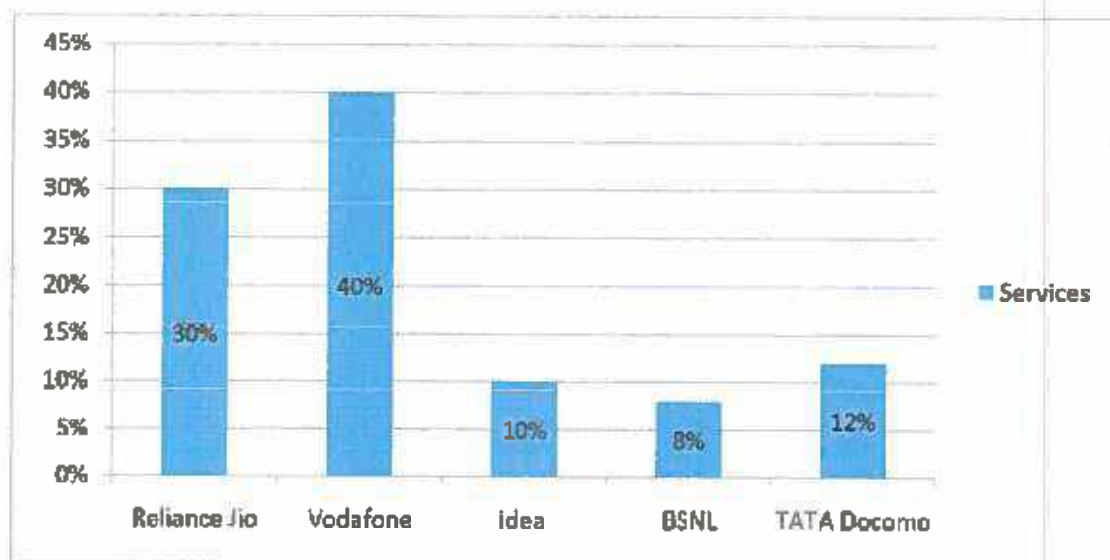
Source: Survey.



Interpretation :From the above table it is revealed that 48% of the respondents are using more than 1 year , 30% of respondents are using 6-12 months, 18% of the respondents are using 2-6 months, and 4% of the respondents are using less than 1 month. From above sample customers are using the more than 1 year.

TABLE NO. 4.5 Shows Operators Services for Before Using

SL NO.	SERVICES	NO. OF THE RESPONDENTS	% OF THE RESPONDENTS
1	Reliance Jio	15	30%
2	Vodafone	20	40%
3	Idea	5	10%
4	BSNL	04	08%
5	TATA Docomo	06	12%
Total		50	100%



Source : Survey .

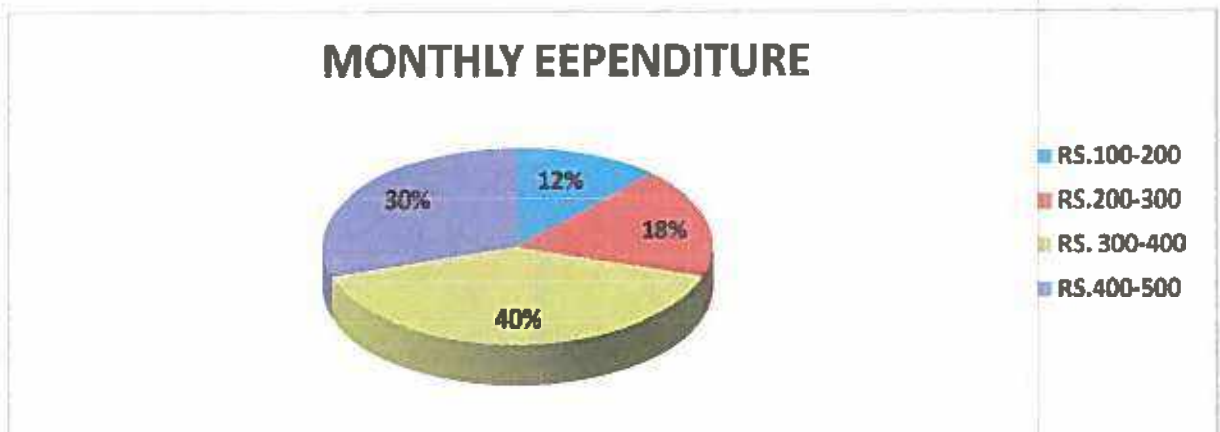
Interpretation :

Out of total respondents 30% of the respondents are using Reliance JIO, 40% of the respondents are using Vodafone , 10% of the respondents are using Idea, 8% of the respondents are using BSNL and 12% of the respondents are using TATA Docomo. Most of the customers using Vodafone services, rest of the customers using Jio services.

TABLE NO 4.6 Shows Monthly Expenditure for Mobile

SL. NO.	MONTHLY EXPENDITURE	NO. OF THE RESPONDENTS	% OF THE RESPONDENTS
1	Rs. 100-200	06	12%
2	Rs. 200-300	09	18%
3	Rs. 300-400	20	40%
4	Rs. 400-500	15	30%
Total		50	100%

Source : Survey.



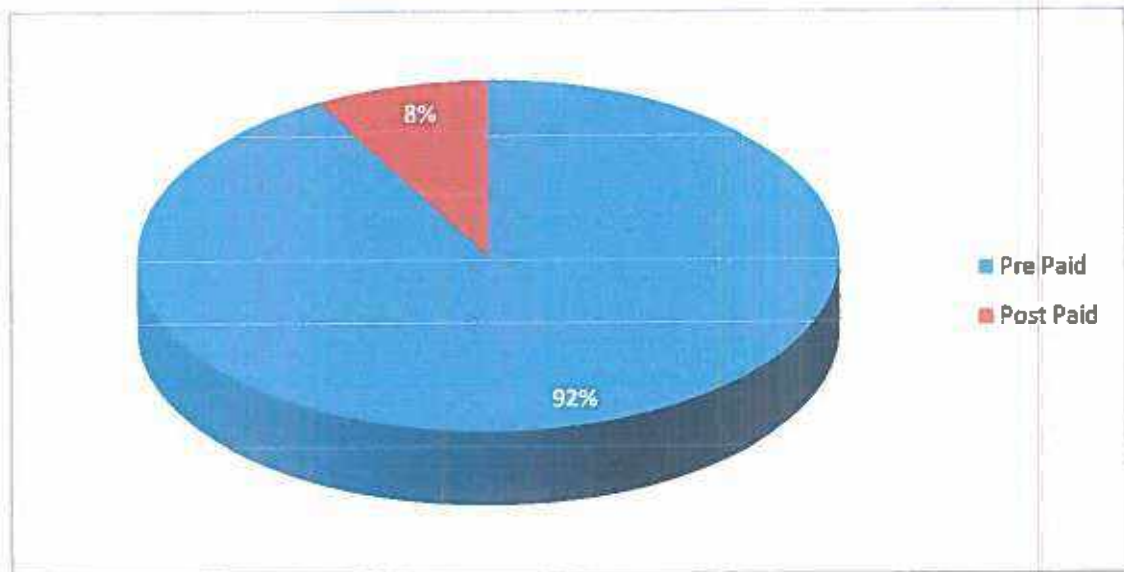
Interpretation :

Out of total respondents 12% of the respondents monthly expenditure is between Rs.100-200, 18% of the respondents monthly expenditure is between Rs.200-300, 40% of respondents monthly expenditure is between Rs.300-400 and 30% of the respondents monthly expenditure is between Rs.400-500. 40% of customers are expending in an average between Rs.300-400 per month because of the providing more services.

A Study On Customer Satisfaction Towards Bharti Airtel Chikodi

TABLE NO 4.7 Respondents Towards Kind of Services

SL. NO.	SERVICE	NO. OF RESPONDENTS	% OF THE RESPONDENTS
1	Pre - Paid	46	92%
2	Post - Paid	04	08%
TOTAL		50	100%



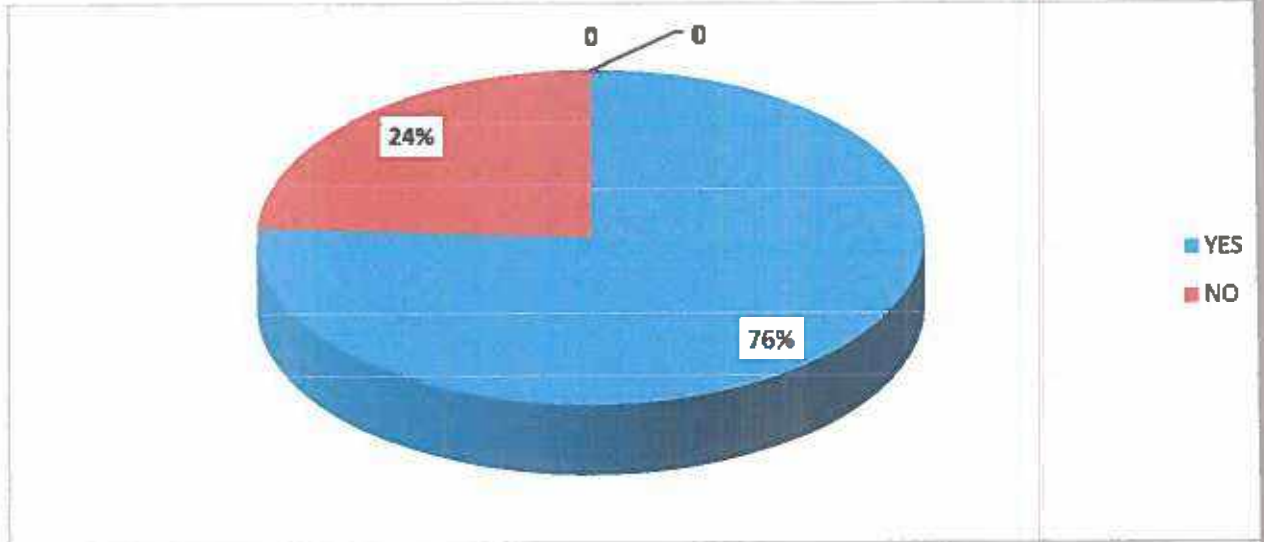
Interpretation :

From the total respondents 92% customers are using Pre-Paid and 08% of the customers using Post Paid. Majority of i.e.92% of respondents are using more Prepaid Services.

TABLE NO. 4.8 Shows Customer Towards Customer Care

SL NO.	CUSTOMER CARE	NO. OF RESPONDENTS	% OF RESPONDENTS
1	YES	38	76%
2	NO	12	24%
		50	100%

Source : Survey



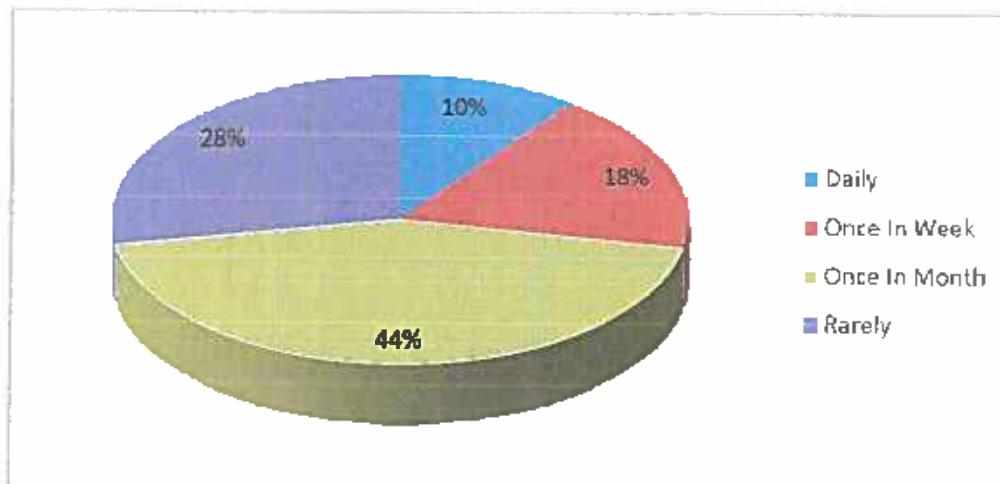
Interpretation :

From the total respondents 76% of respondents are call to customer care and 24% of respondents are not call to customer care. Most of the respondents are using direct call to customer care center. Because of more network problems in the home.

TABLE NO. 4.9 Shows Respondents Towards Call At Customer Care

SL NO.	IF YES	% OF RESPONDENTS	NO. OF RESPONDENTS
2	Once In week	09	18%
3	Once In Month	22	44%
4	Rarely	14	28%
TOTAL		50	100%

Source : Survey.



Interpretation :

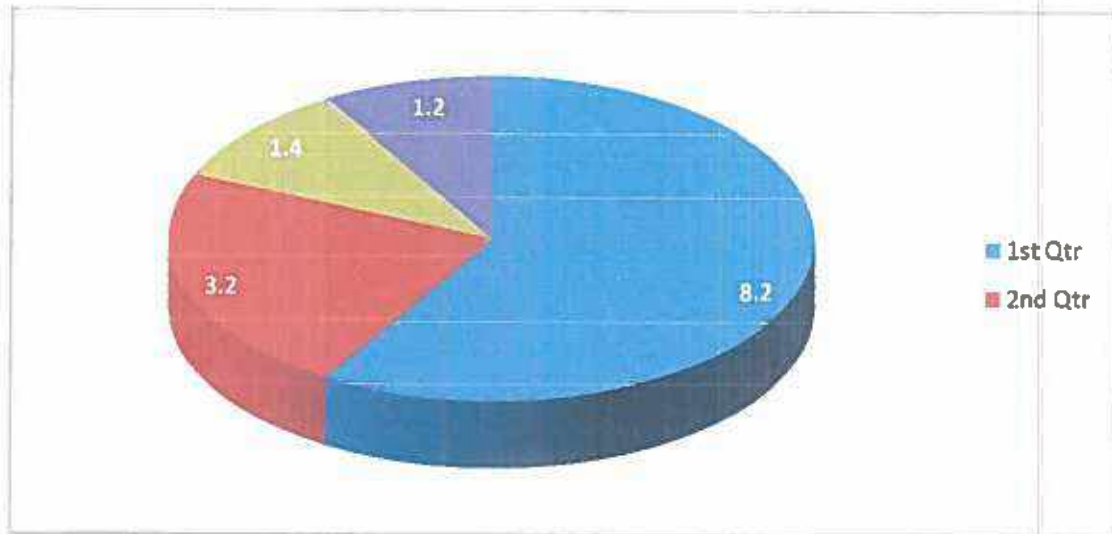
From the total respondents 10% of respondents are daily call to customer care, 18% of respondents are call Once In week to customer care, 44% of respondents are call Once In Month to customer care, and 28 % of respondents are call Rarely to customer care. Most of the respondents calling to customer care once in a month and rarely.

A Study On Customer Satisfaction Towards Bharti Airtel Chikodi

TABLE NO. 4.10 Shows Respondents Satisfied About Airtel

SL NO.	SATISFACTION LEVEL	NO. OF RESPONDENTS	%OF RESPONDENTS
1	YES	48	96%
2	NO	02	04%
Total		50	100%

Source : Survey



Interpretation :

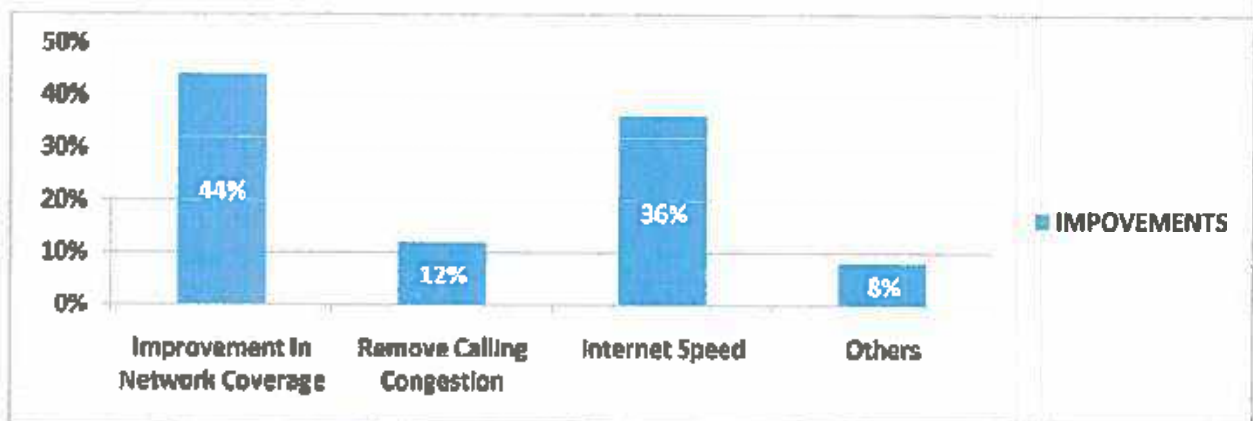
From the total respondents 96% of respondents are satisfied and 04% of respondents are not satisfied.

All the customers are satisfied with AIRTEL. Because of AIRTEL providing best suitable plans to customers

TABLE NO. 4.11 Shows Opinion About Airtel

SL NO.	IMPROVEMENTS	NO. OF RESPONDENTS	% OF RESPONDENTS
1	Improve In Network Coverage	22	44%
2	Remove Calling Congestion	06	12%
3	Internet Speed	18	36%
4	Others	04	18%
TOTAL		50	100%

Source: Survey.



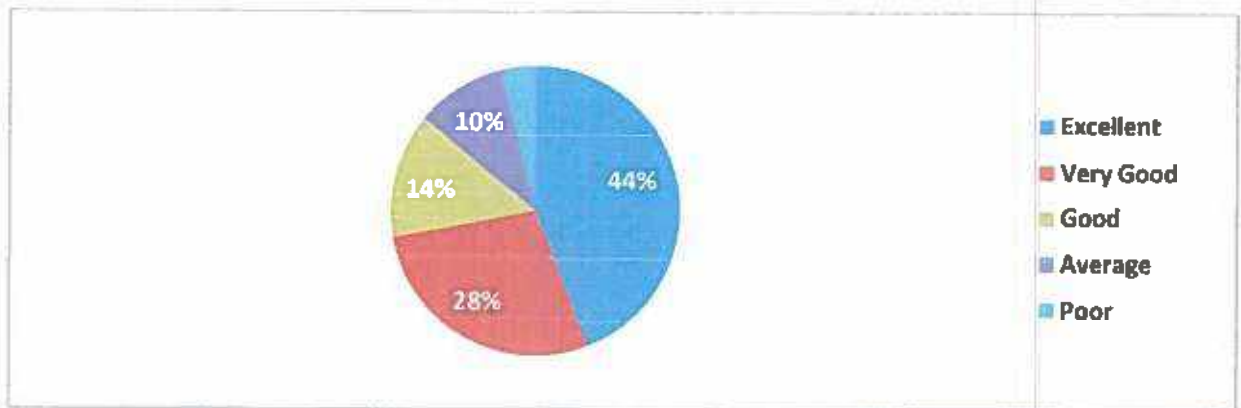
Interpretation :

From the total respondents 44% of respondents are dissatisfied with poor network coverage, 12% of respondents are dissatisfied with call drop, 36% of respondents are dissatisfied with internet speed and 08% of respondents are dissatisfied others. Most of the people says to Improve in network coverage because of anywhere and anytime not coming network.

Table No. 4.12 Shows Network Coverage.

SI. NO.	SATISFACTION	NO.OF RESPONDENTS	% OF RESPONDENTS
1	Excellent	22	44%
2	Very Good	14	28%
3	Good	07	14%
4	Average	05	10%
5	Poor	02	04%
TOTAL		50	100%

Source : Survey



Interpretation :

From the total respondents 44% of respondents are satisfied with Excellent Network Coverage, 28% of respondents are satisfied with Very Good network coverage, 14% of respondents are satisfied with Good network coverage , 10% of respondents are satisfied with Average network coverage and 4% of respondents are satisfied with Poor network coverage. More than 72% customers who rated the network coverage Very Good and Excellent in responding to customers.

CHAPTER 5

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

5.2 SUGGESTIONS

5.3 CONCLUSION

CHAPTER – 5

FINDINGS, SUGGESTIONS & CONCLUSION

5.1 FINDINGS

The following are the Findings of the study.

- 1) Bharti Airtel is a very successful brand in India as it covers a wide network and is still one of the best in network coverage and one of the best network in the world and has covers major of the population coverage.
- 2) Business houses are the major users of Airtel as it is better than all other network's in broadband coverage and plans are better than any.
- 3) Bharti Airtel has wide market capture in Chikodi area.
- 4) Customer are satisfied the 4G Unlimited Services as comparison to other services.
- 5) Bharti Airtel is enhanced the potential market share in Chikodi.
- 6) Bharti Airtel is the market leader in Chikodi area, all the customer are preferred its products and services.
- 7) Wide network coverage is available in Chikodi area.
- 8) The company is focusing more on the Youth and the Untapped areas of the country like Rural areas to hold a strong position in the country and prosper future. At last it can be said that are a lot of scope of BHARTI AIRTEL market in Future.

5.2 SUGGESTIONS OF THE STUDY

Most of the respondents are suggesting to improve the network coverage of AIRTEL services and to remove the calling congestion. It assists AIRTEL to capture the greatest market share in the current trend. And it can be survived in the market with its competitors for a long period and also create a good image in the minds of customers. If the company charges for the its services in the future, the researcher suggested it to charge minimum rate on data and calling services than their rival competitors. Improvement in the customer care services will enrich their CRM practices and to retain existing customers and to create new customers. Through the word of mouth, the customers are aware of AIRTEL and strive for accessing its services. That is why, it is recommended to increase the quality of their services. To remove the network problem and calling congestion, the study suggests to install the towers in the place of unavailability of network and the remote areas

SUGGESTIONS

1. In today's era the Airtel must focus on rural areas to get the people attention and gather the rural people interest. Because most of rural people are not having the knowledge about Airtel
2. Enhance the market penetration & shares in every market and give the high competition to others company.
3. We should try building a good relationship with all retailers, praise, recognition & honors on several occasion for our retailers would help a lot.
4. The customer care people and also employees in Airtel should try to convey brand Airtel while talking to people.
5. Spread out the awareness about Airtel in deep rural areas.
6. Modification must be brought in Airtel, in terms of quality. Its demands should be increased and provides its customer with value added services as to retain them.
7. In today's age the brand must focus on other areas to market it like Malls, Theatre and Crowed areas to get attention and market it and gather audience interest.
8. Many of the respondents are not satisfied with the features provided to prepaid users as compared to Landline users.

5.3 CONCLUSION

The study is involved in measuring the level of satisfaction and preference of AIRTEL customers and the researcher recommends Airtel company to improve their network coverage and to wipe out the calling congestion. And it is assured that the company can achieve the 100 percentage satisfaction of their customers.

BHARTI AIRTEL has become a very successful brand in India & providing customer satisfaction is to be there main motive. It provides unlimited free calling and data services and Unlimited Caller tunes on the move as the people are more dependent on it in their daily lives like wide network coverage and good 4G services. Because 3G services was unable to meet our customer needs and wants. That's why 4G has been evolved for Indian customers. Airtel possesses congestion free and wide network coverage, attractive 4G schemes & customer services as well as life time roaming free services. Providing customer satisfaction is the most crucial step of the company as they are to be satisfied and provides Internet access on the move such as Wide network coverage and good 4G services as they are important and technology advanced stuff required by almost everybody in today's environment, Airtel is a home brand company and a very emerging brand in India and will be successful in overseas market in upcoming years. It possesses congestion free and wide network, attractive 4G schemes & customer services to cover one of the widest areas. From the details it can be concluded that 97% of Airtel users preferred to remain with Airtel and fully satisfied. Also good number of customers who are willing to switch from their respective subscribers showed interest in Airtel. Airtel is capturing the wide area of Indian markets increasingly day by day. Hence, these statistics imply a bright future for the company. It can be said that in near future, the company will be booming in the telecom industry.

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ANNEXURE

Questionnaire

Dear Sir/Madam,

It is matter of great pleasure to introduce myself Miss Sumayya Bagwan studying M.com in K.L.E Basavaprabhu Kore College Chikodi, as per the course requirement we need to undergo a major concurrent project entitled ' A Study On Customer Satisfaction' Towards Bharti Airtel Chikodi.

I am requesting you to please share your time provide in information and opinion by filling this questionnaire. Your co-operation will be highly appreciated and also this will helpful to us to serve you better in future.

1) Are you aware about Airtel?

- A. Yes
- B. No

2) If, yes how long you are using Airtel?

- A. Less than 1 Month
- B. 2-6 Month
- C. 6-12 Month
- D. More than 1 year

3) Which operator's service you were using before Airtel?

- A. Vodafone
- B. Idea
- C. BSNL
- D. TATA Docomo
- E. Reliance Jio

4) What is your average monthly expenditure on mobile?

- A. Rs.100- Rs.200
- B. Rs.200-Rs300
- C. Rs.300-Rs.400
- D. Rs.400-Rs500

5) Why did you choose this service provider?

- A. Unlimited calling service
- B. Unlimited data service
- C. Unlimited SMS service
- D. All service

6) What kind of service you have?

- A. Pre-paid
- B. Post-paid

7) Do you call at customer care?

- A. Yes
- B. No

8) If, yes how often you call at customer care?

- A. Daily
- B. Once a week
- C. Once in month
- D. Rarely

9) For what reason do you call customer care?

- A. Value added service
- B. Information regarding new schemes
- C. Complaints
- D. Other Queries

10) Are you satisfied with Airtel?

- A. Yes
- B. No

11) From which source you come to know about Airtel?

- A. Newspaper
- B. Advertisement
- C. Monthly publication
- D. Hoardings

Signature

**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON EMPLOYEE JOB SATISFACTION"
AT
SHREE SHIVSHAKTI SUGARS LTD.SOUNDATTI**

**Submitted to
RANI CHANNAMMA UNIVERSITY, BELAGAVI**



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

Miss. SUVARNA PATIL

M.COM-IV SEMESTER

REGISTER NO: MC191624

UNDER THE GUIDANCE OF

SHRI. S. M. BHOSAGE

**K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that **Miss. Suvarna Patil** has satisfactorily completed the Project Report Entitled "**A Study on Employee Job Satisfaction**" At **Shree Shivshakti Sugars Ltd , Soundatti** for the partial fulfilment of Degree in **Master of Commerce** in **Rani Channamma University, Belagavi** during the academic year **2020-2021**.

SHRI. S. M. BHOSALE

PROJECT GUIDE

SHRI. LAXMIKANTHA NAYAKA T O

COORDINATOR
P.G. Department of Commerce
B.K. College Chikodi

SHRI. UDAYSINGH RAJPUT

PRINCIPAL
KLE'S Basavaprabhu Kore
Arts, Science and Commerce College
CHIKODI - 591 201



Ref.No.SSL/HRD/Trg.Crt./2020-21

Date: 09.08.2021

CERTIFICATE
To whom so ever it May Concern

This is to certify that, **Miss: Suvarna S Patil** student of B K Collage Chikodi, has successfully completed Project Work in our Industry on "**Employee Job Satisfaction**" from 24.07.2021 to 28.08.2021. During the period of Project, She was found sincere and hard working.

We wish her all the success for bright future.

For Shivshakti Sugars Ltd


 Manager -HR

To
Miss: Suvarna S Patil

Factory Office:

Shivshakti Sugars Limited., Soundatti.
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 🌐 web:www.shivshaktisugars.com

DECLARATION

I declare that the project report entitled "A Study on Employee Job Satisfaction" At Shree Shivshakti Sugars Ltd. Soundatti is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. S. M. Bhosage, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 31-08-2021

Place: Chikodi

Miss. Suvarna patil

Register No: MC191624

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

I sincerely express my deep sense of gratitude and appreciation to Internal Guide **Shri. S. M. Bhosage**, for his careful and valuable guidance, never ending patience and constant encouragement throughout the project.

I am beholden to **Shri. Laxmikantha Nayaka T O**, Co-Ordinator of PG Department of Commerce and Management for constant interest evidenced by him in my academic pursuits.

I express my deep intelligence of appreciation to **Shri. Udaysingh Rajput**, Principal of our college for his valuable suggestions and encouragement.

I express my sincere gratitude to **Shri. G Krishna**, Manager, Shree Shivashakti Sugars Ltd, Soundatti for providing me an opportunity to do a project in their organization.

At the outset, I would like to thank all the teaching faculty of PG Department of Commerce and Management for their valuable suggestions during project work.

My thanks are also to library staff for their cooperation during the course of project work and I am also thankful to Printers for their skillful printing of this project.

Finally I owe my deep sense of gratitude to my parents, friends and relatives for their constant encouragement and support.

Miss. Suvarna Patil

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CHAPTER-1
INTRODUCTION AND RESEARCH DESIGN

- 1.1. Introduction**
- 1.2. Review of literature**
- 1.3. Statement of the problem**
- 1.4. Need for the study**
- 1.5. Objectives of the study**
- 1.6. Scope of the Study**
- 1.7. Research Methodology**
- 1.8. Limitations of Study**
- 1.9. Chapter Scheme**

CHAPTER-1

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

The study conducted on the **"EMPLOYEE JOB SATISFACTION", THE PRACTICE OF HUMAN RESOURCE MANAGEMENT**. The study was conducted in Shree Shivshakti sugars limited soundatti.

Job satisfaction is defined as "the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs" (Spector, 1997, P.2) this definition suggests job satisfaction is a general or global affective reaction that individuals hold about their job.

Shivshakti Sugars Ltd., is a public Limited Company registered under the Companies Act, 1956, having "Certificate of Incorporation" vide No.08/17655/21/4/995 and received "Certificate for Commencement of business" from The Registrar of companies in Karnataka, Bangalore on 02-03-1999.

The population of the study is all the workers that are working in The Shree shivshakti Sugars Limited Soundatti.

For the purpose of Project work sample of 100 employees or respondents have covered. Also while administering Questionnaire care was taken to ensure that the sample ratio is the representative of the population.

The study concludes with an view that, attitude of workers towards job is an important factor for future development of the company.

The term relates to the total relationship between an individual and the employer for which he is paid. Satisfaction does mean the simple feeling state accompanying the attainment of any goal; the end state is feeling accompanying the attainment by an impulse of its objective.

The project report mainly focused on a study on employee's job satisfaction on Shree shivshakti Sugars limited, soundatti. Employee job satisfaction is an important factor which will influence the growth and profitability of the firm. Employee satisfaction is terminology used to describe whether employees fulfilling their desire and need at work many measures that employee motivation, employees global achievement and positive employee morale in the work place.

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

Job satisfaction survey can give the most valuable information the perceptions and causes. For satisfaction/dissatisfaction among the employees attitude towards job satisfaction may be either positive or negative. This positive feeling can be re-inforced and negative feelings can be rectified. This survey can be treated as the most effective and efficient way, which makes the workers to express their inner and real feelings undoubtedly.

1.2 REVIEW OF LITERATURE

studies have been undertaken on employee job satisfaction the most prominent among them are discussed below:

Pallutla Nagmani (2013) in her research article highlights that causes of job dissatisfaction are; high work pressure and low economic facilities are the important problems of job satisfaction among the three levels of employees.

Morad Rezhah and et.al (2012) believed that from their research study there is a meaningful relationship between job satisfaction in role performance.

Lai (2011) argues that an efficient compensation system result in organisational growth and expansion and exhibit a positive relationship between employee satisfaction and job-based wages, skill-based pay and performance-based pay. The study concludes that the intrinsic factors of motivation, including recognition, work, career opportunities, professional growth, responsibility, good feeling about the organisation that has a significant correlation with job satisfaction, while hygiene (external) factors have no significant relationship with job satisfaction of employees satisfaction

Abdulla et al., (2011) identified communications and job stress an important determinant of job satisfaction and found no significant influence on job satisfaction whereas significant relationship found between job satisfaction and its determinants (salary and incentives, organisational policy and strategy and nature of the work).

Orisatoki R and Oguntibej (2010) reveals that managers who want to maintain a high level of job satisfaction among their workforce must try to understand the needs of each employee.

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

Culisir et al. (2010) found a very strong influence of job satisfaction on organisational commitment. Whereas job stress and role ambiguity indirectly influence the willingness of employees to leave their jobs.

Arunima, Shrivastava and Pooja (2009) have made an empirical study on job satisfaction between private and public sector banks. They have concluded that while public sector bank employees are highly satisfied with job security, fringe benefits and the work environment, their counterparts in private sector banks are dissatisfied with the aforesaid variables

Karimi (2008) noted that work-to-family interference has significant and negative effects on job satisfaction among 387 Iranian male and female employees. The results showed that high levels of work family interference are associated with low job satisfaction and with work roles; the individual's job satisfaction is lower.

Rajkumar.B. and Maregouda.R (2006) in their research findings concluded that job satisfaction and morale play an important role in the organisational climate and plays major role in the productivity in the given organisation.

Mrayyyn (2005) says that the variables of encouragement, feedback, a widening pay scale and clear job description, career development opportunity, supportive leadership style, easy communication with colleagues and social interaction positively affect job satisfaction, whereas role stress has a negative influence on it.

Kreitner and Kinicki, (2004) opined that Job satisfaction is an affective and emotional response to various facets of one's job, describes as "being an emotional response that results from the employees perceived fulfillment of their needs and what they believes the company to have offered".

Chu and his friends (2003) demonstrated that satisfaction is positively related to involvement, positive affectivity, autonomy, distributive justice, procedural justice, promotional chances, supervisors' support, co-workers support, but it is negatively related to negative affectivity, role ambiguity, work-load, resource inadequacy and reutilization.

1.3 STATEMENT OF THE PROBLEM

The present study carries out investigation and evaluation of employees job satisfaction in sugar industries of Karnataka state and its analysis in a developmental perspective. An attempt has been made to examine the impact of job satisfaction with

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

respect to various dimensions such as work culture, compensation, employee relation with the management, etc. An attempt has also been made to analyze the impact various demographic variables on job satisfaction. The evaluates the level of job satisfaction amongst the employees of sugars industries and identify the various areas of improvement in order to achieve higher levels of job satisfactions and there by suggest the appropriate measures for higher employee job satisfaction which my lead to the growth of the company as a whole, proving is worth to the future growth of the companies.

1.4 NEED FOR THE STUDY

A studied employee is always an assets to the organization. A satisfied employee is the most important resource for an organization success, It is important to know what extent the employees are satisfied. Job satisfaction is a pre-requisite to user in quality at the human social subsystem of an organization enabling better renewal processes and adoption of importance of job satisfaction. The research under look is a study to determine the levels of job satisfaction of the employees.

1.5 OBJECTIVES OF THE STUDY

The following are the main objectives of this study;

1. To evaluate the working environment in organization.
2. To measure the employees job satisfaction level in the organization.
3. To study the attitude of the employees towards their work.
4. To know employees recognition and rewards system in the organization.
5. To suggest Various measures for Employee job satisfaction.

1.6 SCOPE OF THE STUDY

This study aims to understand the employee satisfaction in the Shree Shivshakti sugars limited soundatti which covers the various working schedule, remuneration, developing overtime allowance , work freedom, job position etc... the scope is to understand the employee satisfaction. The study is conducting at Shree Shivshakti Sugars Limited Soundatti covering 100 employees and data collected based on the questionnaire prepared.

The backbone of the employee satisfaction is respect for workers and job they perform. And easy revenue for employee to discuss problems with upper management should be maintained carefully monitored. The study was done to know the employees are backbone of every organization so the organization should consider a

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

lot employee should be motivated and satisfied. So that they can work more and hence to reach the organization is to its great.

1.7 RESEARCH METHODOLOGY

1) Research methodology:

Research methodology is the systematic way to solve the research problem. It gives an idea about various steps adopted by the researcher in systematic manner with an objective to determine various manners.

2) Research design:

A research design is considered as the framework or plan for a study that guides as well as helps the data collection and analysis of data. The research design may be exploratory, descriptive and experimental for the study. The descriptive research design is adopted for this project.

3) Research approach:

Researchers contacted the respondents personally with well-prepared sequentially arranged questions. The questionnaire is prepared on the basis of the study. Direct contact is used for survey, i.e, contacting employees directly in order to collect data.

4) Sample size:

The study sample constitutes 100 respondents constituting in the research area.

5) Sampling area:

The study is conducted for employees of Shree Shivshakti Sugars Limited soundatti.

6) Sampling design:

The researcher has used probability sampling in which satisfied random sampling is used.

7) Collection of data:

Most of the data collected by the researcher is primary data through personal interview, where has researcher and the respondent operate face-to-face.

SOURCE OF DATA COLLECTION

❖ Primary Data:

Information, which we have gathered for the first time, called primary data: primary research can be quantitative or qualitative.

I have selected the Questionnaire method for collecting the primary data from the employees.

❖ Secondary Data:

These are the sources where the data are developed for some purpose other than the problem at hand out is applicable to the present investigation.

1.8 LIMITATIONS OF STUDY

- The study is conducted only in shree Shivshakti Sugars Ltd Soundatti.
- Due to less time the research could not be made more detailed.
- I was able to cover only those employees who are currently working in the company.
- Some of the replies of the respondents may be biased.
- Due to confidentiality of some information accurate response was not revealed by some of the respondents.

1.9. CHAPTER SCHEME

UNIT- 1: INTRODUCTION AND RESEARCH DESIGN

This chapter gives detail on introduction, Review of literature, Statement of the problem, Need for the study, Objectives of the study, Scope of the study, Research Methodology, Limitations of the study.

UNIT -2: CONCEPTUAL FRAMEWORK

In this chapter is viewed on various concepts related to the study which are, The concept of Human Resource management, Functions of HRM, meaning of Job satisfaction, Employee satisfaction, Herzberg's theory, What are the statistically significant factors that affect job satisfaction?

UNIT -3: INDUSTRY PROFILE

This chapter deals with industry profile which includes introduction to sugar industry, Profile of the industry, Growth of installed capacity over the years, E- Estimated, Vision, mission and aims and objectives, Departments, main functions are as follows, Social and Welfare Activity, SWOT analysis, Organization chart, product profile, by product of sugar manufacturer, Flow chart of sugars manufacturing.

UNIT- 4: DATA ANALYSIS AND INTERPRETATION

This chapter gives details regarding the analysis and interpretation of data. It also consists of the tables, charts and its interpretation.

UNIT -5: FINDINGS, SUGGESTIONS AND CONCLUSION

This chapter concluded the project it companies findings, suggestions and conclusion.

CHAPTER -2

CONCEPTUAL FRAMEWORK

2.1 The Concept Of Hrm

2.2 Functions Of Human Resource Management

2.3 Job Satisfaction

2.4 Employee Satisfaction

2.5 What Are the Statistically Significant Factors That Affect Job Satisfaction?

CHAPTER -2

CONCEPTUAL FRAMEWORK

2.1 THE CONCEPT OF HRM

Human Resource Management is defined as the “ The policies and practices involved in carrying out the “people” or Human Resource aspects of management position, including recruiting, screening, training, rewarding, Job satisfaction and appraising”. What exactly is ‘human resource management’? Many people find HRM to be a vague and elusive concept-not least because it seems to have a variety of meanings. This confusion reflects the different interpretations found in articles and books about human resource management. Human Resource Management in a Business Context includes a reasoned discussion on this topic.

Additional notes: Townley (1994) argues that much of the confusion over the role of human resource managers is due to two factors:-

1. The conflict between the ‘welfare’ tradition of personnel management and the strategic orientation of modern HRM.
2. A gender divide between: ‘female’ or ‘soft personnel management (particularly in respect of the welfare tradition) at lower management and administrative levels:- ‘male’ hard-nosed human resource managers within upper management or corporate headquarters.

She contends that the gender issue should be taken further than ‘counting the number of women’ into an examination of language, role divisions and power. In particular, Townley (1994) holds that gender is inherent in how ‘personnel’ has become a subject of study. In the UK the professional institution has had several different titles since it was founded as the Welfare Workers Association in 1913. Currently it is the Chartered Institute of Personnel and Development, having been unable to face the ultimate change to a name which parallels the Australian Human Resource Institute (AHRI) or the Society for Human Resource Management (SHRM) in the USA. Townley (1994) points to the debate about consequences of the name on employment prospects” ‘debates centered on the image projected-welfare was thought to reflect the feminine’. The consequence was that more ‘strenuous terms’ were used: in 1924

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

it became Industrial welfare Workers; in 1931 it changed to Institute of Labor Management; in 1946, the Institute of Personnel Management, a title which remained for the next half century. Throughout the last century there has been a polarization between male and female aspects of people management. As an example, tonally cites industrial relations as a male preserve in the 1960s and 70s, whereas training was mainly staffed by females.

More recently, she believes that: "The present division between personnel and HRM... equally reflects the same gendered elements. Put bluntly, the focus of HRM-an agenda, in the main, prescribed by men-has been important' men in one filed talking to, reflecting and reporting on important 'men in another."

2.2 FUNCTIONS OF HUMAN RESOURCE MANAGEMENT

The main functions of human resource management are classified into two categories:

- (a) Managerial Functions and
- (b) Operative Functions

Managerial functions

Following are the managerial functions of Human Resources Management.

1. Planning

The planning function of human resource department pertains to the steps taken in determining in advance personnel requirements, personnel programmes, policies etc. After determining how many and what type of people are required, a personnel manager has to devise ways and means to motivate them.

2. Organization

Under organization, the human resource manager has to organize the operative functions by designing structure of relationship among jobs, personnel and physical factors in such a way so as to have maximum contribution towards organizational objectives.

In this way a personnel manager performs following functions:

- (a) Force;
- (b) Allocation of work to individuals;

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- (c) Integration of the efforts of preparation of task the task force;
- (d) Coordination of work of individual with that of the department.

3. Directing

Directing is concerned with initiation of organized action and stimulating the people to work. The personnel manager directs the activities of people of the organization to get its function performed properly. A personnel manager guides and motivates the staff of the organization to follow the path laid down in advance.

4. Controlling

It provides basic data for establishing standards, makes job analysis and performance appraisal, etc. All these techniques assist in effective control of the qualities, time and efforts of workers.

Operative functions:-

Management The following are the Operative Functions of Human Resource

1. Procurement of Personnel

It is concerned with the obtaining of the proper kind and number of personnel necessary to accomplish organization goals. It deals specifically with such subjects as the determination of manpower requirements, their recruitment, selecting, placement and orientation, etc.

2. Development of Personnel :

Development has to do with the increase through training, skill that is necessary for proper job performance. In this process various techniques of training are used to develop the employees. Framing a sound promotion policy, determination of the basis of promotion and making performance appraisal are the elements of personnel development function.

3. Compensation to Personnel :

Compensation means determination of adequate and equitable remuneration of personnel for their contribution to organization objectives. To determine the monetary compensation for various jobs is one of the most difficult and important function of the personnel management. A number of decisions are taken into the function, viz., job-evaluation, remuneration, policy, incentive and premium plans, bonus policy and

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co-partnership, etc. It also assists the organization for adopting the suitable wages and salaries, policy and payment of wages and salaries in right time.

2.3 JOB SATISFACTION:

Job satisfaction is defined as "the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs" (Sept, 1997, p.2). This definition suggests job satisfaction is a general or global affective reaction that individuals hold about their job. While researchers and practitioners most often measure global job satisfaction, there is also interest in measuring different "facets" or "dimensions" of satisfaction. Examination of these facet conditions is often useful for a more careful examination of employee satisfaction with critical job factors. Traditional job satisfaction facets include: co-workers, pay, job conditions, supervision, nature of the work and benefits.

Job satisfaction is in regard to one's feelings or state-of-mind regarding the nature of their work. Job satisfaction can be influenced by a variety of factors, eg, the quality of one's relationship with their supervisor, the quality of the physical environment in which they work, degree of fulfillment in their work, etc.

(To my knowledge, there is no strong acceptance among researchers, consultants, etc., that increased job satisfaction produces improve job performance—in fact, improved job satisfaction can sometimes sit around all day and do nothing. That may make them more satisfied with their "work" in the short run, but their performance certainly didn't improve.)

2.4 Employee satisfaction

Have always been important issues for physicians. After all, high levels of absenteeism and staff turnover can affect your bottom line, as temps, recruitment and retraining take their toll. But few practices (in fact, few organizations) have made job satisfaction a top priority, perhaps because they have failed to understand the significant opportunity that lies in front of them. Satisfied employees tend to be more productive, creative and committed to their employers, and recent studies have shown a direct correlation between staff satisfaction and patient satisfaction. Family physicians who can create work environment that demands quality and cost

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efficiency. What's more, physicians may even discover that by creating a positive workplace for their employees, they've increased their own job satisfaction as well.

Meaning of Job satisfaction:

Job satisfaction refers to a person's feeling of satisfaction on the job which acts as a motivation to work. It is not the self satisfaction happiness or self Both satisfaction and dissatisfaction were seen as function of the perceived relationship between what one prevail it as offering one entailing.

satisfaction and dissatisfaction were seen as function of the perceived relationship between what one prevail it as offering one entailing.

Both satisfaction and dissatisfaction were seen as function of the perceived relationship between what one prevail it as offering one entailing.

Herzberg's theory:

In the late 1950s, Frederick Herzberg, considered by many to be a pioneer in motivation theory, interviewed a group of employees to find out what made them satisfied and dissatisfied on the job. He asked the employees essentially two sets of questions:

1. Think of a time when you felt especially bad about your job. Why did you feel that way?
2. Think of a time when you felt especially bad about job. Why did you feel that way?

From these interviews Herzberg went on to develop his theory that there are two dimensions to job satisfaction: motivation and "hygiene" (see "Two dimensions of employee satisfaction"). Hygiene issues, according to Herzberg, cannot motivate employees but can minimize dissatisfaction, if handled properly. In other words, they can only dissatisfy if they are absent or mishandled. Hygiene topics include company policies, supervision, salary, interpersonal relations and working conditions. They are issues related to the employee's environment. Motivators, on the other hand, create satisfaction by fulfilling individuals' needs for meaning and personal growth. They

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are issues such as achievement, recognition, the work itself, responsibility and advancement. Once the hygiene areas are addressed, said Herzberg, the motivators will promote job satisfaction and encourage production.

2.5 What are the statistically significant factors that affect job satisfaction?

Bavendam Research identified six factors that influenced job satisfaction when these six factors were high, job satisfaction was high. When the six factors were low, job satisfaction was low. These factors are similar to what we have found in all organizations.



1) Opportunity:

Employees are more satisfied when they have challenging opportunities at work. This includes chances to participate in interesting projects; jobs with a satisfying degree of challenge and opportunities for increased responsibility. Important; this is not simply "promotional opportunity". As organizations have become flatter, promotions can be rare. People have found challenge through projects, Team leadership, special assignment-as well as promotions.

Actions:

- Promote from within when possible.

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- Reward promising employees with roles on interesting projects.
- Divide jobs into levels of increasing leadership and responsibility.

It may be possible to create job titles that demonstrate increasing levels of expertise which are not limited by a viability of positions they simply demonstrate achievement

2. Stress:

When negative stress is continuously high, job satisfaction is low. Jobs are more stressful if they interfere with employees' personal lives or are a continuing source of worry or concern.

Actions:

- Promote a balance of work and personal lives. Make sure that senior managers model this behavior.
- Distribute work evenly (fairly) within work teams.
- Review work procedures to remove unnecessary "red tape" or Bureaucracy
- Manage the number of interruptions employees have to endure while trying to do their jobs.
- Some organizations utilize exercise or "fun" breaks at work.

3. Leadership:

Employees are more satisfied when their manager are good leaders. This includes motivating employees to do a good job, striving for excellence or just taking action.

Actions:

- Make sure your managers are well trained. Leadership combines attitudes and behavior. It can be learned.
- People respond to managers that they can trust and who inspire them to achieve meaningful goals.

4. Work standards:

5. Employees are more satisfied when their entire workgroup takes pride in the quality of its work.

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Actions:

- Encourage communication between employees and customers. Quality gains importance when employees see impact on customers.
- Develop meaningful measures of quality. Celebrate achievements in quality.³

Trap:

Be cautious of slick “packaged” campaigns that are perceived as superficial and patronizing.

6. Fair Rewards:

Employees are more satisfied when they feel they are rewarded fairly for the work they do. Consider employees responsibilities, the effort they have put forth, the work they have done well and the demands of their jobs.

Actions:

- Make sure rewards are for genuine contributions to the organization.
- Be consistent in your reward policies.
- If your wages are competitive make sure employees know this.
- Reward can include a variety of benefits and perks other than money.
- As an added benefit, employees who are rewarded fairly, experience less stress.

7. Adequate Authority:

Employees are more satisfied when they have adequate freedom and authority to do their jobs.

Actions:

When reasonable:

- Let employees make decisions.
- Allow employees to have input on decisions that will affect them.
- Establish work goals but let employees determine how they will achieve those goals. Later reviews may identify innovative “best practices.”

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- Ask, "If there were just one or two decisions that you could make, which ones would make the biggest difference in your job?"

He secret:

One thing that makes humans unique is ability to focus energy. Whether to heat a home or to cut steel with a laser, focusing energy where it's needed produces significant results. As a manager, you need to know what is important problem is more likely to produce measurable benefits to the organization.

The actual cases unique to your organization can only uncovered through a proper analysis. Bavendam research Inc. has developed a survey process that identifies underlying cases of the factors such as:

- ❖ Retention/turnover
- ❖ Productivity
- ❖ Teamwork
- ❖ Communication
- ❖ Job satisfaction

You can choose from standard, semi - custom analyses. We even help you manage the improvement projects once they begin.

CHAPTER- 3

INDUSTRY PROFILE

3.1 Industry Profile

3.2 Growth of installed capacity over the years

3.3 Statement Showing distribution of Sugar mills with cane crushing capacity and sugar production per unit in various countries

3.4 Board of directors

3.5 Cost of the projects

3.6 Vision, Mission And Aims And Objectives.

3.7 Aims & Objective of the Company

3.8 SWOT Analysis

CHAPTER: 3 INDUSTRY PROFILE

3.1 INDUSTRY PROFILE

India has been known as the original home of sugar and sugarcane. Indian mythology supports the above fact as it contains legends showing the origin of sugarcane.

India is the second largest producer of sugarcane next to Brazil. Presently, about 4 million hectares of land is under sugarcane with an average yield of 70 tones per hectare.

India is the largest single producer of sugar including traditional cane sugar sweeteners, khandsari, and Gur equivalent to 26 million tones. Even in respect of white crystal Sugar, India has ranked No. 1 position in 7 out of last 10 years.

Traditional sweeteners Gur & Khandsari are consumed mostly by the rural population in India. In the early 1930's nearly 2/3 rd of sugarcane production was utilized for production of alternate sweeteners. Gur & khandsari. With better standard of living and higher incomes, the sweetener demand has shifted to white sugar. Currently, about 1/3rd sugarcane production is utilized by the Gur & khandsari sectors. Being in the small scale sector, these two sectors are completely free from controls and taxes which are applicable to the sugar sector.

The advent of modern sugar processing industry in India began in 1930 with grant of tariff protection to the Indian sugar industry. The number of sugar mills increased from 30 in the year 1930-31 to 135 in the year 1935-36 and the production during the same period increased from 1.20 lakhs tones to 9.34 lakhs tones under the dynamic leadership of the private sector.

The era of planning for industrial development began in 1950-51 and Government lay down; targets of sugar production and consumption, licensed and installed capacity, sugarcane production during each of the Five Year Plan periods. The targets and achievements during various plan periods are given below.

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subsequently raised to 1 TCD and finally these expansion limits were withdrawn in 1990.

As a result, the industry has grown horizontally with an all India per unit average capacity of 500 TCD. As against this, this has been consolidation and move towards larger per unit capacity 1 over the world, as would be evident from the following table

3.3 STATEMENT SHOWING DISTRIBUTION OF SUGAR MILLS WITH CANE CRUSHING CAPACITY AND SUGAR PRODUCTION PER UNIT IN VARIOUS COUNTRIES

Country	No. of units	Average cane crushing per day (tones)	Average cane crushing per unit (tones)
Thailand	45	10307	140540
Australia	28	9216	183321
Brazil	213	9168	64018
South Africa	13	6877	137769
Mexico	67	4749	71015
Colombia	10	4590	214900
Cuba	156	4229	45538
Hawaii	9	4111	44111
Mauritius	16	3195	42970
India	430	2527	35000

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Government enacted the Sugar Development Fund Act & Rules which provide for levy of. Per quintal. Of sugar known as Sugar Development Fund (SDF). The SDF is utilized for granting term loans to sugar mills for modernization and grants of research projects in the sugar r besides creation of buffer stocks as and when required to ensure price stability. A number of I are in the process of expanding their capacities and modernizing their plant with the assistance: from SDF.

POLICY

The present policy of partial decontrol 10% of production by each unit is supplied for public distribution system i.e. as levy sugar at Govt. notified prices admittedly below 20% of the actual cost of production. The levy sugar is I to the public irrespective of their economic status. The balance 90% is sold in the free market against monthly issued by the Government. This policy has been continuing since 1967-68 except for brief periods of de-control me during the years of surplus production and accumulated sugar stocks.

Government announces the Statutory Minimum Price (SMP) for sugarcane every year based on recommendations of the Commission for Agricultural Costs and Prices (CACP). In the year 3-04, Government announced Rs. 73.00 per quintal linked to a basic recovery of 8.5%. For every 1% increase in recovery, the grower gets a premium of Rs.0.85/ql. In actual practice, the sugar pays much higher prices than SMP

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COMPANY PROFILE

Name of the Organization	:	Shree Shivshakti Sugars Ltd.
Location	:	Soundatti Village.
		Tal.-Raibag , Dist - Belagavi
		Karnataka.
Resi .office	:	Chikodi.
		Ph. No. – 08331-227657
		E-Mail – hrd@shivshaktisugars.com
Capacity	:	10000 Tones Sugar Cane crushing / day.
		37 M. W. Power Generation.
Turnover	:	550 to 600 Crores / Annum.
Employees	:	550
Work Shifts	:	3 Shifts / 8 hours per shift

3.4 BOARD OF DIRECTORS

The following composition of directors on the board of **SHREE SHIVSHAKTI SUGARSLTD SOUNDATTI, RAJBAG ROAD, KARNATAKA**

The high profiled Board of Directors forms the Management of our Company headed by a veteran Educationalist, Agriculturist & a sitting Member of Parliament (Upper-House) Dr. Prabhakar B Kore as a Chairman

• BOARD OF DIRECTORS:



Prabhakar.B. Kore: Chairman

Rajkumar S. Kothavale: Additional Director

Shrikant B Umarane:Executive Director

• STATUTORY AUDITORS:

M/s. P. G. Ghali& Co.,

Chartered Accountants,

102, Hari Apartments,

College Road,

Belgaum

**P.G. Department of Commerce and Management, K.L.E Society's B.K. college,
Chikodi**

3.5 COST OF THE PROJECTS

- ❖ The factory spent Rs. 337.00 laths as its original project.
- ❖ For the first phase expansion factory incurred cost of Rs.349.00 lakhs.
- ❖ For the second phase expansion the factory spent of Rs. 2700 lakhs .

3.6 Vision, mission and aims and objectives.

Vision:

"Total customer satisfaction"

Mission:

- Encourage agro-based Private industry.
- To develop co-operative movement in rural sector.
- To encourage the farmers to grow sugar cane for production of sugar and its by-products.

3.7 AIMS & OBJECTIVE OF THE COMPANY

The object of the society is to encourage proper development of Agricultural Industrial amongst Farmers and joint forming methods so as to secure best merits of modern large scale agriculture production to the owners of lands and for this propose.

- 1) To encourage self-help, thrift and Farmers.
- 2) To acquire lands either by way of purchase or otherwise for cultivation of sugar cane and other cost and for erection of building. Go downs staff quarters etc and for installations of machinery's.
- 3) To manufacture sugar jogger and their by products out of sugar-cane grown and supplied by members of the society and other and to sell the same to the best advantage

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- 4) To undertake such other activities as are identical and conducive to the development of the society etc
- 5) To acquire and install machinery for the utilization of the product and buy raw material and sell finished product in the course of utilizing and marketing the by products.

DEPARTMENTS:-

ADMINISTRATION DEPARTMENT

The most of work of the department is future planning as a standardization of time and work and dealing with other companies.

The work of administration department is conceptual decision taking with the permission of Chairman, Director, M.D and CAO.

ENGINEERING DEPARTMENT

In SSL the engineering department looks after mechanical, civil construction, improving production method, simplifying of work and power generation, and also deals with good working condition, maintenance of go down, installation of machinery etc.

CANE DEPARTMENT

In SSL cane department deals with registration of sugar cane with growers, good quality maintenance, developing high yield varieties and also term loans and subsidies to the farmers who are growing sugar cane for this company and now giving seeds of sugar cane to grow variety sugar cane and this department has consultant to consult sugar cane and I/p.

ACCOUNTS / FINANCE DEPARTMENT

The SSL Soundatti sugar company's growth in term of turnover and profitability besides investment in the block assets and working capital has been satisfactory over a period of time. Unless proper accounting of the various transactions of the company taking place out systematically, the real control on the various functional areas of the company will be lost to management.

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MAIN FUNCTIONS ARE AS FOLLOWS

- ❖ Registration and scrutiny of sale orders pertaining to equipment and spare parts.
- ❖ Preparation and submission of invoice to customers for payment.
- ❖ Accounting of sales and sales realization.
- ❖ Receipt of cash, cheque and bank drafts etc and issue of official receipts for the same.
- ❖ Follow up are watch for transfer or receipt of funds to and from regions or district offices.
- ❖ Operation of bank accounts
- ❖ Maintenance of journal, expense ledger and general ledger.

PROCESS DEPARTMENT

Process department is given integral part of the organization. It looks after work of different process of sugar cane into the consumer sugar.

PROCESS OF CANE

Cane will be crushed in five mills; juice will be transferred to boiling stations. In the boiling station for the purpose of purification sculpture and lime powder will be added proportionality.

PURCHASE DEPARTMENT

Purchasing procedure very concededly according to the needs of the organization and authority delegated to porches manager the successes of organization is based on effective inventory management system and interrupted production schedule this is achieved with adequate purchasing function.

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7. Medical treatment
8. Provident fund
9. Employees pension
10. Death come retirement relief fund
11. Sport and recreation facilities etc

POLLUTION CONTROL PROGRAMME

To arrest fly ashes and dust emerged out of boilers the factory has installed a machine called dust controller. Further the factory has installed efficient treatment plant to neutralize the effluent by using lime.

3.8 SWOT ANALYSIS

STRENGTHS:

- Well established since long time.
- Strong network from all aspects- location, transports, and infrastructure.
- Good financial supports whenever needed are provided by both state and central governments.
- Located in the heart of city.
- Concept of multi joint-product.
- New power plant, which is constructing now is needed for future growth.

WEAKNESS:

- Absent of motivating incentives.
- Lot of training required for all levels of employees.
- Improper planning of investment for future growth.

OPPORTUNITIES:

- Can implement change in technology.
- Frame proper policies and procedures.
- Restructuring of manpower.
- Re- engineering.

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THREATS:

- Other units.
- Competition.
- Decrease in sugar growth.
- Diversified resources such as raw material due to many sub units initialization.

MC KINSEY 7S MODEL



The first three elements are strategy, structure and system are considered as hardware of success, the next four elements are style, staff, skills and shared values / super ordinate goals are the software of any company

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According to the 7's model

1) STRATEGY

The way in which a business aims to improve its position in relation to its competition is embodied in its strategy or the way of doing something in an organization

In SSL, introduce new technologies and products strategies importance in time with national objective to improve quality reliability of products there by attaining the international standards.

2) SYSTEM

System refers to how the production system, distribution, information system and security system is maintained in its company.

A. Production system

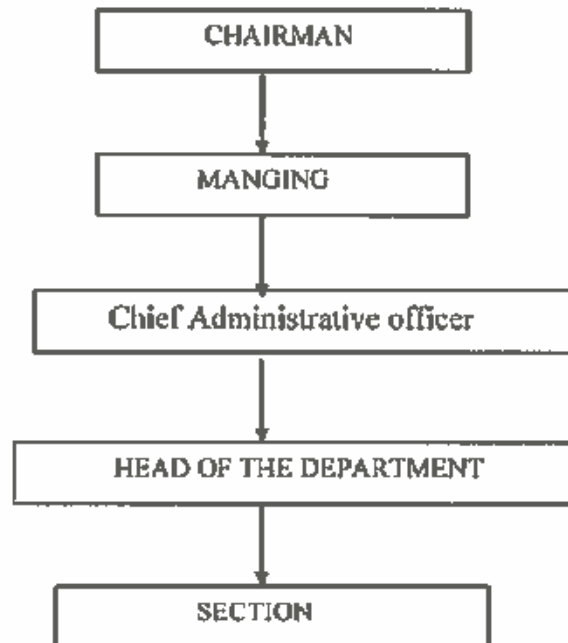
B. Distribution system

The distribution system of the products produced is in the following way;

- ❖ Direct sales are made within the state and outside the state.
- ❖ Indirect sales are made outside the country and the depot sales are also made.
- ❖ The products are also sold directly to the consumers or sold to the wholesale

C. Information system

Structure of information system



a. system

The SSL has strict security system.

In the maintenance of accounts after the record have been closed, the records are kept in the room and closed the room is opened only with permission of higher authority. If the visitors went to inter they have to take prior permission with the authority and after entering they are not suppose to go any department other then the department from whom they took the permission.

3) STRUCTURE

The following department carries out the general admission of the company and this is downwards communication in the company. The information flows from the top level of management to the lower levels.

4) STYLE

The style which is portrayed to outside world is derived from the style and behaviors exhibits inside organization. The internal style of the organization effects new staff feels things and does their jobs. Therefore an organization is reflection of its structure.

5) SHARED VALUES /SUPER ORDINATE GOALS.

Shared values are refers to company policies. In Shivshakti Sugars Ltd the following policies are maintained.

- Quality policies
- Environment policies
- FSSI

QUALITY POLICY

Quality leading to customer satisfaction shall be the top priority, this shall be achieved by complying to the requirements of the quality management system and continuously improve its effectiveness.

ENVIRONMENT POLICY

The SSL is committed to comply with the requirement of relevant environment regulation and standers by implementing environment management system and the continually improve its effectiveness.

TOTAL PRODUCTIVE MANAGEMENT

The SSL is committed in maximizing limited is committed in maximizing overall plants effectiveness to make SSL company a world class company through total productive manufactured by

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- Promoting automates maintenance culture.
- Involving all employees and building culture.
- Minimizing the losses and reduced the cost.

6) STAFF

Good hard working citizen play essential role in the development of nation.

The employees are responsible for the successes are failure of company.

The company has totally 550 workers are working is the company. They are divided as follows

No. Of workers	
1) Permanent worker	280
2) Seasonal workers	101
3) Daily wage worker	169
<hr/>	
No. of workers	550

Company is playing salary of 60,00,000 per month to its workers.

7) SKILLS

Skills here refer to how the training will be given to the employees and employees.

The training will be given in 2 months they are

a) On the job

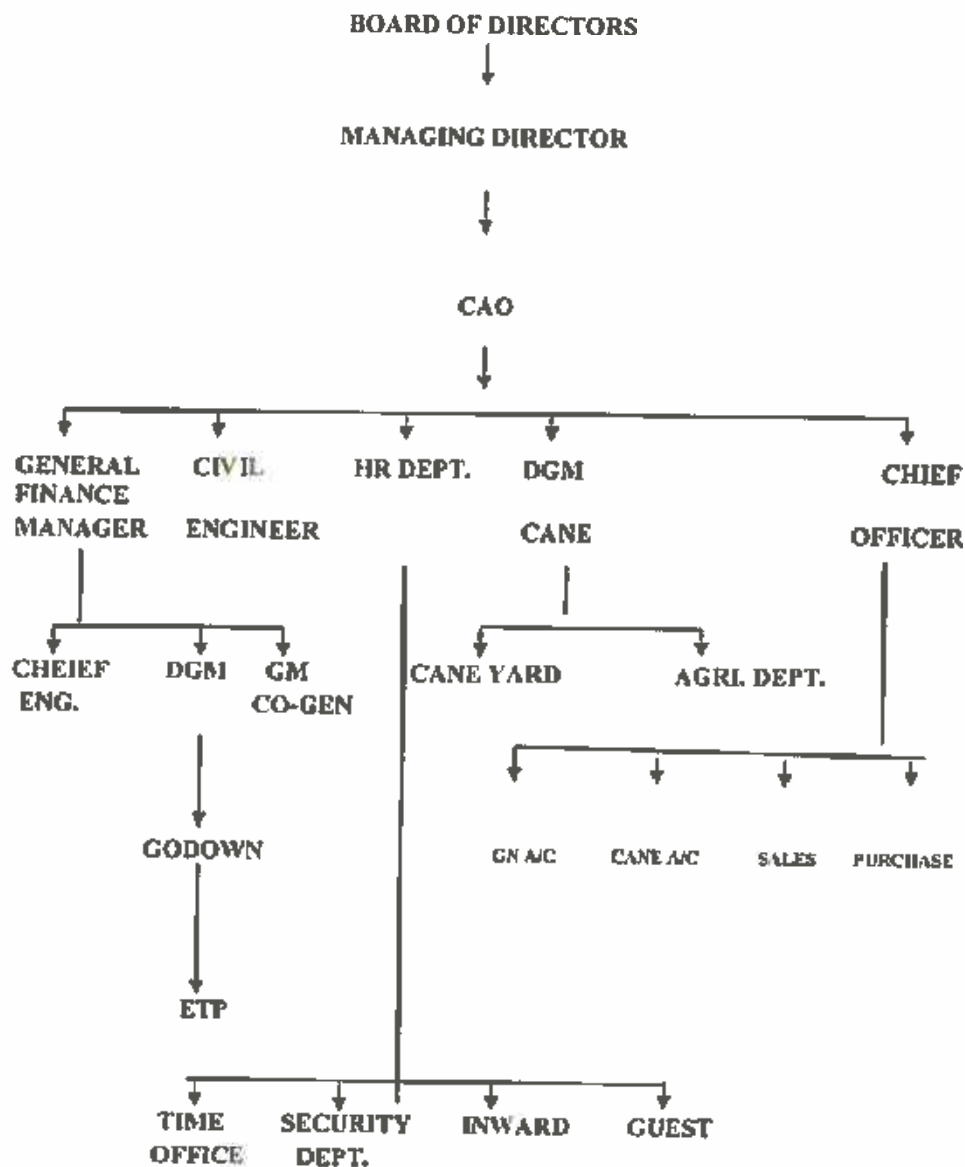
This is one of the oldest methods; the individual place is on the regular job and taught the skill necessary to perform that job on the job training has the advantage of given firsthand knowledge and experience under the actual working conditions. This training is given to employees.

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b) Off the job

In this methods trainee is separated from the job situations and his attention is focused upon learning the related to his future job performance. There is an opportunity for freedom of expression for the trainees.

ORGANISATION CHART



PRODUCT PROFILE

PROCUREMENT

The factory obtains the sugarcane, which is required from more than 1000 farmers and by the company farms and others raw materials which are required for the operation is taken from the vendor there vendors will be evaluated on basis of price and quality and then the required raw materials will be taken for the efficient vendors.

The transport of sugar cane from framers to the factory will be engaged throng lorries, which will be taken through bidding at time of harvesting, and also farmers themselves supply by their own bullock carts or by tractors.

CANE WEIGHMENT :

There are 12 outlaying weighbridges situated round about Raibag for delivering the sugarcane from the farmers. Double check has been provided over the weight of cane transported from out stations.

OPERATIONS :

The sugarcane, which is carried by Lorries or other, will be directly fed to the machine where the initial process starts. At the starting point these are knives which cuts sugar cane bunches into individual sugar cane.

After this in the next step there are sharp cutter, which cuts the sugarcane, bunches into very small pieces. Then it will go to trade marks (a series of rollers used for crushing purpose) for crushing. Then the juice produced will go for further processing and the Bagasse will be lift out their itself. Then they add flocculent (used for mud setting) milk sanitation etc and then after it will go through pans and mesquite for this masscult they will add sodium Hydro Sulphite (to bleach the mesquite) and it will be separated out and the molasses will be send to distillery and they white sugar will be bagged.

BY PRODUCTS OF SUGAR MANUFACTURER

The chief by products of sugar manufacturing are

Biogases

Biogas is the by-product of sugar left behind after cursing of sugar cane. It is used as a fuel in the sugar factory boiler. Excess Biogases finds use as raw materials in paper manufacturing industry.

Molasses

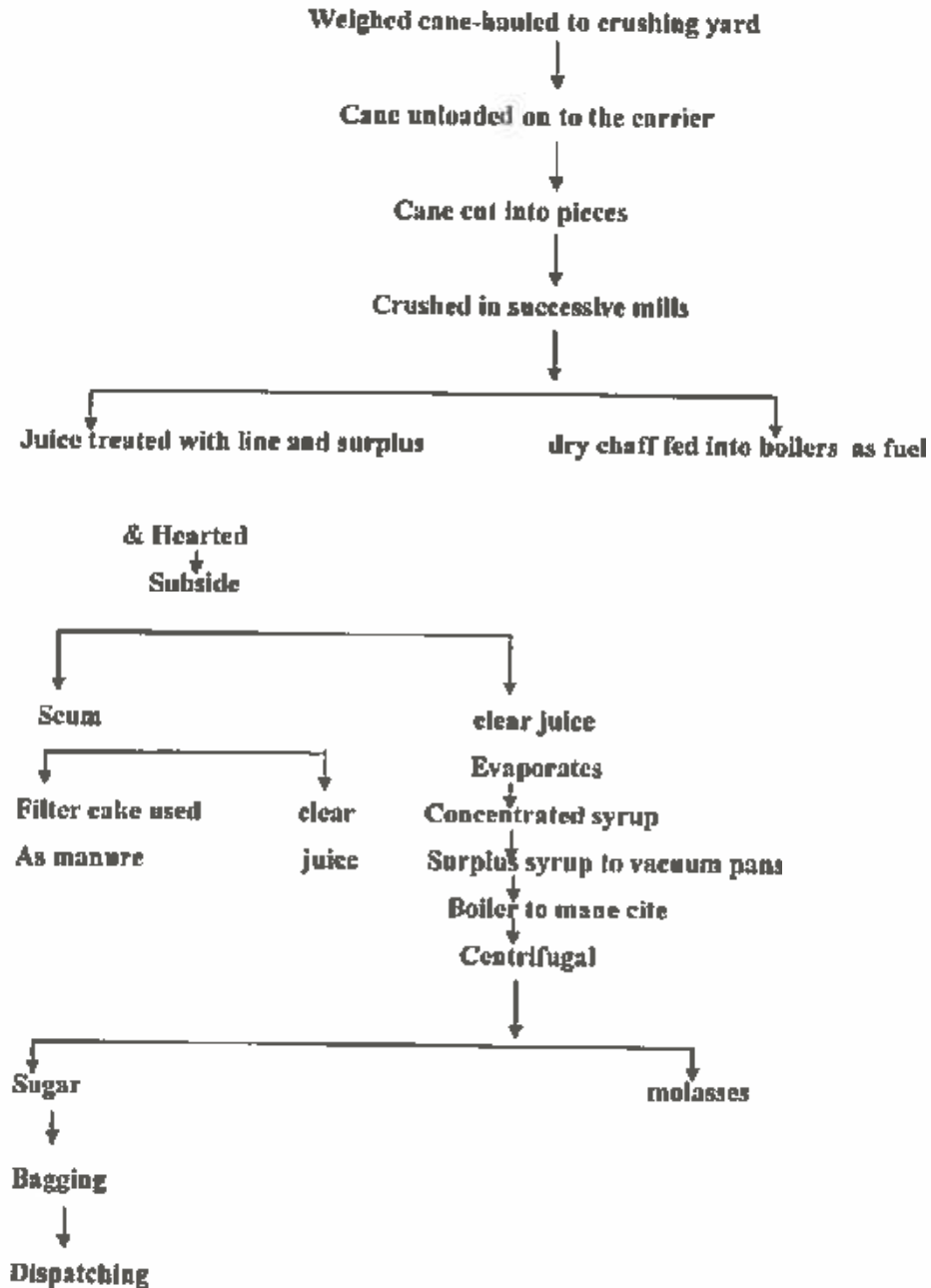
Molasses is a by product of sugar refining chiefly used for alcohol production. The entire molasses out put is routed to the distillers unit, which is maintained by the organization.

Press mud

Press mud is the by-product generated by cane juice filtration during sugar manufacture, currently, Press mud is used as a fertilizer in sugar cane cultivation.

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FLOW CHART OF SUGAR MANUFACTURING



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THE FOLLOWING STATEMENT SHOWING YEARLY SUGAR CANE CRUSHED, PRODUCTION AND AVERAGES.

Year	Crushed Sugar-cane (in Tones)	Production (in Quintals)	Average
2003-04	407550	305114	11.14
2004-05	469226	445883	11.05
2005-06	522048	890888	10.56
2006-07	468022	405786	11.56
2007-08	409158	34292	11.04
2008-09	405230	319326	12.52
2009-10	544627	444103	12.17
2010-11	657165	584600	10.83
2011-12	396649	335792	11.17
2012-13	638040	549762	11.58
2013-14	833457	738170	11.28
2014-15	890709	740086	12.01
2015-16	720041	614749	11.70
2016-17	734954	604005	11.80
2017-18	805047	660312	11.90
2018-19	421461	395310	10.20
2019-20	494488	534334	10.81

CHAPTER- 4

DATA ANALYSIS AND INTERPRETATION

- 4.1: shows Employees satisfaction with their job
- 4.2: shows Employees they receive appropriate recognition for their Contribution.
- 4.3: shows Employees they receive appropriate recognition for their Contribution.
- 4.4: Shows Employees attitude regarding facilities provided by the organization.
- 4.5: Shows the employees opinion about salary.
- 4.6 : Shows Number of employees to work in the company.
- 4.7: Shows the Number of employees thinking that the company cares their People.
- 4.8 Respondent's response about company is a strong competitor in key growth areas.
- 4.9 Respondent's response about the leaders in work environment are positive role models.
- 4.10 Respondent's response about the supervisors keeps them well informed about what's going on in the company.
- 4.11 Respondents response towards their view and participation are valued in the organization.
- 4.12 Employees satisfaction with the professionalism of the people with whom they work.
- 4.13 Respondent's satisfaction with the team spirit in their work .
- 4.14 Respondent's Response about the morale of the people with whom they work
- 4.15 respondent's opinion about overall job security.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

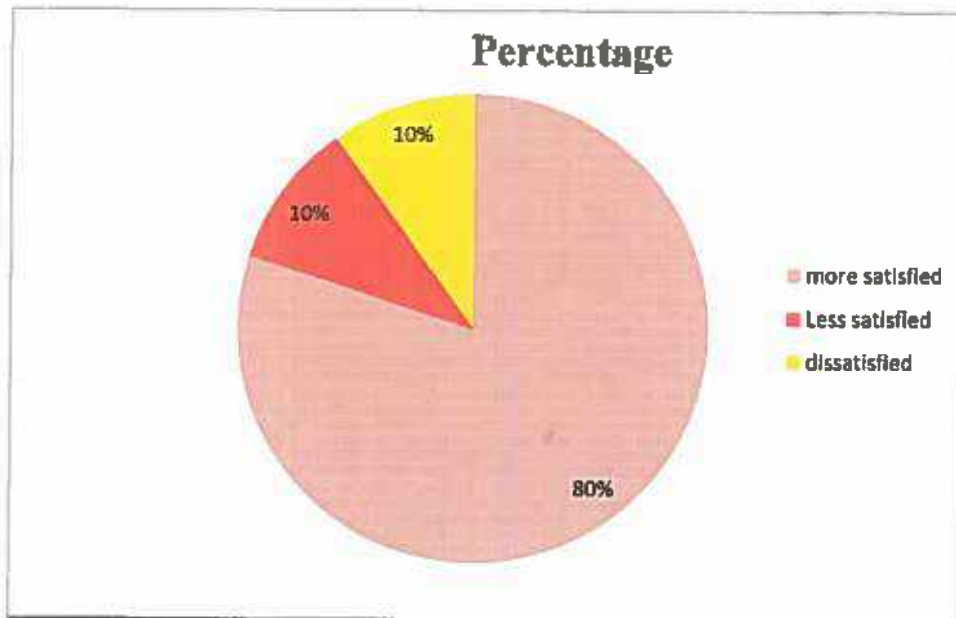


A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

TABLE 4.1 Shows employees satisfaction with their job.

Attributes	No. of respondents	Percentage
More satisfied	80	80%
Less satisfied	10	10%
Dissatisfied	10	10%

Source: Survey



INTERPRETATION:

The above table shows that out of 100 employees 80 say that they are satisfied with their jobs and 10 employees are less satisfied with their jobs. And remaining 10 of them say that they are dissatisfied with their jobs.

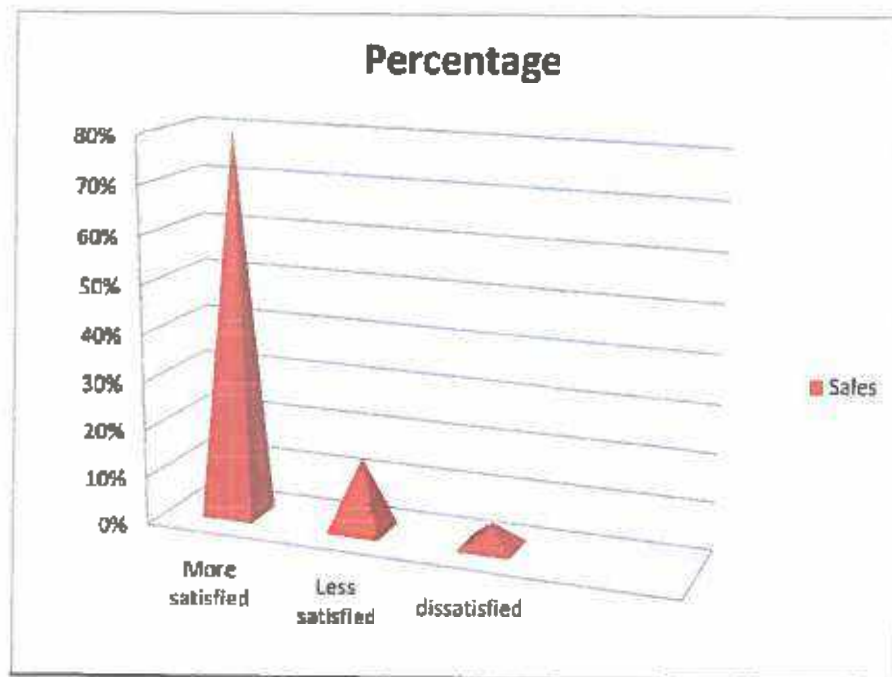
Here we can observe that majority of respondents are satisfied with their job.

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

TABLE 4.2 Shows employees they receive appropriate recognition for their contribution.

Attributes	No. of respondents	Percentage
More satisfied	80	80%
Less satisfied	15	15%
Dissatisfied	05	05%

Source: Survey



INTERPRETATION

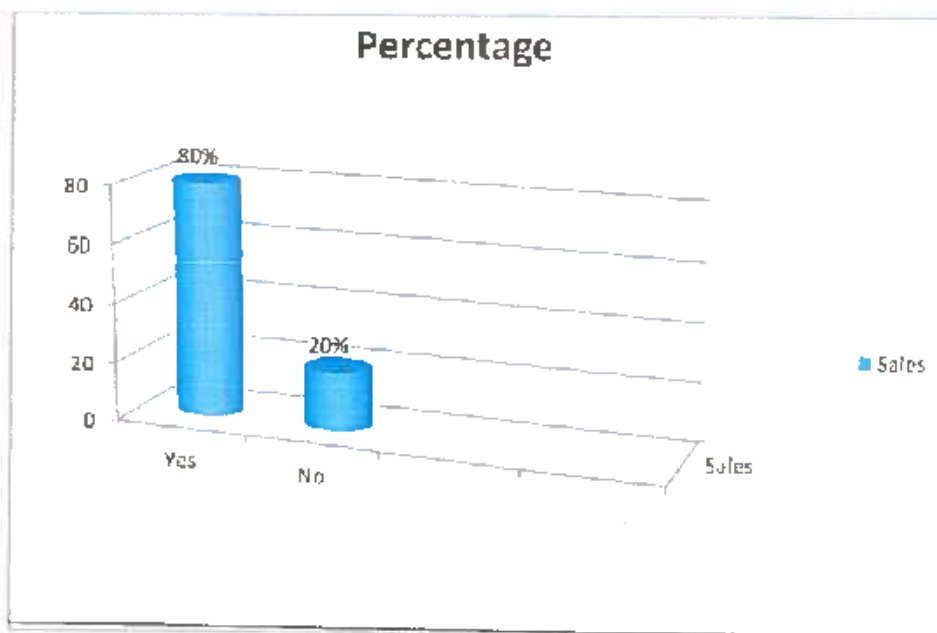
The above table represents that 80% of the employees say they receive a good recognition for their contribution and 15% of the employees less satisfied and 5% of the employees are dissatisfied.

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

TABLE 4.3 Shows employees they receive appropriate recognition for their contribution.

Opinion	Employees	Percentage
Yes	80	80%
No	20	20%

Source: Survey



INTERPRETATION

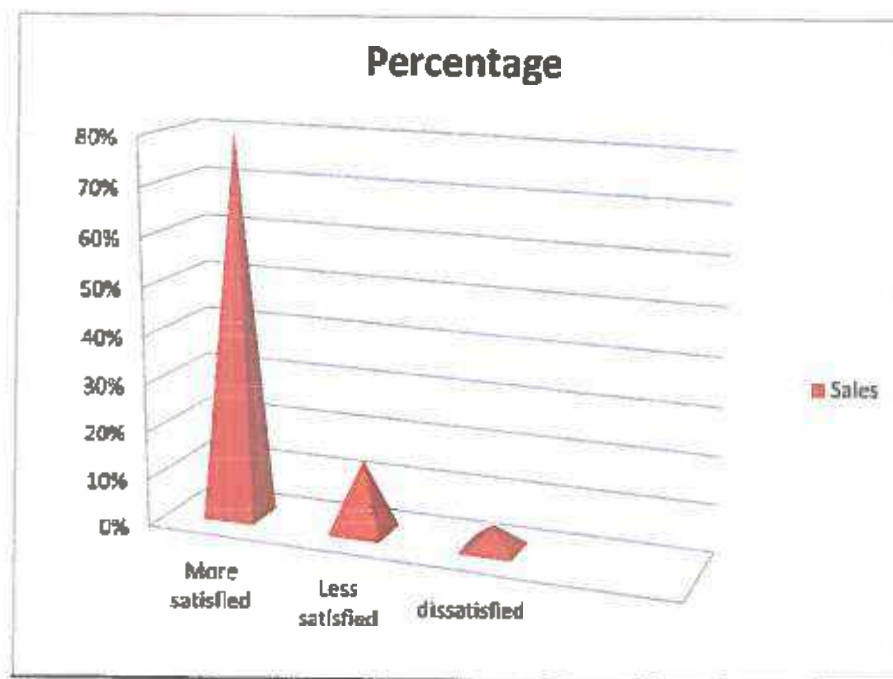
The above table shows that Out of 100 employees 80% of the employees are satisfied with facilities provided with the organization and 20% of the employees dissatisfied with statement. It shows that most of employees are satisfied with the regarding facilities in the industry.

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

TABLE 4.2 Shows employees they receive appropriate recognition for their contribution.

Attributes	No. of respondents	Percentage
More satisfied	80	80%
Less satisfied	15	15%
Dissatisfied	05	05%

Source: Survey



INTERPRETATION

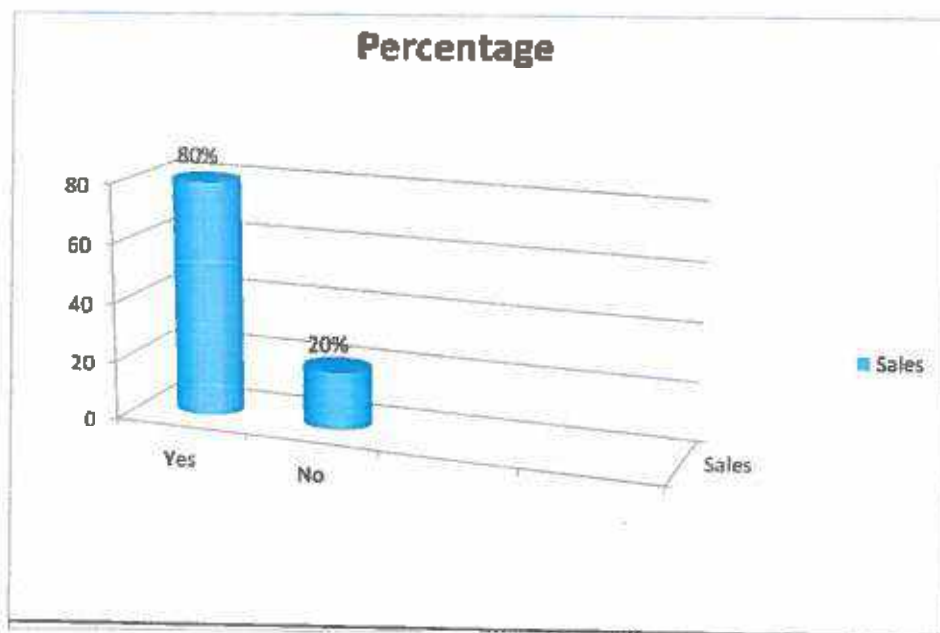
The above table represents that 80% of the employees say they receive a good recognition for their contribution and 15% of the employees less satisfied and 5% of the employees are dissatisfied.

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

TABLE 4.3 Shows employees they receive appropriate recognition for their contribution.

Opinion	Employees	Percentage
Yes	80	80%
No	20	20%

Source: Survey



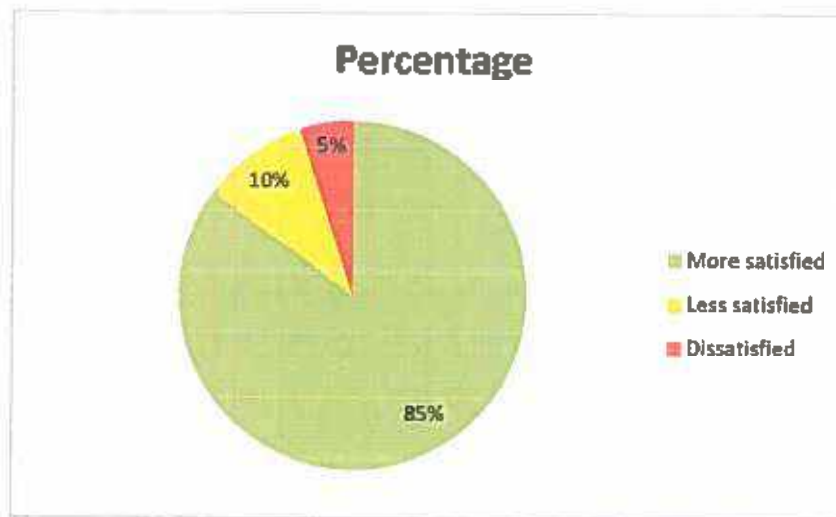
INTERPRETATION

The above table shows that Out of 100 employees 80% of the employees are satisfied with facilities provided with the organization and 20% of the employees dissatisfied with statement. It shows that most of employees are satisfied with the regarding facilities in the industry.

TABLE-4.4: Shows employees response regarding facilities provided by the organization.

Attributes	No. of respondents	Percentage
More Satisfied	85	85%
Less Satisfied	10	10%
Dissatisfied	05	05%

Source: Survey



INTERPRETATION

The above table shows that out of 100 employees 85 employees are more satisfied and 10 employees are less satisfied and remaining 5 employees are dissatisfied with the present working conditions and environment.

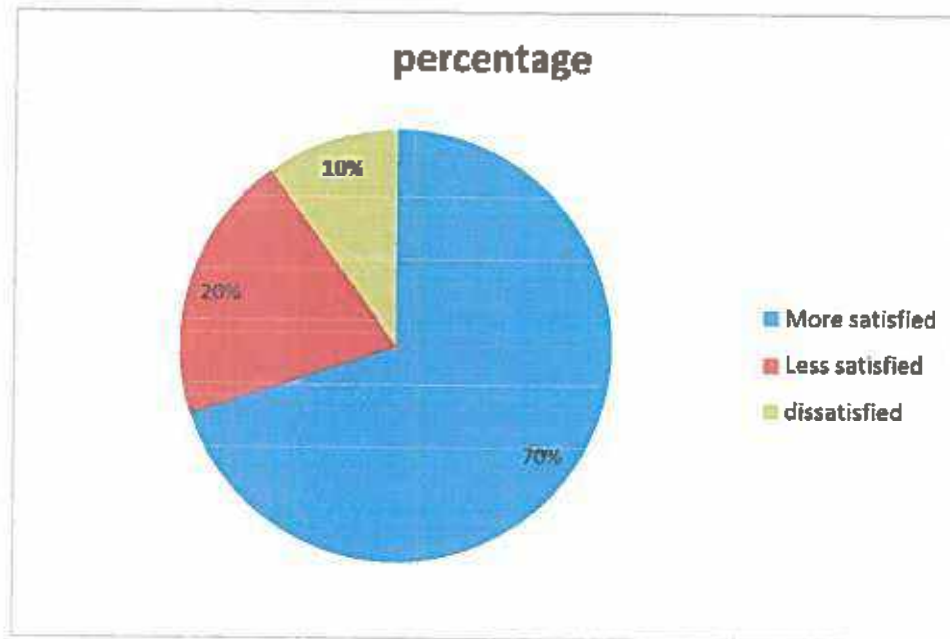
It shows that most of employees are satisfied with the facilities in the industry.

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

TABLE 4.5 Shows the employees opinion about salary.

Attributes	No. of respondents	Percentage
More Satisfied	70	70%
Less Satisfied	20	20%
Dissatisfied	10	10%

Source: Survey



INTERPRETATION

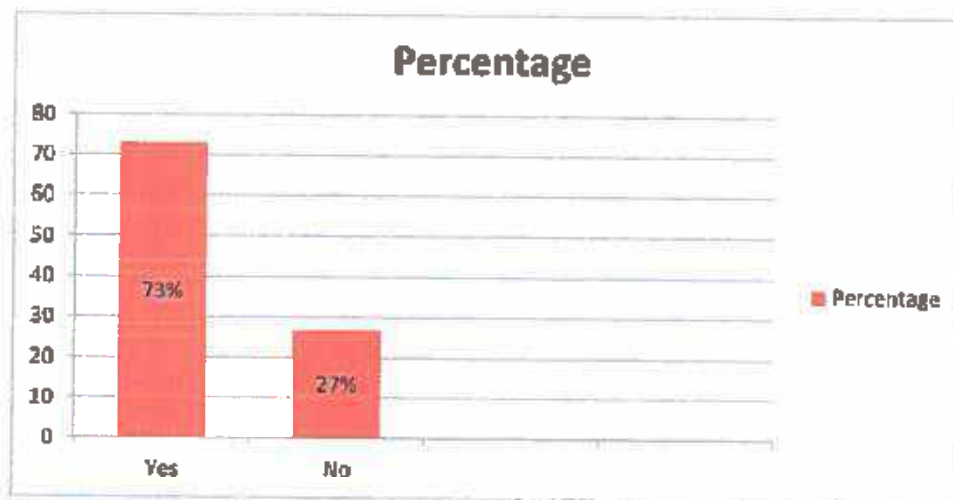
The above diagram shows the satisfaction of employees with their salary. Out of 100 employees 70 employees are more satisfied. And 20 employees are less satisfied and remaining 10 employees are dissatisfied with the salary provided by the company.

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

TABLE 4.6 Shows employees are proud to work in the company.

Attributes	Employees	Percentage
Yes	73	73%
No	27	27%

Source: Survey



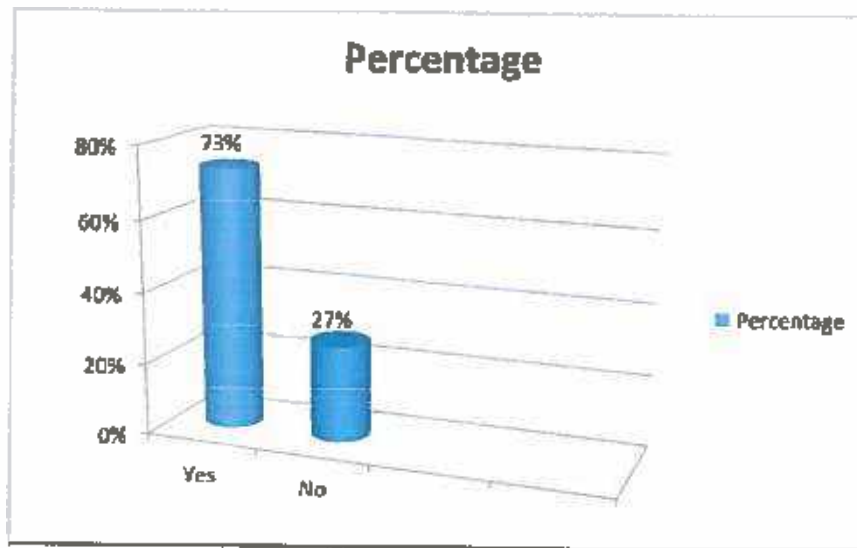
INTERPRETATION:

The above table shows that Among the 100 employees that I contacted 73% of the employees feel themselves proud of working the organization, and remaining 27% of them are not proud.

TABLE-4.7: Shows the company cares the Employees.

Attributes	No. of respondents	Percentage
Yes	71	71%
No	29	29%

Source: Survey



INTERPRETATION:

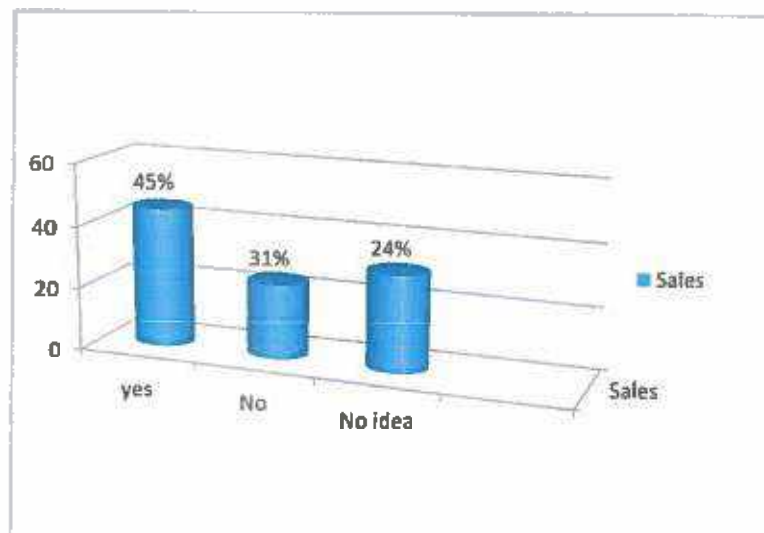
Every organization has to care its employees in all aspects. In this organization 71% of the employees say that the company cares them. But the other 29% of the employees feel that the company will not care them.

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd, Soundatti

TABLE 4.8 Shows respondent's response about company is a strong competitor in key growth areas.

Attributes	No. of respondents	Percentage
YES	45	45
No	24	24
No Idea	31	31
TOTAL	100	100

Source: survey



INTERPRETATION

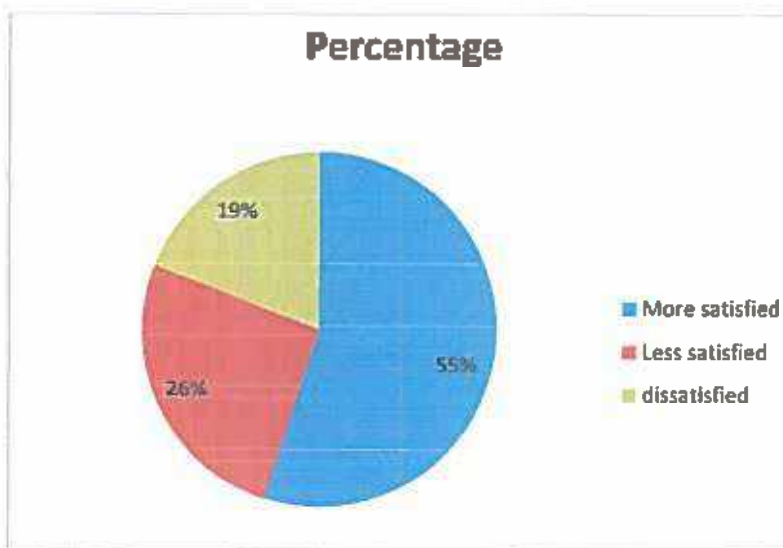
The above table represent that most of them say the company is a strong competitor in there field. Among the 100 employees surveyed 45 of them say Yes, 24 Say No, and the others say that they don't have any idea of the competitor prevailing the market.

Here we can observe that employees feeling that the company is a strong competitor in key growth areas.

TABLE 4.9 Shows respondent's response about the leaders in work environment are positive role models.

Attributes	No. of respondents	Percentage
More Satisfied	55	55%
Less Satisfied	26	26%
Dissatisfied	19	19%

Source: Survey



INTERPRETATION:

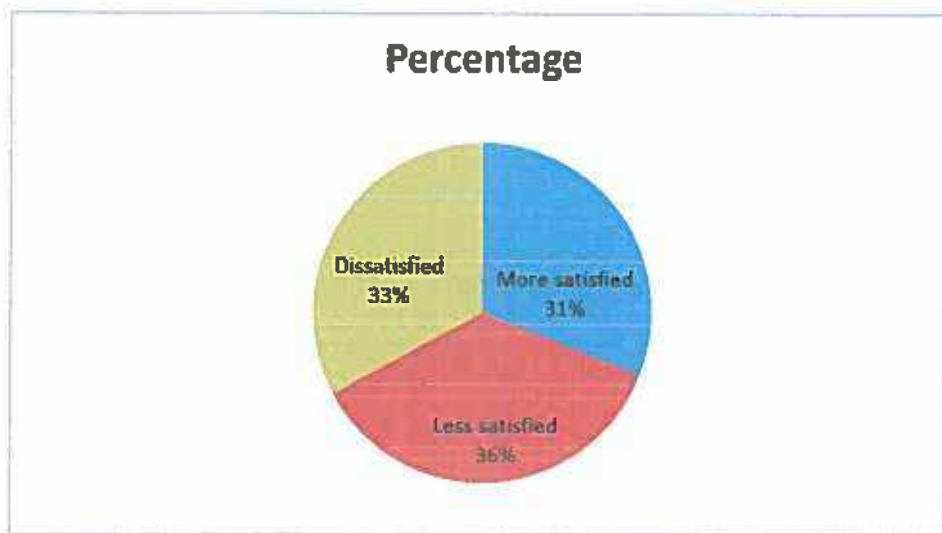
From the above table it shows that that 55% of them are more satisfied with their leader who works with them. 26% are less satisfied and 19% are dissatisfied.

Here we can observe that employees leaders in their work environment are positive role models.

TABLE 4.10 Shows respondent's response about the supervisors keeps them well informed about what's going on in the company.

Attributes	No. of respondents	Percentage
More satisfied	31	31%
Less satisfied	36	36%
Dissatisfied	33	33%

Source: Survey



INTERPRETATION

Among 100 employees 31 of them are more satisfied with the supervisors who give information about what happens in the company. 36 of them are less satisfied and 33 of them are not satisfied.

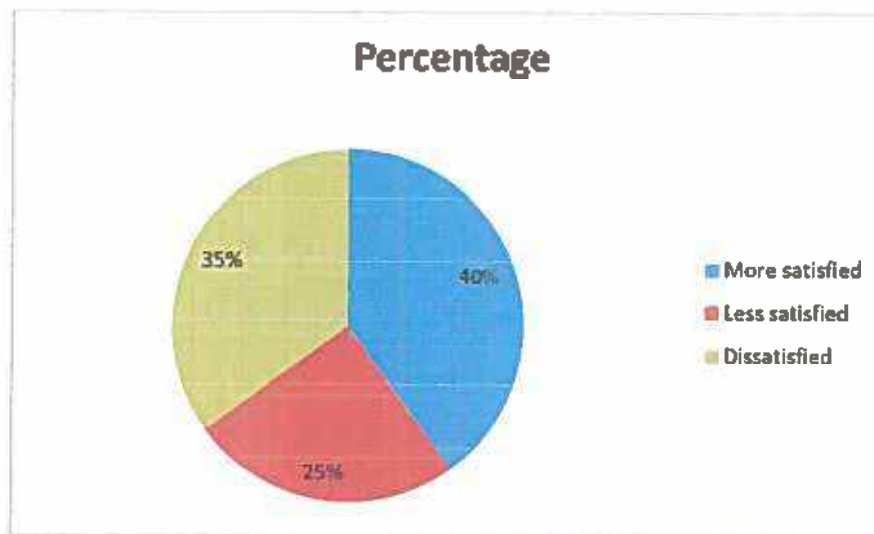
Here we can observe that their supervisors keep well informed about the happenings in the company to the employees.

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

Table 4.11 Shows respondents response towards their view and participation are valued in the organization.

Attributes	No. of respondents	Percentage
More satisfied	40	40%
Less satisfied	25	25%
Dissatisfied	35	35%

Source: Survey



INTERPRETATION

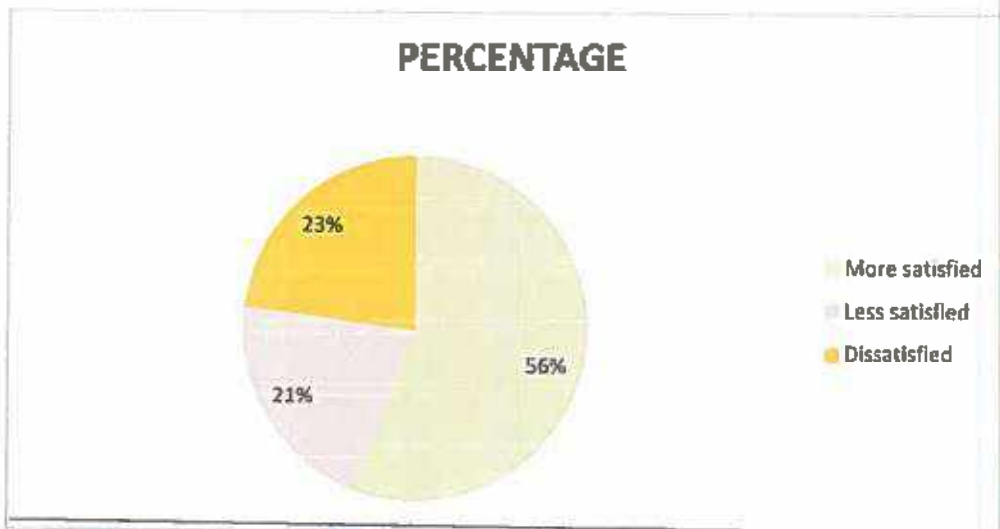
The above table shows that participation of each and every employee in organization is very important. The employees are motivated when their view and participation are valued. Among the 100 employees I surveyed 40 of them say they are more satisfied, 25 of them say that they are less satisfied, and 35 of them say they are dissatisfied. Here we can observe that Employees views and participation are Valued in the organisation.

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

TABLE 4.12 Shows employees satisfaction with the professionalism of the people with whom they work.

Attributes	No. of respondents	Percentage
More satisfied	56	56%
Less satisfied	21	21%
Dissatisfied	23	23%

Source: Survey



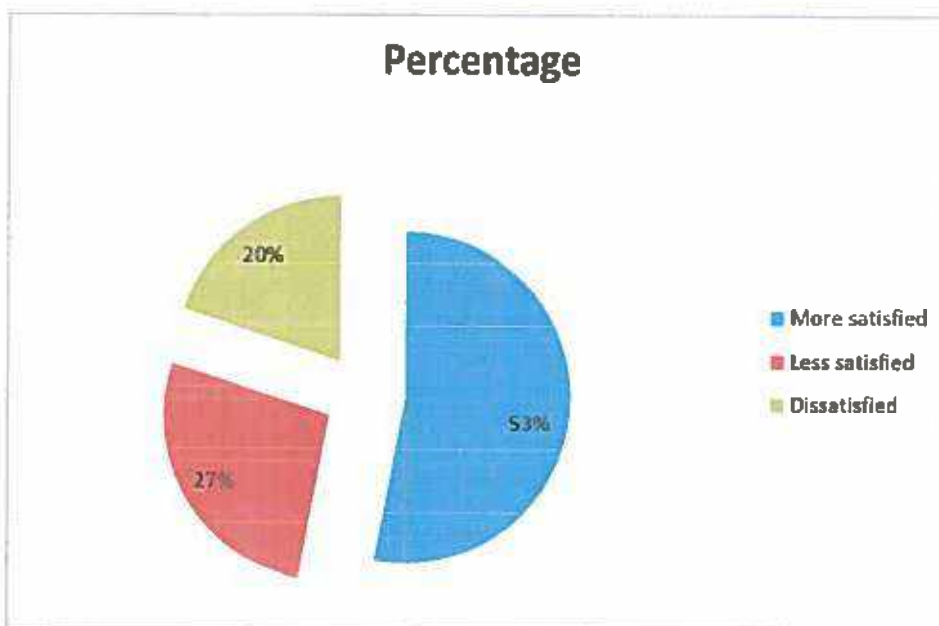
INTERPRETATION

The above table shows that 56% of the respondents say that they are satisfied And 21% of the respondents say that they are less satisfied and 23% of the respondents sat they are dissatisfied the professionalism of the people with whom they work.

TABLE 4.13: shows Respondent's satisfaction with the team spirit in their work .

Attributes	No. of respondents	Percentage
More satisfied	53	53%
Less satisfied	27	27%
Dissatisfied	20	20%

Source: Survey



INTERPRETATION

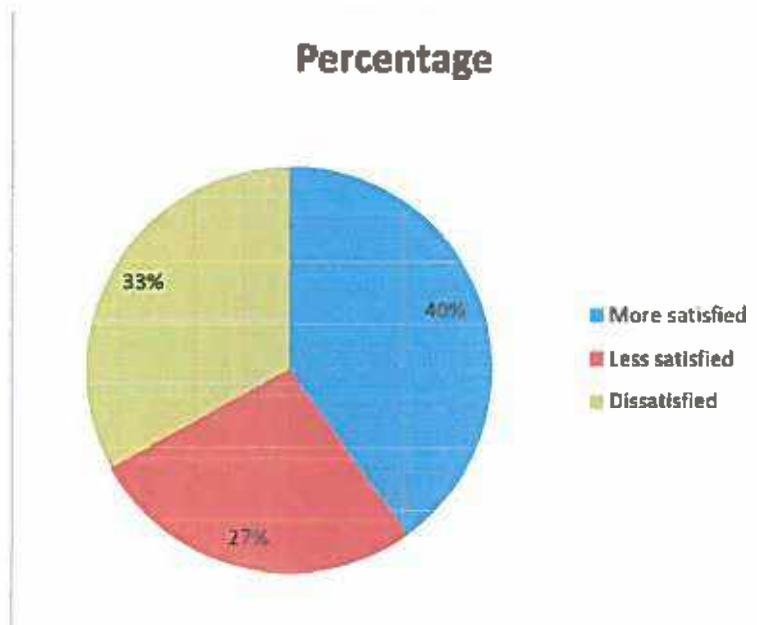
In the above table shows that we can see that 53% of the employees are more satisfied with the team spirit in the work environment. 27% are less satisfied and 20% are dissatisfied.

Here we can observe that increase in the team spirit in their work environment.

TABLE 4.14 Shows respondent's response about the morale of the people with whom they work

Attributes	No. of respondents	Percentage
More satisfied	40	40%
Less satisfied	27	27%
Dissatisfied	33	33%

Source: Survey



INTERPRETATION:

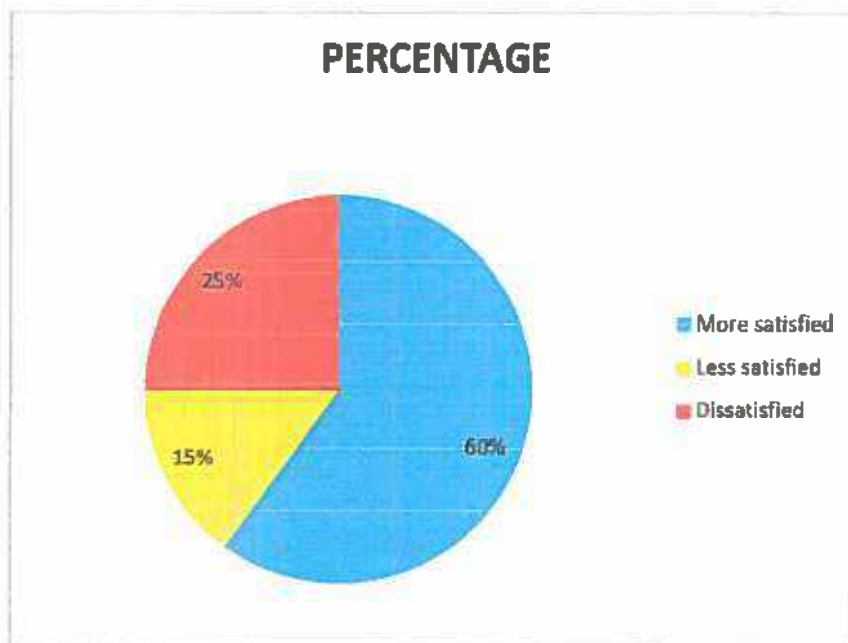
The above table shows that among the 100 employees surveyed 40 of the respondents say that they are more satisfied with the morale of the people with whom they work. 27 of them say are less satisfied, and 33 of the respondents say that they are dissatisfied.

Here we can observe Employees attitude towards the morale.

TABLE 4. 15: respondent's opinion about overall job security.

Attributes	No. of respondents	Percentage
More satisfied	60	60%
Less satisfied	15	15%
Dissatisfied	25	25%

Source: Survey



INTERPRETATION:

The table shows that out of 100 respondents 60% respondents are more satisfied with their overall job security. And 15% of the respondents are less. And 25% of the respondents are dissatisfied satisfied with their overall job security.

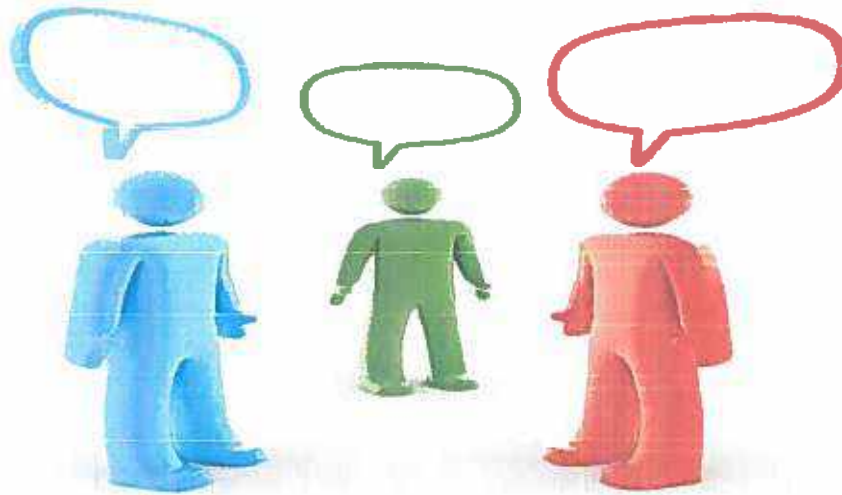
Here we can observe that employees are having job security in the industry.

CHAPTER-5
FINDINGS, SUGGESTIONS AND CONCLUSION

- 5.1 Findings**
- 5.2 Suggestions**
- 5.3 Conclusion**

CHAPTER-5

DATA ANALYSIS AND INTERPRETATION



5.1 FINDINGS:

- In the survey it was found that 80% of the respondents are satisfied With their Job
- It was found that 80% of the employees says they receive a good recognition for their contribution.

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

- In the survey it was found out of 100 employees, 80% of the respondent were satisfied with facilities provided by the company.
- In the survey it was found out of 100 employees 73% of the respondents are proud of working in the company.
- Maximum employees are satisfied with the present working conditions & environment.
- 70% of the respondents were more satisfied with the salary and 20% of them says that they are less satisfied. & 10% of respondent were dissatisfied.
- Most of respondents says that the company cares them. But some employees feel that the company do not care them.
- Among 100 employees surveyed 45 of them says yes and 24 says No, and other says that they don't have a any idea of the competitor prevailing in the market.
- Out of 100 employees 55% of them are more satisfied with their leader who works with them.

A Study on Employee Job Satisfaction At Shivshakti Sugars Ltd. Soundatti

- In the survey it was found that only 31% of the employees are more satisfied with that the supervisor keeps them well informed about what's going on in the company.
- 40% of the respondents say that their views and participation are valued.
- Most of the employees are more satisfied with the team spirit in the work environment.
- Most of the respondents say that they are more satisfied with the morale of the people with whom they work.
- Some of the employees are not satisfied towards the safety measure in the company.
- In the survey it was found that they are more satisfied with their overall security, Among the 100 respondents I have surveyed 60 of them are most satisfied.

5.2 Suggestions :

1. Evaluate and measure job satisfaction.
2. The company has to give appropriate recognition to the employees for their contribution
3. Whenever the company wants to make any changes in the industry consider the employees. The Views of the employees should be considered while making any changes.
4. The supervisors must inform all the employees about what's going on in the company.
5. I found that some of the employees are not satisfied with the facilities. So they should provide proper facilities to all the employees.
6. The company should improve the working conditions.
7. The company should focus on the employees' welfare and their conditions of working.

5.3 CONCLUSION:

The Objective of the study was the study about the "Employee job satisfaction" in SSL. The study helped in knowing how much the employees are satisfied in the work environment. The study is concluded with the view that, attitude of workers towards job is an important factors for future development of the company.

Shree SSL. is a company were more than 550 employees are working. The company is taking much of the care about the employees. Most of the employees feel themselves proud of working in such a big organization. The company has to inform all employees about these happenings that take place in the come.

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❖ Websites:

❖ www.Shodaganga.com

❖ www.wikipedia.com

ANNEXURE

QUESTIONNAIRE ON EMPLOYEE JOB SATISFACTION

Dear Sir / Madam

I am suvarna s patil Studying in M.COM 4th Sem at B.K COLLEGE is making a survey on employee job satisfaction at Shree Shivshakti Sugars Ltd Soundatti. I would appreciate if you convey your opinion on the different questions refer to this questionnaire.

I thank you for sparing your valuable time & co-operation.

Name of the employee:- _____

Department :- _____

Designation :- _____

Years of experience :- _____

1. How much satisfied are you with your job?

More satisfied

Less satisfied

Dissatisfied

2. How fare you are satisfied with the incentives provided by the organisation ?

More satisfied

Less satisfied

Dissatisfied

3. Are you satisfied with the facilities provided by the organization?

Yes

No

4. Are you satisfied with the present working conditions and environment?

More satisfied

less satisfied

Dissatisfied

5. Company provides satisfactory Salary according to the Work?

More satisfied

Less satisfied

Dissatisfied

6. Are you proud to work for the company?

Yes

No

7. Do you think the company cares about its people ?

Yes

No

8. Do you feel that the company is a strong competitor in key growth Areas?

Yes

No

No idea

9. How much satisfies are you with that the leaders in your work
Environments are positive role models?

More satisfied

Less satisfied

Dissatisfied

10. How much satisfied are you with that your supervisor keeps you well
Informed about what's going on in the company?

More satisfied

Less satisfied

Dissatisfied

11. How much satisfied are you with that your views and participation are
valued?

More satisfied

Less satisfied

Dissatisfi

12. Are you satisfied with the professionalism of the people with whom you work?

More satisfied

Less satisfied

Dissatisfied

13. How much satisfied are you with the teams spirit in your work?

More satisfied

Less satisfied

Dissatisfied

14. How much satisfied are you with the morale of the people with whom you work?

More satisfied

Less satisfied

Dissatisfied

15. How do you feel about your overall job security?

More Satisfied

Less Satisfied

Dissatisfied

Any other suggestions,

Signature

**K. L. E.SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON HUMAN RESOURCE POLICIES AND ITS
IMPLICATIONS"**

AT

NAG SHANTI RENAULT PRIVATE LTD BELAGAVI

Submitted to

RANI CHANNAMMA UNIVERSITY, BELAGAVI



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

**Miss. Triveni Desai
M.COM-IV SEMESTER
REGISTER NO: MC191625**

UNDER THE GUIDANCE OF

SHRI. V. S. KHOT

K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201
PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that Miss. Triveni Desai has satisfactorily completed the Project Report Entitled "A Study on Human resource policies and its implications" At Nag Shanti Renault private ltd. Belagavi for the partial fulfillment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year 2020-2021.

SHRI V. S. KHOT

PROJECT GUIDE

SHRI LAXMI ANTHA NAYAKA T O

CO-ORDINATOR

P.G. Department of Commerce
 B.K. College Chikodi

SHRI. UDAYSINGH RAJPUT

PRINCIPAL

K.L.E.S. Basavaprabhu Kore
 Arts, Science and Commerce College
 CHIKODI - 591 201





RENAULT
Passion for life

CERTIFICATE

This is to certify that Miss. TRIVENI APPASABA DESAI, M.com 4th Semester Register No: MC191625 student of BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE CHIKODI, she has completed her project work from 22 June 2021 To 13 August 2021 on the topic "HUMAN RESOURCE POLICIES AND ITS IMPLICATIONS" in our showroom. The project is of her own work and she has sincere during the period of her project work.

Place : Belagavi

Date : 15-08-2021

Sales Manager

(M.G.HIREMATH)



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Ph : 0836- 4252969 e-mail- Renault@nagshanti.co.in

DECLARATION

I declare that the project report entitled "A Study on Human Resource policies and its implications" At Nag shanti Renault private ltd. Belagavi is a record of independent research work carried out by me and submitted in partial fulfillment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. V. S. Khot, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 25/09/2021

Place: Chikodi

T. A. Desai

Miss. Triveni Desai

Register No: MC191625

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

I sincerely express my deep sense of gratitude and appreciation to Internal Guide **Shri. V. S. Khot**, for his careful and valuable guidance, never ending patience and constant encouragement throughout the project.

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I express my deep intelligence of appreciation to **Shri. Udaysingh Rajput**, Principal of our college for his valuable suggestions and encouragement.

I express my sincere gratitude to **Shri. M.G HIREMATH**, sales Manager, Nag shanti Renault private company ltd for providing me an opportunity to do a project in their organization.

At the outset, I would like to thank all the teaching faculty of PG Department of Commerce and Management for their valuable suggestions during project work.

My thanks are also to library staff for their cooperation during the course of project work and I am also thankful to Printers for their skillful printing of this project.

Finally I owe my deep sense of gratitude to my parents, friends and relatives for their constant encouragement and support.

Miss. Triveni Desai

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CHAPTER-1

INTRODUCTION AND RESEARCH DESIGN

- 1.1 Introduction**
- 1.2 Review of literature**
- 1.3 Statement of the problem**
- 1.4 Objectives of the study**
- 1.5 Scope of the study**
- 1.6 Need for the study**
- 1.7 Research methodology**
- 1.8 Limitations of the study**
- 1.9 Chapter scheme**

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

Human resource is the set of people who make up the work force of an organization, business sector, industry, or economy. A narrow concept is human capital, the knowledge and skill which the individuals command. Similar terms include manpower, labour, personnel, associates or simply people.

The human resources department of an organization performs human resource management, overseeing various aspects of employment, such as compliance with labor law and employment standards, interviewing, administration of employment benefits, organizing of employee files with the required documents for future reference, and some aspects of recruitment and employee offboarding. They serve as the link between an organization's management and its employees.

Human resource management used to be referred to as personnel administration. In the 1920s, personnel administration focused mostly on the aspects of hiring, evaluating and compensating employees.

According to an HR Magazine article, the first personnel management department started at the National Cash Register Co. in 1900. The owner, John Henry Patterson, organized a personnel department to deal with grievances, discharges and safety and information for supervisors on new laws and practices after several strikes and employees.

1.2 REVIEW OF LITERATURE

A. Austin (2018): Mentions "self-fulfillment," "Independence," and "work environment" as the main factors for manager's job satisfaction in Cyprus, according to Austin, good compensation, highly skilled subordinates, and possibilities for advancement all contribute to job satisfaction. Employers should focus on these three aspects, namely demographic characteristics, work independence, and work environment, in order to make the system operate smoothly and result in job

B. Nir (2012): There are two components to pleasure that are most important. Achieved status and respect are two characteristics that have a significant impact on employee satisfaction. As a factor, self-efficacy is beneficial since it fosters individual self-realization. Workers are pleased both intrinsically and extrinsically when a company values their contribution and cares about their well-being.

C. Beaumont (2012): In this article, the task satisfaction level of the general unit is highlighted in the United States, where there is a detailed work relationship in the United States than in the United Kingdom. Within the study, he discovered that in the United States, there is a positive relationship between job satisfaction and age, whereas in the United Kingdom, it is significantly low.

D. Partridge (2010): He looked at the work satisfaction levels of females in the king demand discovered that they were higher than black men's, despite the fact that they often had low expectations from their employment.

E. Saari & Judge (2009): The impact of worker attitudes on job satisfaction was discussed. The worker's viewpoint is expanded to the task; if someone has a feeling for the task, their satisfaction level will rise, boosting the organization's overall performance.

F. Witte (2006): concentrated on the cluster variations side in job satisfaction. The swot was done on the financial division in Europe an nation.

G. Hawley (2003): Discusses on the job satisfaction level and factors influencing their level of satisfaction. Employees are be found to be happy with their job and therefore the factors that cause their job satisfaction were educational proficiency, race ,socio economic standing,

H. Antvor (2002): Discusses the impact of national culture on national work satisfaction and, at the same time, the impact of national culture on other job-related factors assessments. They claim that, while there was cultural effect on national work satisfaction, not all characteristics of job satisfaction were culturally distinctive.

I. Omey (2000): Despite the fact that there is a link, he also claims that there is no relationship: better educated employees are consistently happier than lower educated employees, owing to the fact that higher educated people have higher-quality jobs. Because of the psychological benefits of a successful work, he selects less educated people, who may have a greater degree of job satisfaction. The quality of employment available to employees varies depending on their academic level, resulting in a wide range of job satisfaction.

J. Tietjen & Myers (1999): Job Satisfaction is often most once associate worker is glad with the work that is appointed to him. A well provided with workplace and also the warmth of the occupation surroundings doesn't facilitate a lot of wherever because the base duty assigned within the job and also the intrinsic connected feelings of a private creates a positive angle in him concerning the task. pay, perk continually does not result in job satisfaction it's the inherent view of a private that results in job satisfaction.

K. Mc Dermid (1994): workaholics' duty fulfillment was investigated. He aforesaid their area unit six variables of compulsive patterns i.e., workaholics, glowing workaholics, workglowing and undecieved staff.

1.3 STATEMENT OF THE PROBLEM

The problem selected for the study is "To analyze the HR policies and its implications of employees at Nag shanti private ltd."

This topic is selected to analyze the HR policies and its implication pattern with reference to Nag shanti Renault pvt ltd belagavi. That has shows how HR policies and its implications pattern of employees

1.4 OBJECTIVES OF THE STUDY

1. To assess the job satisfaction of the employees Nag shanti Renault Motors Belagavi.
2. To assess the satisfaction level on Work Environment and Conditions.
3. To identify their relationship with the Employees and Co-Workers.
4. To Know the Level of Grievance Handling Procedure in Renault Motors.
5. To incorporate the amendments in the base policy and prepare final policy.
6. To design a HR Policy manual for the company with special emphasis on the Managerial Service Conditions.

1.5 SCOPE OF THE STUDY

The present study limited to Nag shanti Renault private ltd covers a study on Human Resource policies and its implications.

1.6 NEED FOR THE STUDY

The study of Human resource policies and its implications patten of employees is the most important for company. HR department as they can understand the expectation of the employees. It helps to understand what makes a employees to work effectively. It is important to assess the kind of Human resource policies liked by employees so that they can work effectively.

1.7 RESEARCH METHODOLOGY

Methodology is the systematic approach to the given problem. In other words, it is the way in which we go for the collection of data. Therefore, the better way of collecting data is more important than the data collected, because ultimately the data collected is depend upon how we approach the data. The data has been collected in the following ways.

Tools for data collection:

The tools for data collection are divided into two parts i.e

- Primary Data
- Secondary Data

Primary data:

It is the actual data collected by research for self source of primary data

A Study on Human Resource Policies And Its Implications – Nag Shanti Renault Pvt Ltd

- Discussion
- Questionnaires

Secondary data:

Secondary data is data which was already collected by someone else and which is used for the study purpose.

- Secondary data includes books, journals, newsletters of Nag shanti pvt ltd and internet.

Sample design:

Sampling design is a design, or working plan, that specifies the population frame, sample size, sample selection and estimation method in detail. Objective of the sampling design is to know the characteristics of population.

Population:

Target population for the project is employee's of nag shanti Renault pvt ltd

Sample Size:

The sample size is taken for the study at nag shanti Renault pvt ltd is a 25

Sampling Method:

Simple random sampling

1.8 LIMITATIONS OF THE STUDY

It is not possible for any market study to make it accurate due to many hurdles in the collection and computation of data. Some limitations of the study are listed below:

- 1) The sampling frame to conduct the study has been restricted to Nagshanti Renault pvt ltd
- 2) Respondents show reluctance towards giving correct information.
- 3) Time was a major constraint.
- 4) The text size with irregular examining 25 individual was taken.
- 5) The study is limited to the employees of production department only.

1.9 CHAPTER SCHEME

Chapter 1 Introduction and Research Design

It deals with Introduction of the study, Statement of the problem, Objectives of the study, Research methodology and Limitations of the study.

Chapter 2 Conceptual Framework

It deals with introduction, Meaning of the Human resource, Definition of the Human resources, Factor influencing on Human resource pattern, Area of operation.

Chapter 3 Company Profile

It deals with profile of the company, History of the company, objectives, Organizational structure and SWOT analysis

.Chapter 4 Data Analysis and Interpretation

It deals with analysis and interpretation of collected.

Chapter 5 Findings, Suggestions and Conclusion

It deals with findings, suggestion and conclusion of the study.

CHAPTER-2

CONCEPTUAL FRAEWORK

- 2.1 Introduction**
- 2.2 Importance of human resource policy**
- 2.3 Advantages of human resource policy**
- 2.4 Disadvantages of human resource policy**
- 2.5 Functions of human resource policy**
- 2.6 Essential of human resource policy**
- 2.7 Implications of human resource policy**
- 2.8 Facilities of human resource policy**
- 2.9 Value and statement**
- 2.10 Research and Development**
- 2.11 Scope of human resource management**
- 2.12 Objective of human resource management**
- 2.13 Job analysis and job description**

CONCEPTUAL FRAMEWORK

2.1 Introduction

Human resource policy is the formula rules and guidelines that businesses put in place to hire, train, assess, and reward the members of their workforce. Having policies written is important so that it is clear to all what the policies are and that they are applied consistently and fairly across the organization. The most value resource an organization has is its human capital. HR policies, procedures and practices establish a frame work to help to manage people. Human resource development includes such opportunities as employee training, employee career development, performance management and development, coaching, mentoring, succession, planning, key employee identification. various type of organizations, the employees as well as the employers need to carry out their job duties in accordance to policies and practices. Human resource management is the strategic approach is the efficient management of people in company or organization such that help their business gain a competitive advantage.

Human Resource means:

“Human resource is the division of a business that is charged with findings, screening, as well as administering employee benefit programs.”

Human resource Development meaning:

“Human resource development is the frame work for helping employees develop their personal and organization skills, knowledge , and abilities.”

Human resource policy means:

“Human resource policies are continuing guidelines on the approach of which an organization intends to adopt managing its people.”

Human resource implication means:

“Human resource planning and implication in an ongoing process involving the development and implication of policies and procedures that lead to a comprehensive human resource strategy.”

2.2 IMPORTANCE OF HUMAN RESOURCE POLICY

1. **Thoughts of Management:** Every organization should have human resource policies as they ensure the company benefits. The listed or general implemented policies typically include how and when workers and staff are paid.
2. **Consistent Treatment:** Established human resource policies ensure consistent treatment of all human resources through the organization. Therefore favoritism and discrimination are minimized.
3. **Continuity of Action:** Continuity of action is assured even though top management human resource change. The manager of a company may possess a very sound human resource management philosophy.
4. **Standard of performance:** Human resource policies serve as a standard of performance. Actual result can be compared with the policy to determine how well the members of the organization are living up to the professed intentions.
5. **Employee motivation:** Sound human resource policies help build employee motivation and loyalty. This is especially true where the policies reflect established principles of fair help people grow within the organization.
6. **Resolving Conflict:** Sound human resource policies help resolve interpersonal, and intergroup conflicts.

2.3 ADVANTAGES OF HUMAN RESOURCE POLICY

1. **Recruitment and Employment:** Advertising for and hiring employees is a core HR function. Human resource policies that include what goes into the recruitment and selection process inform employees of the company's expectations and procedures.
2. **Rehires and promotion:** Human resource policies explain the company's stance on rehires and promotions. This includes the ground for rehiring a terminated worker and the process for moving up in the company.
3. **Compensation and Evaluations:** Human resource staffers use a combination of job analysis techniques and market surveys to determine the amount to compensate an employee while remaining competitive within the workforce.
4. **Training and Development:** HR policies include provisions for training and professional development so employees know the resources that are available to them.
5. **Employee Issue:** HR policies inform employees about how to handle problems at work, Whether the issue involves coworkers, management or the work itself, employees want to know that they have some they can share their concern with in private.

2.4 DIS ADVANTAGES OF HUMAN RESOURCE POLICY

1. **Recent origin:** So it lacks universally approved academic base. Different people try to define the term differently. Some thinkers consider it as a new name to personnel management.
2. **Lack of support of top management:** HRM should have the support of top level management. The change in attitude at the top can bring good results while implementing HRM.
3. **Improper Actualization:** HRM should be implemented by assessing the training and development requirements of employees. HRM is actuated half heartedly.
4. **Inadequate Development programmers:** HRM needs implementation of programmes such as career planning, on the job training, development programmes, MBO, counseling etc. a need to create an atmosphere of learning in the organization.
5. **Inadequate Information:** Some enterprise do not have requisite information about their employees. In the absence adequate information and data base, this system cannot be properly implemented.

2.5 FUNCTIONS OF HUMAN RESOURCE POLICY

1. Providing clear communication between an organization and it employees regarding HRM.
2. Forming a basis for treating all employees fairly and equally.
3. Setting and managing employee expectation.
4. Establishing guidelines for developing the employee hand book.
5. Communicating the organization goal and values.
6. Creating a basis for regularly reviewing possible change that affect employees.
7. Creating a common and healthy working environment.
8. Giving a clear picture of career growth in the organization.

2.6 ESSENTIAL OF HUMAN RESOURCE POLICY

1. At – will Employment policy.
2. Anti – Harassment and non discrimination policy.
3. Sexual Harassment policy.
4. Employment classification policy.

5. Leave and time off benefits policy.
6. Meal and Break period policy.
7. Timekeeping and pay policy.
8. Safety and healthy policy.
9. Employee conduct, attendance and punctuality policy.

2.7 IMPLICATIONS OF HUMAN RESOURCE POLICY

1. Recruitment and selection: Policies regarding recruitment and selection are the frame work for making decisions in the hiring process.

2. Training and Development: The organization and its workforce benefit from training and development policies. Human resources departments staffed with training experts often have policies.

3. Workplace safety: The implications of workplace safety policies cannot be overstated. Employees are comfortable with company policies based in part on federal and state regulations.

4. Performance management: Company leaders are responsible for providing employees with the necessary tools and information to help them understand the company's performance expectation.

5. Implication: Developing and implementing human resource policies are essential HR responsibility. The importance of human resource policy development cannot be overlooked.

2.8 FACILITIESE OF HUMAN RESOURCE POLICY

- Nag-shanti Renault engines has a decent foundation office.
- Electricityofficeis24hours
- Good working staff.
- Location of showroom effectively accessible.
- Dedicated vehicle washing office.
- Computerized hard ware ability.
- Waiting lounge office.
- Showroom is very much outfitted.

2.9 VALUE AND STATEMENT

- Integrity** : We are open, ethical, transparent & uncompromising in our work.
- Team spríte** : we encourage group interaction and working together, united and
Collective drive achieves the desired goal.
- Commitment** : We keep all promises made within and outside the company.
- .Excellent** : We are a role model and benchmark company for our products and
business process.
- Caring** : We are concerned for our environment, society and employees and
Work for their betterment.
- Innovation** : We nurture creativity and encourage application of knowledge and
Idea in all facts of our business.
- Customer** : Customer is uppermost in our mind.
- .Orientation** : We work to exceed his expectation.

2.10 Research and development

R&D is the key to survival and growth, given that a fast paced global environment results in ever changing customer needs and new products and processes drain away competitiveness.

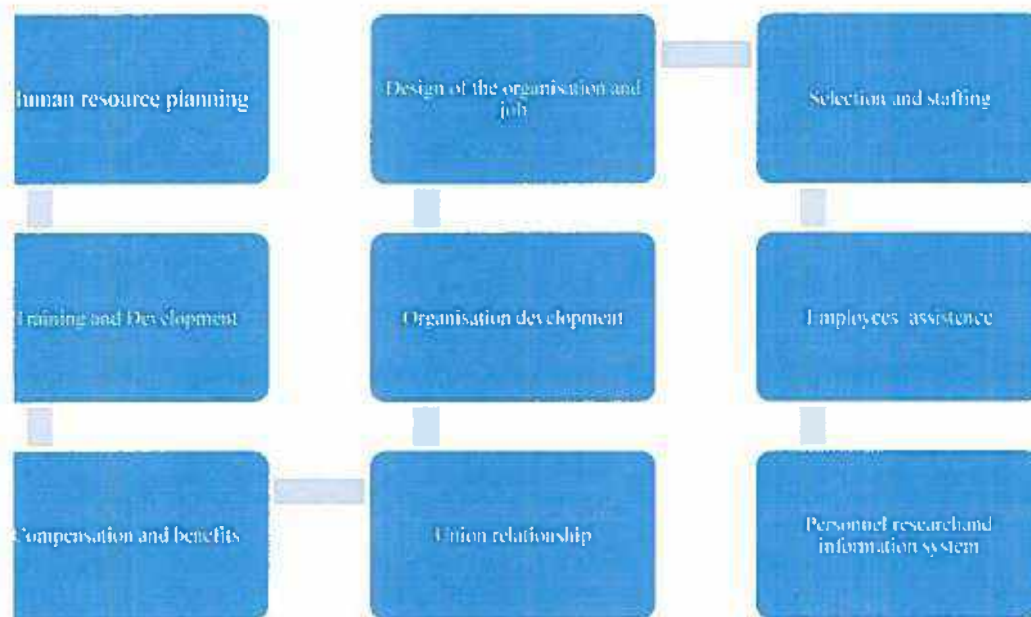
Approved by the Government of India., Dept . of Science & Technology,
thecentreisprimarilyengagedinresearchandprocessdevelopmentfornewproducts as well as
optimization of the manufacturing processes for
existingproducts.Thepilotplantofthecompanyensuresolutionsforextremelydemandingcustomers.

Ateamofover30persons,includingPhDsandChemical Engineers are supported by a technical
services group of Chemists / Chemical Engineers at them an factoring divisions.

2.11 SCOPE OF HUMAN RESOURCE MANAGEMENT

1. Human resource planning
2. Design of the organization and job
3. Selection and staffing
4. Training and development
5. Organization Development

6. Compensation and benefits
7. Employee assistance
8. Union or labour Relations
9. Personnel research and information system



12 OBJECTIVES OF HUMAN RESOURCE MANAGEMENT

Human capital: Assisting the organization in obtaining the right number and types of ployees to fulfill its strategic and operational goals.

Helping to establish and maintain a harmonious employer/ employee relationship.

Helping to maintain performance standards and increase productivity through effective job sign.

Providing adequate orientation, training, and development.

Providing performance related feedback, and ensuring effective two way communication,

Helping to create and maintain a safe and healthy work environment.

To develop and maintain the quality of work life.

To help maintain ethical policies and behavior.

o communicate HR police to all employees.

To increase employees satisfaction and self actualization.

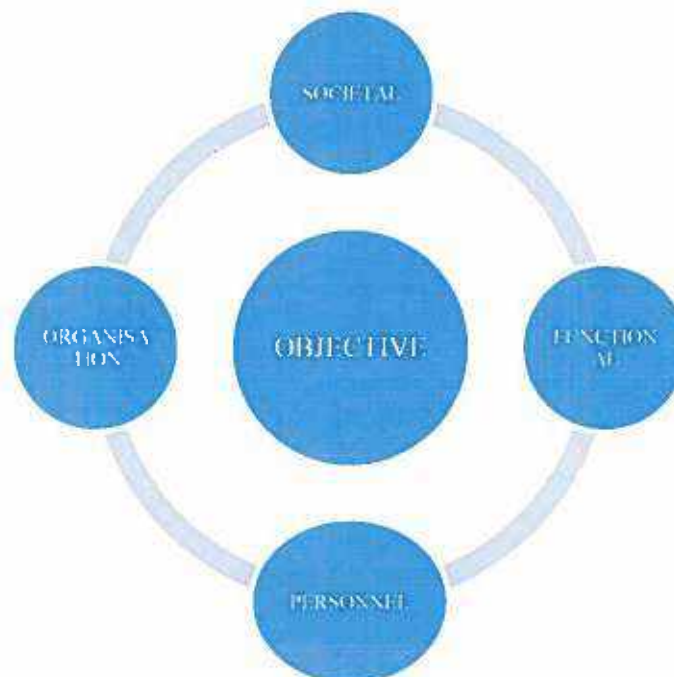
To providing organization with well trained and well motivated employees.

Developing programs to meet the economic, psychological, and social need of the emp
helping the organization to retain the productive employees.

Developing organization climate: helping to create a climate in which employees are
uraged to develop and utilize their skill to full fill and to employ the skill and abilities
kforce efficient.

Ensuring that the organization is in compliance with provincial/ territorial and federal l
cting the workplace.

above stated HRM objective can be summarized under four specific objectives: S
nizational, and functional and personnel.



• **SOCIETAL OBJECTIVE:**

to ensure that the organization become socially responsible to the needs and challenges of society while minimizing the negative impact of such demand upon the organization.

• **ORGANIZATION OBJECTIVE:**

to recognize the role of HRM in bringing about organizational effectiveness. It make sure that HRM is not a standalone department, but rather a means to assist the organization with its primary objective.

• **FUNCTIONAL OBJECTIVE:**

to maintain the department contribution at a level of appropriate to the organization need. Human resource are to be adjusted to suit the organization demand. The departments value should not become too expensive at the cost of the organization in service.

• **PERSONNEL OBJECTIVE:**

to assist employees in achieving their personal goal, at least as far as these goal enhance the individual contribution to the organization. Personal objective of employees must be met if they are to be maintained, retained and motivated.

TABLE: HRM OBJECTIVE AND FUNCTIONS

NO	HRM OBJECTIVE	SUPPORTIVE FUNCTION
	Societal objective	Legal compliance benefit Union management relations
	Organizational objective	Human resource planning Training and development Appraisal
	Functional objective	Appraisal Placement Assessment
	Personal objective	Training and development Compensation Assessment

CURRENT CLASSIFICATION OF HR ROLES

According to R.L Mathis J.H Jackson (2010) several roles can be fulfilled by HR management. The nature and extent of these roles depend on both what upper management wants management to do and what competencies the hr staff have demonstrated. Three roles are typically identified for HR. The focus of each of them, as shown in figure 1 is elaborated below:



- **ADMINISTRATIVE ROLE OF HR:**

The administrative role of hr management has been heavily oriented to administrative and recordkeeping including essential legal paperwork and policy implications. Major change have opened in the administrative role of HR during the recent year.

- **OPERATIONAL ROLE OF HR:**

HR manager manage most HR activities in line with the strategies and operations that have been identified by management and serves as employee “ champion” for employees issues and concerns.

- **STRATEGIC ROLE OF HR:**

The administrative role traditionally has been the dominated role for HR. However as figure indicates that a broader transformation in HR is needed so that significantly less HR time and fewer HR staffs are used just for clerical work.

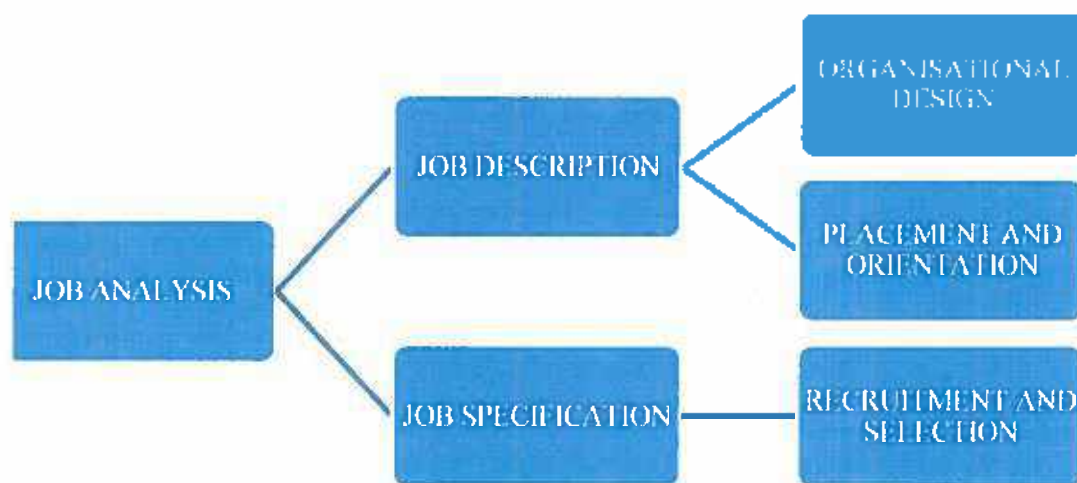
3 JOB ANALYSIS AND JOB DESCRIPTION

JOB ANALYSIS MEANING:

According to Michael, Jones:

“Job analysis refers to the process of studying the operations, duties and organizational aspects of jobs in order to derive specifications or as they called by some, job descriptions.”

USES OF JOB ANALYSIS



- **ORGANISATIONAL DESIGN:**

Job analysis will be used in classifying the jobs and the interrelationships among the jobs. On the basis of information obtained through job analysis, sound decisions regarding hierarchizing positions and functional difference of the work can be taken and it will improve operational efficiency.

- **PLACEMENT AND ORIENTATION:**

Job analysis helps in matching the job requirement with the abilities, interests and aptitudes of people. Jobs will be assigned to persons on the basis of suitability for the job. The orientation programme will help the employee in learning the activities and understanding duties that results in checking reference

- **RECRUITMENT AND SELECTION:**

Job analysis provides you with information on what the job entails and what human requirements are required to carry out these activities. This information is the basis on which you decide what sort of people to recruit and hire.

JOB DESCRIPTION:

Job description meaning:

According to Pigors and Myers:

“Job description is a pertinent picture of the organizational relationship, responsibilities and specific job duties that constitutes a given job or positions.”

According to Zerga, who analysed 401 articles on job description about 30 years ago, a job description helps us in:

- Job grading and classification
- Transfers and promotion
- Adjustment of grievances
- Defining and outlining promotional steps
- Investigation accidents
- Team and motion studies
- Scientific guidance
- Determining jobs suitable for occupational
- Providing hiring specifications
- Providing performance indicators
- Studies of health and fatigue
- Maintains, operating and adjusting machinery
- Defining the limits of authority

CHAPTER-3

COMPANY PROFILE

- 3.1 Introduction
- 3.2 History of the company
- 3.3 Organization structure
- 3.4 Product and services
- 3.5 Recent awards
- 3.6 Vision and mission and quality policy
- 3.7 Competitors
- 3.8 Company principles and implications
- 3.9 Area of operation
- 3.10 Benefits of the company
- 3.11 Objectives of the company
- 3.12 Document and data control
- 3.13 SOWT Analysis

COMPANY PROFILE

3.1 COMPANY PROFILE



Name of the company	Nagshanti Renault pvt. ltd
Location	Plot No 38, Udayambhag Khanapur Road Belagavi
Established year	2012,july
Founder	Arun Agade
Type of ownership	Partnership
Firm Sector of company	Automobile
No of Employees	25
Email	renaultsalesdgm@nagshanti.in
Outlets	Belagavi, Hubali

- Nag shanti Renault is established in July 2012. To offer an ideal exhaustive support just as experience to its client it set up with strong dexterous objective arranged staff and eager team.
- To guarantee the customer Renault purchasing and proprietorship experience should be charming and smooth.
- Another brand of Nag-shanti Renault, Hubli comprise of magnificent display area of 3600sq.ft which displaying of entire scope of Renault vehicles offers the best help in its enormous works bounce space of 40000sq.ft with all the condition of craftsmanship office in and gear in house paint stall.
- Coming to the part of Nag-shanti Renault Belagavi set up its activity with wonderful display area of 5000sq.ft including huge workshop space of 20000sq.ft to give the best support of the clients of Belagavi district and cooks the best clients experience and its outcome into having 1000plus fulfilled clients.

3.2 HISTORY OF THE COMPANY

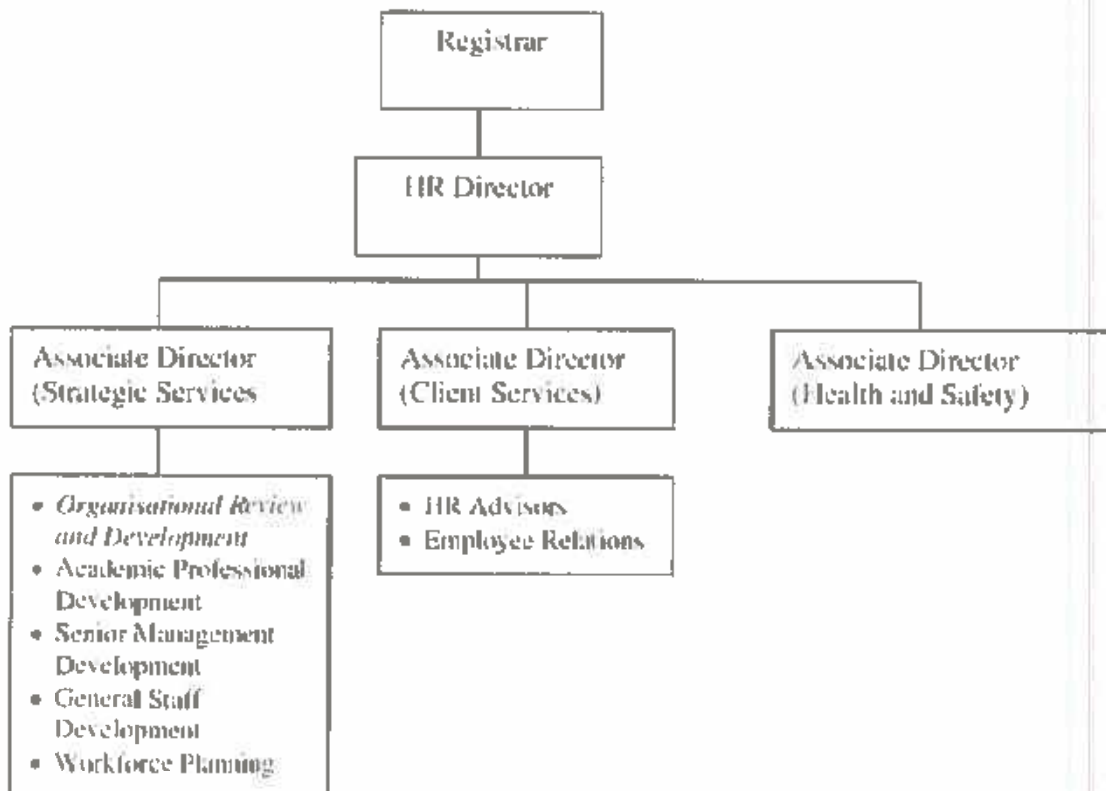
- India was the world's fifth-largest automobile market in 2020, with 3.49 million units sold in the passenger and commercial vehicle classes. In 2019, it was the sixth-largest manufacturer of commercial vehicles.
- India is also a well-know vehicle exporter with promising growth prospects in the not-too- distant future. Furthermore, a new initiative by the Indian government and substantial vehicle key parts in the Indian market are expected to propel India to the forefront of the global bike and four-wheeler industry by 2020.
- The automobile industry is supported by a number of reasons, including the availability of skilled labour at a low cost, strong R&D efforts, and low-cost steel production. The company also provides exceptional freedoms to entrepreneurs, as well as immediate and back handed labour to both talented and inept workers
- The auto business of India is considered as one of the biggest on the planet. In view of 4- wheeler and traveler vehicles piece of the pie A/C is 14% and 2-wheeler piece of the overall industry beer is around 80%, two-wheeler and 4-wheeler are driving the auto business of India.
- Automobiles formally came into existence in the year 1952 and also introduced the 1st passenger car in the country (India).

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- In the year 2017, According to traveler vehicle deals in India. It became fifth biggest traveler vehicle market which is grew by 9.2% in the world with more than 3 million deals of traveler vehicles.

Type	Society Anonyms
Industry	Automotive
Founder	Marcel Renault, Louis Renault, Fernando Renault
Main office	France, Boulogne- Bullecourt
Area served	WorldWide-128 Nations
Products	Automobiles, electric and commercial vehicles
No of Employees	1, 81, 344
Parent group	Renault S.A and Renault group
Division	Renault sport racing and cars
Subsidiaries	Samsung, Nissan-43.4%, Dacia-99.43%, Auto VAZ 73.3%
Website	www. Renault.ac.in
Outlets	India, France

3.3 ORGANISATION STRUCTURE



[Researcher's work role in italics]

3.4 PRODUCT AND SERVICES

- **RENAULTDUSTER**



Name	RENAULTDUSTER
Price	8.49 – 9099 lakhs
Availablecarcolor	<ul style="list-style-type: none"> • Caspian blue • Mahogany brown • Cayenne orange • Moonlight silver • Slate gray • Outback bronze

- **RENAULTCAPTURE**



Name	RENAULTCAPTURE
Price	90.49 – 12.99 lakhs
Availablecarcolor	<ul style="list-style-type: none"> • Mystery black • Mahogany brown • Radiant red • Pearl white

• **RENAULT LODGY**



Name	RENAULT LODGY
Price	7.00 – 8.63 lakhs
Available car color	<ul style="list-style-type: none"> • Royal orchid • Pearl white • Slate grey • Fiery red

• **RENAULT TRIBER**

Name	RENAULT TRIBER
Price	4.99 – 5.01 lakhs
Available car color	<ul style="list-style-type: none"> • Ice cool white • Moon light silver • Electric blue



- **RENAULTKWID**



Name	RENAULTKWID
Price	2.92 – 5.00 lakhs
Available car color	<ul style="list-style-type: none"> • A Fiery red • An Out back bronze • A Planet grey • An Icy white

- **RENAULTSCALA**



Name	RENAULTSCALA
Price	8.35 – 12.09 lakhs
Available car color	<ul style="list-style-type: none"> • Pearl white • Metallic blue • Metallic silver • Completely black

▪ **RENAULTPULSE**



Name	RENAULTPULSE
Price	5.05 – 6.95 lakhs
Available car color	<ul style="list-style-type: none"> • Pearl white • Metallic red • Champagne gold • Cosmos blue

• **DUSTERTURBO**



3.5 RECENT AWARDS

NDTV CNB Awards

- Small Car of the Year - 2016
- CNB Viewers' Choice of the Year - 2016
- NDTV Car of the Year - 2016
- Design of the Year - Car 2016

Team BHP, Motor beam

- Car of the Year - 2015
Auto X
- Best of 2015
BBC Top gear
- Compact Hatchback of the Year
- Car India Hatchback of the Year
Anand Vikatan, Motor Vikatan
- Car of the Year
Cardekho.com
- Budget hatchback of the year
- Jury Award - Car of the Year
Gandiwaadi.com
- Value For Money Car of the Year: Renault KWID
Meteoroids
- Entry Level Car of the Year
Drivespark.com
- Car of the Year - 2016
Flywheels.co
- Small Car of the Year 2016
- Reader's Choice Car of the Year 2016
Auto car India
- Car of the Year
Hatchback of the Year
- Entry Level Hatchback of the Year
Motor Vikatan
- Car of the Year

Zigwheels

- Hatchback of the Year
Zeignition Auto Awards 2016
- Entry Level Hatchback of the Year
Motoring World
- Hatchback of the Year

3.6 VISION AND MISION AND QUALITY POLICY

Vision:

Renault is a group driven and pioneering organization, offering reasonable versatility for all. Vitalsignificance is clients satisfaction. Theintest as a dependable vehicle producer and pioneer in manageable versatility for everything is to grow extensively moderate portability offers, make new advancements.

For example: Zero discharge electric vehicles and see that crude materials and energy are use economically.

Mission:

To make and stand Renault as the most beneficial and serious European volume vehicle organization. To delight our regarded representatives, clients, through speedy and a quality benefits by uncompromisingly displaying apparent execution and arrive at the achievement.

Quality Policy:

Buyer satisfaction increments by present's vehicles that are synchronized as close to as solid to the veritable necessities and wants of each individual buyer.

3.7 COMPETITORS

1. Alpha Honda [Mangesh
Honda] Address – Debra, no
17 camp BELAGAVI.

2. Mahindra Solaria auto center
Address—old P Broad, BELAGAVI.

3. VolkswagenBelagavi
Address – 5B industrial area
kangri, Vaibhavnagar, BELAGAVI.

4. Manic bag TATA motors
Address – 691, industrial estate bemire,
Khanapur road, BELAGAVI.

5. Maruti Suzuki
Address – CTS no 1612/udyambag,
Khanapur road ,BELAGAVI.

3.8 COMPANY PRINCIPLES AND IMPLICATIONS

- 1. Principle of individual development:** to offer full and equal opportunities to every employee to realize his/her full potential.

- 2. Principle of scientific selection :**to select the right person for the right job.

- 3. Principle of free flow of communication:** to keep all channel so communication openhandedcourageupward, downward, horizontal, formalandinformalcommunication.

- 4. Principle of participation :**to associate employee representatives at every level of decision-making.

- 5.Principle of fair remuneration :**to pay fair and equitable wages and salaries comment sorting with jobs.

- 6.Principle of Incentive:** to recognize an reward good performance.

- 7.Principle of dignity of labor:** to treat every job and every job holder with dignity an respect.

- 8.Principle of labor management co-operation:** to promote cordial industrial relations.

- 9.Principle of team spirit:** to promote co-operation and team spirit among employees.

- 10.Principleofcontributiontonationalprosperity:**To provide a high repurpose of work to all employees and to contributed on national prosperity.

3.9 AREA OF OPERATION

Nag shanti Renault engines so offer sanupright to the client and works just around there. They are acceptable at keep up great picture from the clients just as offering the great support to the clients.

3.10 BENEFITS OF THE COMPANY

Organizations should have personnel policies as they ensure the following benefits:

- A) The work involved in formulating policies requires that the management give deep thought to the basic needs of both the organization and the employees. The management must examine its basic convictions as well as give full consideration to the prevailing practices in other organizations.
- B) Established policies ensure consistent treatment of all personnel throughout the organization. Favoritism and discrimination are, there by, minimized.
- C) Continuity of action is assured even though top management personnel change. The CEO of a company may possess a very sound personnel management philosophy. He/she may carry the policies of the organization in his/her head, and he/she may apply them in an entirely fair manner. But what happens when he/she retires? The tenure of office of nay manager is finite. But the organization continues. Policies promote ability.
- D) Policies serve as a standard of performance. Actual result can be compared with the policy to determine how well the members of the organization are living up to the professional intentions.
- E) Sound policies help build employeemotivationandloyalty. This is especially true where the principle fair.
- F) Sound policies help resolve intrapersonal, interpersonal and inter group conflicts.

3.11 OBJECTIVES OF THE COMPANY

In reviewing the purpose of HR Policies at NAG SHANTI RENAULT PVT Ltd., the organization stated that the HR Policies has been a key part of the management process for the effective utilization of human resource. The company aims to fulfill the following objectives through its HR Policies:

- Ensure a high degree of selectivity in recruitment so as to secure super achievers and nurture them to excel in their performance.
- Impart such induction, orientation and training as to match the individual to the

task and inculcate a high sense of organization all loyalty.

- Provide facilities for all round of growth of individual by training in and outside the organization, reorientation, lateral mobility and self-development through self-motivation.
- Groom every individual to realize his potential in all facets contributing to higher organization and personal goals.
- Build teams and foster team-work as the primary instrument in all activities.

3.12 Document and data control

- Documents and data are generated by the Corp. HR in the form of hard copies or electronic medium.
- Documents are reviewed and approved for adequacy by Corp. HR prior to issue.

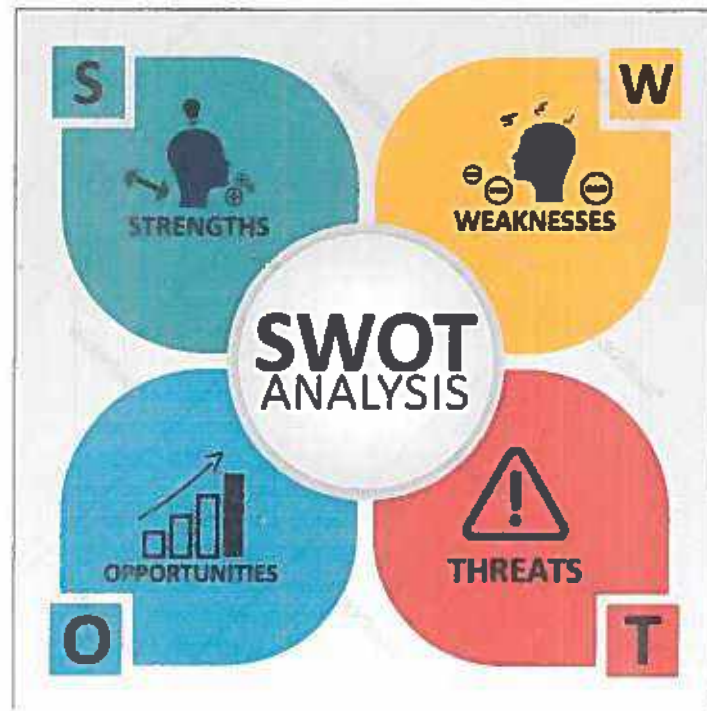
The various procedures that form the HR Policy of the Organization are:

1. Recruitment and selection of manpower
2. Induction and Placement
3. Job Rotation
4. Performance appraisal
5. Counseling
6. Career Planning
7. Success on planning
8. Employee training and Development
9. Human Resource Information Management System
10. Retirement Planning
11. Job Enrichment
12. Exit Interviews

A brief preview of the above mentioned policies and the various objectives that these policies aim to achieve are given in the subsequent chapters.

Due to high level of secrecy maintained in the organization, the policies given below are according to my understanding and interpretation of the subject.

3.13 SWOT ANALYSIS



Strength

- Fantastic execution in new market.
- Maintain brander liability with extraordinary quality among clients.
- Marked as solid brand on the lookout.
- Brand image on the lookout.

Weaknesses

- Service division in fervor quality.
- Less in tersest in research division.
- Due to government rules and guidelines the cost vehicles expanding in g which are impacts on client purchasing choice.

Opportunities

- **New model vehicle launches.**
- **Customer side in trusties increase.**
- **Growth and improvement.**
- **Chance so value acknowledgment.**
- **The wide scope of market is awesome resource for brand selling.**

Threats

- **Constantly changing in market patterns.**
- **Face of weighty down pour fall, floods Belgravia hittedina year ago.**
- **Competition level is high with the vendor of vehicles brands.**
- **Increasing pay scope of representatives, work' sand staff.**
- **Increase in cuss and taxation on cutover s**

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

Table 4.1: Shows Respondents basis of Gender factor.

Table 4.2: Shows marital status of the Respondent's.

Table 4.3: Shows age of Respondent's.

Table 4.4: Shows Occupation of the Respondent's.

Table 4.5: Shows monthly income of the Employee.

Table 4.6: Shows Respondent's preference to Sale of per vehicle.

Table 4.7: Shows adequate opportunities with respect to promotion.

Table 4.8: Shows expectations consistent with respect level of resource.

**Table 4.9: Shows mode of payment used by respondents while making
Payment.**

**Table 4.10: Shows Renault nag- shanti does an excellent job of keeping
Employee's information about matter affecting them.**

Table 4.11: Shows Respondent's Expect from the nag shanti pvt ltd.

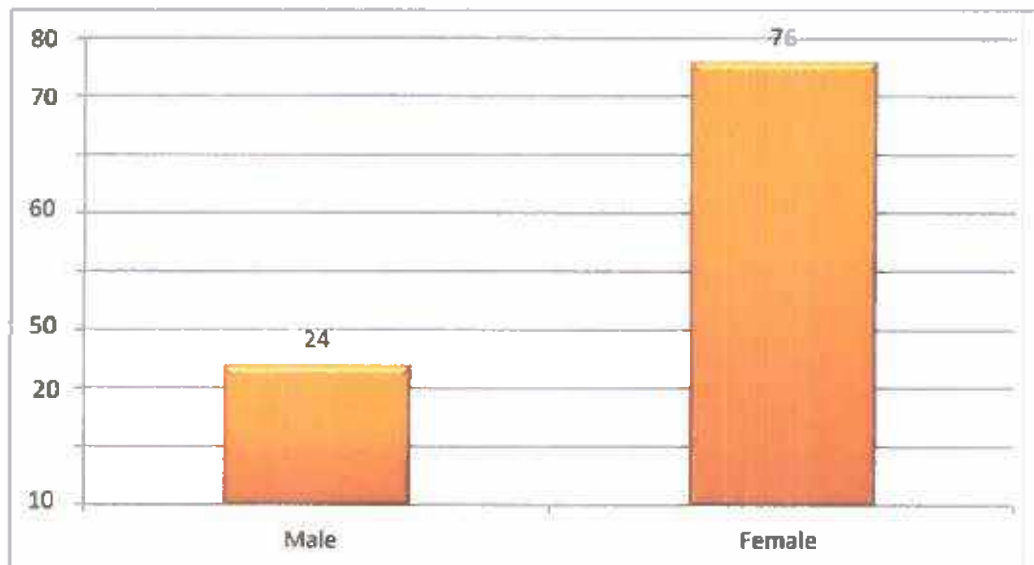
Table 4.12: Shows Respondents are performed the following through online.

DATA ANALYSIS AND INTERPRETATION

Table 4.1: Shows Respondents basis of Gender factor

Gender	No of Respondents	Percentage(%)
Male	12	24
Female	38	76
Total	50	100

Chart 4.1: Shows Respondents basis of Gender factor.

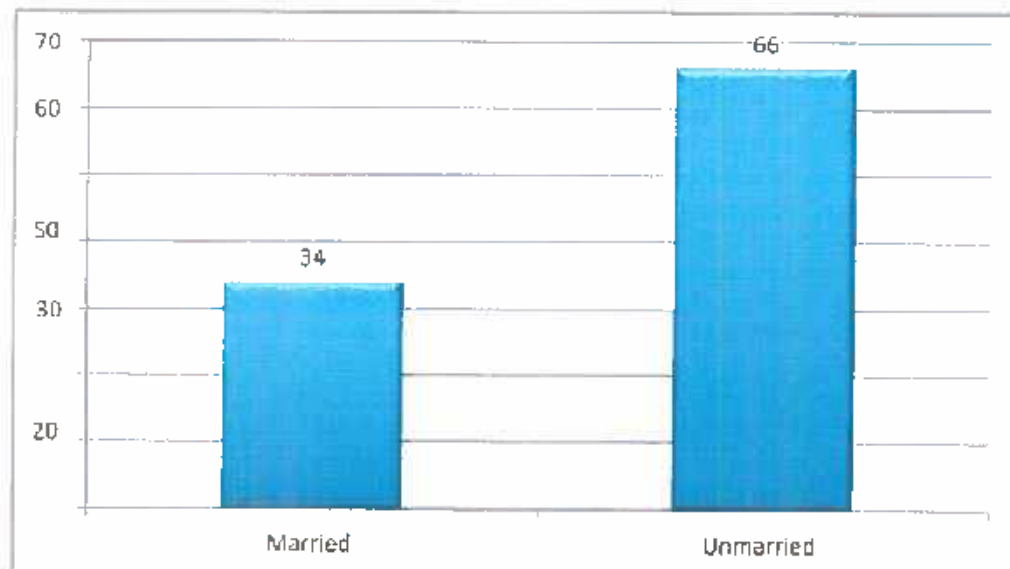


Interpretation:

It can be observed from the above table that out of 50 respondents 24% of employees are male and 76% of employees are female. So the majority of the respondent's i.e 76% employees are female.

Table 4.2 : Shows Marital status of the Respondents.

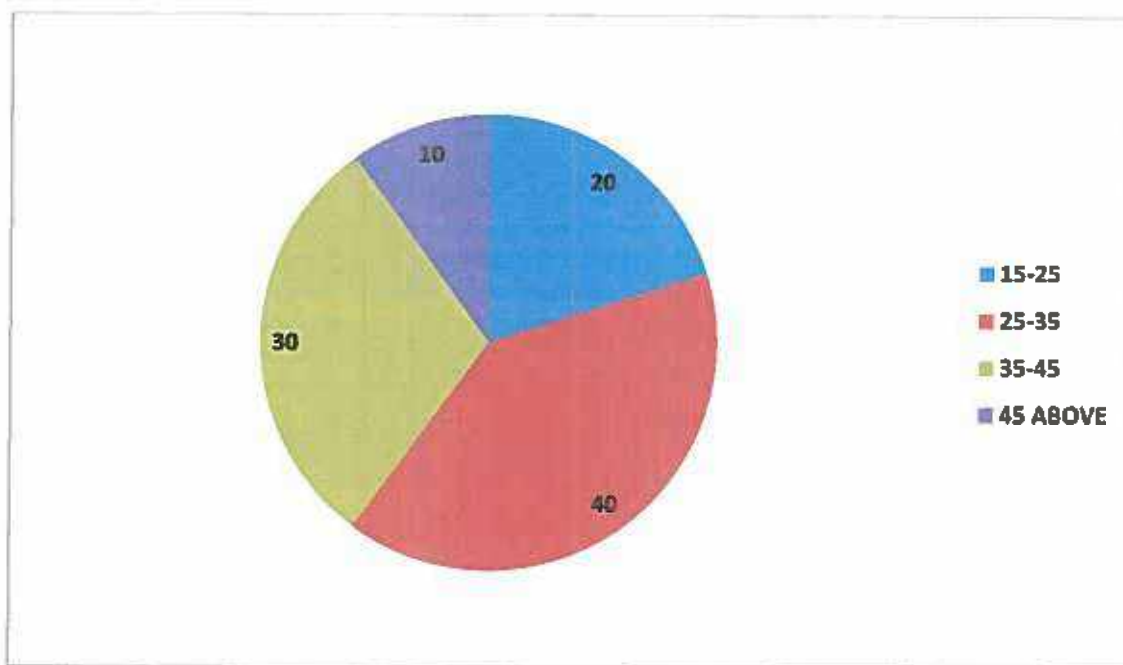
Marital Status	No of Respondents	Percentage (%)
Married	17	34
Unmarried	33	66
Total	50	100

Chart 4.2: Shows Marital status of the Respondents.**Interpretation:**

It can be observed from the above table and chart that out of 50 Respondents 34% of respondents are married and 66% of respondents are unmarried. Majority of respondents i.e 66% are not married.

Table 4.3: Shows age of Respondents.

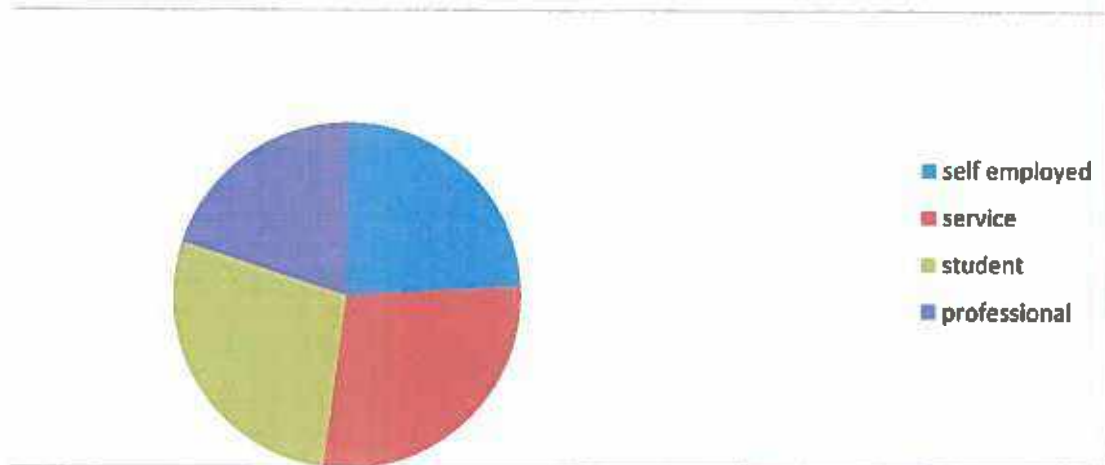
Particulars	NO of Respondents	Percentage(%)
15 -25	10	20
25 -35	20	40
35 -45	15	30
Above 45	5	10
Total	50	100

Chart 4.3: Shows age of Respondents.**Interpretation:**

It can be observed from the above table and chart that out of 50 respondents 20% of employees are 15-25 age group, and 40% employees are 25-35 age group, and 30% of employees are 35-45 age group, and 10% of employees are above 45 age group. Majority of respondents i.e 40% of employees are 25-35 age group.

Table 4.4: Shows occupation of the Respondents.

Particulars	No of Respondents	Percentage (%)
self employment	06	24
service	07	28
student	07	28
professional	05	20
Total	25	100

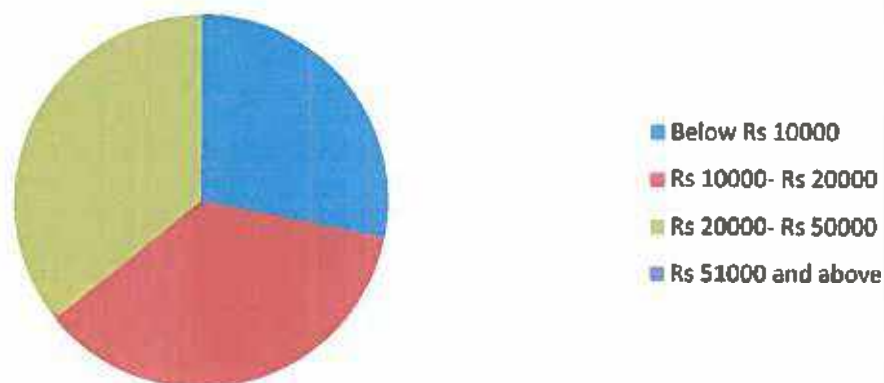
Chart 4.4 : Shows occupation of the Respondents.**Interpretation:**

As can be observed from the above table that out of 25 respondents 24% respondents are self employed and 28% of respondents are from service sector and 28% of respondents are students and 20% of the respondents are professional. Majority of respondents i.e. 28% are students and 28% are in service sector.

Table 4.5: shows monthly income of the Employees.

Particular	No. of Respondents	Percentage
Below Rs 10000	07	28
Rs 10000-Rs 20000	09	36
Rs 20000-Rs 50000	09	36
Rs 51000 and above	00	00
Total	25	100

Chart 4.5: Shows monthly income of the Employees.

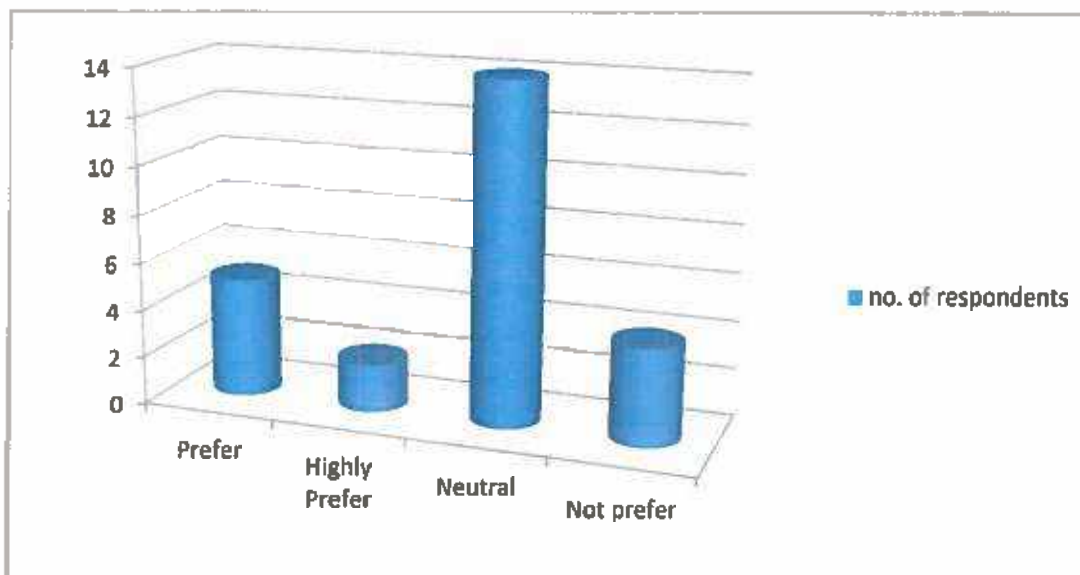


Interpretation:

As can be observed from above table that out of 25 respondents 28% of the customers are below Rs 10000 income group and 36% of customers are in group of Rs 10000-20000 and 36% of customers are in group of Rs 20000- 50000 and Rs 51000 & above there are no respondents. Majority of the respondents i.e 36% are earning Rs 10000- Rs 20000 and Rs 20000- Rs 50000.

Table 4.6: shows respondents preference to sale of per vehicle.

Particulars	No. of Respondents	Percentage (%)
Prefer	05	20
Highly prefer	02	08
Neutral	14	56
Not prefer	04	16
Total	25	100

Chart 4.6: shows respondents preference to sale of per vehicle.**Interpretation:**

It can be observed from the above table that out of 25 respondents 20% of customers prefer to purchase and 8% of the customers are highly prefer to purchase and 56% of customers are having neutral opinion regarding purchase and 16% of customer are not preferring to purchase pre packed products. Majority of respondents i.e 56% are having neutral opinion regarding purchase of pre packed products.

Table 4.7: Shows adequate opportunities with respect to promotion.

Particulars	No of Respondents	Percentage(%)
Strongly agree	10	33
Agree	8	42
Neither agree	2	17
Disagree	5	8
Strongly disagree	0	0
Total	25	100

Chart 4.7: Shows adequate opportunities with respect to promotion.**Interpretation:**

It can be observed from the above table and chart that out of 25 respondents 33% of respondents are strongly agree to respect to promotion, and 42% of respondents are agree to promotion, and 17% of respondents are neither agree to opportunities of respect promotion, and 8% of respondents are disagree to opportunities of respect to promotion, and 0% of respondents are strongly disagree to respect to promotion. Majority of respondents i.e 42% are agree to opportunities of respect to promotion.

Table 4.8: Shows Management expectations are consistent with respect level of resources.

Particulars	No of Respondents	Percentage(%)
Strongly agree	15	4
Agree	10	64
Neither agree	5	20
Disagree	20	12
Strongly disagree	0	0
Total	50	100

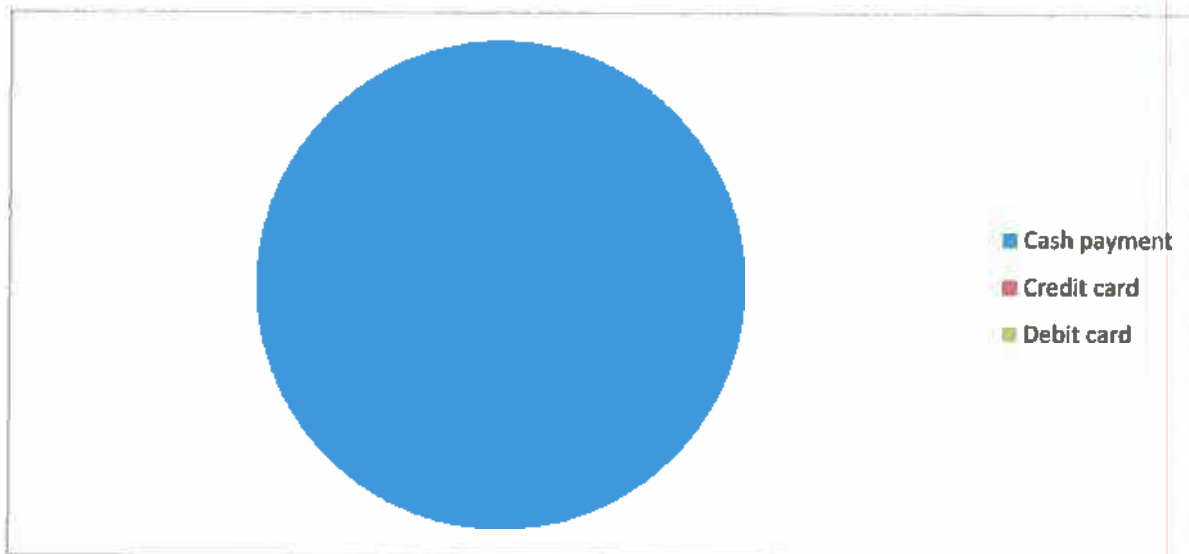
Chart 4.8: Shows Management expectation are consistent with respect level of resource.**.Interpretation:**

It can be observed from above table and graph that out of 50 respondents 4% of respondents are strongly agree to management of expectation are consistent with level of resources, and 64% of respondents are agree to management expectation of consistent level of resource is given, and 20 % of respondents are neither agree to management expectation of resource are given, and 20 % of respondents are disagree to management of expectation of resource is given. Majority of respondent's i.e 64% of employees are agree to management expectation of consistent of resource given.

Table 4.9: shows mode of payment used by Respondents while making payment.

Particular	No. of Respondents	Percentage(%)
Cash payment	25	100
Credit card	00	00
Debit card	00	00
Total	25	100

Chart 4.9: shows mode of payment used by Respondents while making payment.



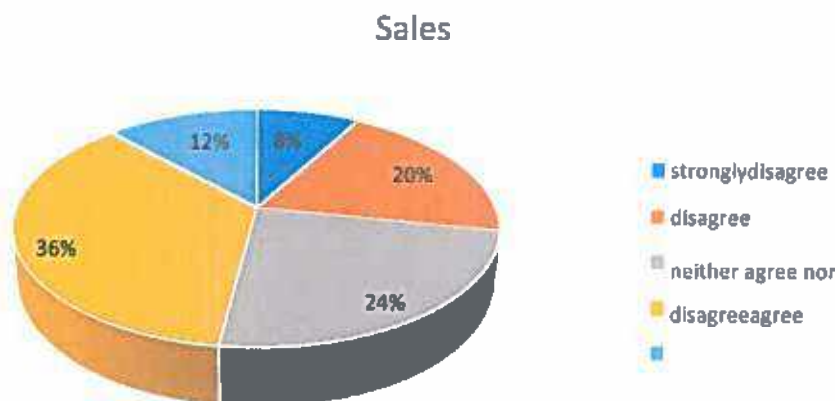
Interpretation:

It can be observed from the above table that out of 25 respondents 100% of customer's i.e all 25 respondents are using cash payment as mode of payment.

Table 4.10: Shows Renault nag shanti does an excellent job keeping employees informed about affecting them.

Particulars	No of Respondents	Percentage(%)
Strongly agree	10	8
Agree	15	20
Neither agree	5	24
Disagree	20	36
Strongly disagree	0	12
Total	50	100

Chart 4.10: Shows Renault nag shanti does an excellent job keeping employees informed About matters affecting them.



Interpretation:

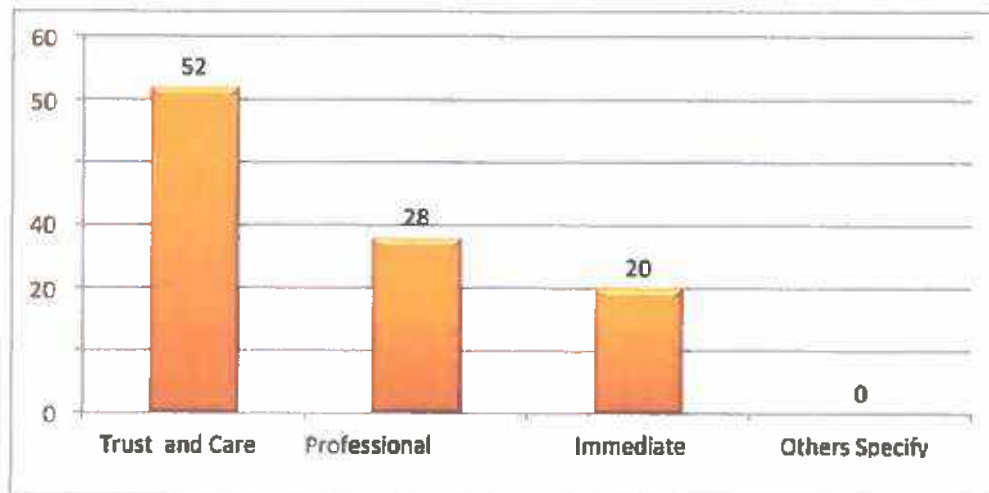
It can be observed from above table and graph that out of 50 respondents 8% of respondents are strongly agree to nag shanti does an excellent job keeping, and 20% of respondents are agree to nag shanti does an excellent job keeping, and 24% of respondents are neither agree to nag shanti does not an excellent job keeping, and 36% of respondents are disagree to nag shanti does not job keeping informed about matters, and 12% of respondents are strongly disagree to nag shanti is does not job keeping about matter. Majority of respondents 36% of employees are dis agree to nag shanti ltd is does an excellent job keeping in informed about matters them.

A Study on Human Resource Policies And Its Implications – Nag Shanti Renault Pvt Ltd

Table 4.11: Shows Respondents Expect from the Nag shanti pvt ltd.

Particulars	No of Respondents	Percentage
Trust and Care	26	52
Professional Quality Service	14	28
Immediate Response	10	20
Others Specify	0	0
Total	50	100

Chart 4.11: Shows Respondents Expect from the nag shanti pvt ltd.

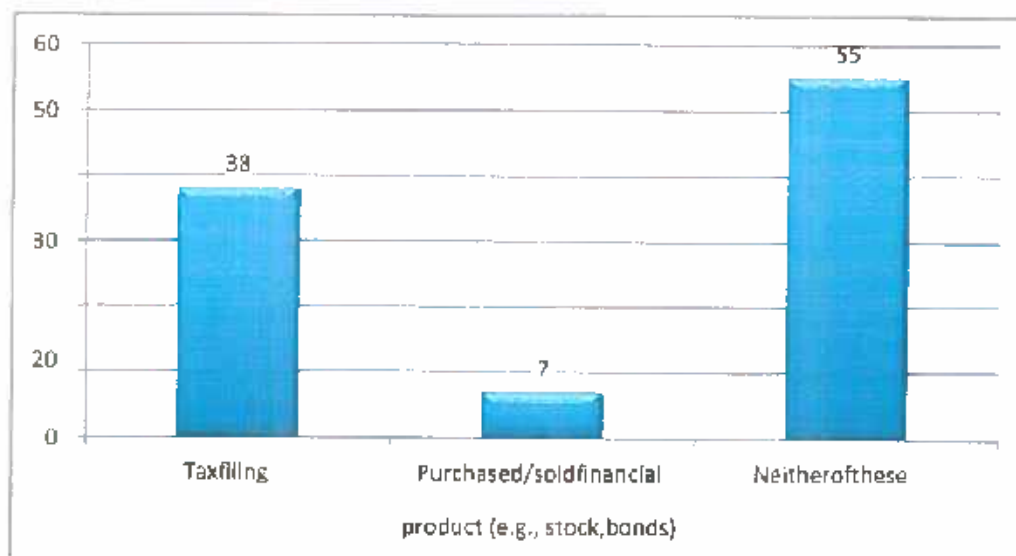


Interpretation:

It can be observed from above table and graph that out of 50 respondents 52% of respondents are having trust and care about nag shanti ltd, and 28% of respondents are having professional quality service towards nag shanti ltd, and 20% respondents are having immediate response towards nag shanti ltd. Majority of respondents i.e 52% are expecting trust and care towards nag shanti ltd.

Table 4.12: Shows Respondents are performed the following through on-line

Particulars	No of Respondents	Percentage
Tax filing	5	10
Purchased/sold financial product(e.g. ,stock ,bonds)	13	26
Neither of these	32	64
Total	50	100

Chart 4.12: Shows Respondents are performed the following through online**Interpretation:**

It can be observed from the above table and chart that out of 50 respondents 38% of the respondents are belong to Tax-Filling performance activities through On-line. 7% of the respondents belongs to Purchased/sold financial product (e.g., stock, bonds) performance activities through On-line ,55% of the respondents are belongs to Neither of these activities through On-line. Majority of the respondents i.e 55% are belong to neither of the actives through on line.

CHAPTER – 5
FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 Findings

5.2 Suggestions

5.3 Conclusion

FINDINGS, SUGGESTION AND CONCLUSION

5.1 FINDINGS

- From the study we can see that out of 50 respondents maximum 76% of employees are female.
- The study revealed that out of 50 respondents maximum 66% of employees are unmarried or single.
- From the study we can see that out of 50 respondents maximum 40% of employees are 25-35 age group.
- The study revealed that out of 25 respondents maximum 28% of employees are students and 28% of employees are from service sector.
- It can be observed from the study that out of 25 respondents maximum 36% of employees monthly income is Rs 10000-Rs 20000 and 36% of employees monthly income is Rs 20000-Rs50000.
- The study revealed that out of 25 respondents maximum 56% of employees give preference to sale per vehicle.
- From the study we can see that out of 25 respondents maximum 33% of employees are having adequate opportunities with respect to promotion.
- It can be observed from the study that out of 50 respondents maximum 64% of employees' expectations are consistent with respect to level of resource given.
- The study revealed that out of 50 respondents maximum 100% of employees have mode cash payment.
- From the study we can see that out of 50 respondents maximum 36% of employees disagree to say that Nag Shanti does an excellent job keeping employees informed about affecting them.

- It can be observed from the study that out of 50 respondents maximum 52% of employees are except from the nag shanti pvt ltd.
- The study revealed that out of 50 respondents maximum 64% of employees are performed through online.

5.2 Suggestions

- Organization should lead different exercises for workers so that can consume feeling of an piety of representatives.
- There ought to be commitment for society.
- Training ought to be given in acceptable way that representatives can work without doubt.
- Company should give reward on uncommon event.
- Relationship among representatives and proprietor should construct all the more emphatically.
- Employees need chomped greater support.

5.3 Conclusion

I felt extraordinary working at Nag-shanti Renault for 6 weeks, it has given me pragmatic in formation. The task presents the representatives work fulfillment towards Nag-shanti Renault.

Intheassociationgreaterpartofindividualsarehappywithcompensation,motivators,timing,working spot,offices,security measuresetc.These are largely the data became more acquainted with by the survey and fulfillment level.

Theygivequalityassistancetoclientssoworkersareadditionallygladforthat.Representativesarelivelierandmoreengertowork.Theygenerallyneededgetappreciatedbychief. Indeed, even the chief likewise more modest and kinder individual with workers and further more with me they upheld me to finish my project. They gave colossal data about organization.

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WEBSITE

- www.renault.com
- www.google.com
- www.wikipidea.com

ANNEXURES

QUESTIONNAIRES

A. Recruitment and Selection.

1. Are you satisfied with the external recruitment sources performed in your organization.

1. Agree

2. Disagree

2. Are you satisfied with the monetary reward given on bringing a candidate on board?

1. Agree

2. Disagree

3. Are you satisfied with the background checks conducted for employees.

1. Agree

2. Disagree

4. Are you satisfied with the monetary limits given to you for the expenses?

1. Agree

2. Disagree

B. Induction

1. The induction program of your organization is informal type.

1. Agree

2. Disagree

2. The induction of your organization covers organizational structure and policies.

1. Agree

2. Disagree

C. Training and Development

1. For employee performance, is the training need analyzed in your organization.

1. Agree

2. Disagree

2. Are you satisfied with the Classroom method adopted by your organization to train the employees?

1. Agree

2. Disagree

D. Performance Appraisal

1. Are you satisfied with the Balanced Scorecard method?

1. Agree

2. Disagree

2. Are you satisfied with the feedback given to you by organization?

1. Agree

2. Disagree

E. Career Progression

1. Are you satisfied with the system followed for career progression?

1. Agree

2. Disagree

2. Are you satisfied with the competence analysis and feedback from manager?

1. Agree

2. Disagree

F. Leave Policy

1. Are you satisfied with the privilege leave provided you?

1. Agree

2. Disagree

G. Communication and Decision making process

1. Are you satisfied with the informal communication pattern?

1. Agree

2. Disagree

2. Are you satisfied with the opinion survey and Department meeting?

1. Agree

2. Disagree

H. Reward and Recognition

1. Are you satisfied with the monetary rewards?

1. Agree

2. Disagree

I. Personal Accident Insurance Policy

1. Are you satisfied contingencies cover under this policy?

1. Agree

2. Disagree

J. Medi claim Policy

1. Are you satisfied with the services covered under this policy?

1. Agree

2. Disagree

K. Identify the source from where you came to know about the job?

- Advertisement
- Consultant
- Personal reference
- Campuse

L. Are you satisfied with the requirement process by which you are selected?

a) yes

b) no

M. What are the sources for recruitment and selection?

- a) Internal
- b) External
- c) Both

N. How was the approach of management during the recruitment?

- a) Serious and positive
- b) Casual
- c) Negative

O. What impression/ image you were having of nag shanti ltd before getting recruitment?

- a) Satisfactory
- b) Average

P. Since how many years have you been working with the organization?

- a) Year
- b) 10 Years
- c) 10 to 15 years

Q. No are the organizations action needed and supported in the selection process?

- a) Poor
- b) Adequate
- c) Excellent

R. What was the time taken for each exercise?

- a) Adequate test
- b) Personal interview
- c) Written test
- d) Practical test

S. Marital status of the employees?

- a) Married
- b) Single

T. Occupation of the employees?

- a) Self employment
- b) Student
- c) Service
- d) Professional

U. Monthly income of the employees?

- a) Below 10000
- b) Rs 20000 to Rs 50000
- c) Rs 51000 above

**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON FINANCIAL STATEMENT ANALYSIS"
AT
SHRI SHANATAPPANNA MIRAJI URBAN CO-OP. BANK. CHIKODI**

**Submitted to
RANI CHANNAMMA UNIVERSITY, BELAGAVI**



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

**Miss. Umashri B Madyali
M.COM-IV SEMESTER
REGISTER NO: MC191626**

UNDER THE GUIDANCE OF

SHRI. V. S. KHOT

K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201
PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that **Miss.Umashri B Madyali** has satisfactorily completed the Project Report Entitled "**A Study on Financial Statement Analysis**" At **Shri Shantappaanna Miraji Urban co-op. Bank., Chikodi** for the partial fulfilment of Degree in Master of Commerce in **Rani Channamma University, Belagavi** during the academic year **2020-2021**.

SHRI. V. S. KHOT

PROJECT GUIDE

SHRI. LAXMIKANTHA NAYAKA T O

COORDINATOR
P.G. Department of Commerce
B.K. College Chikodi

SHRI. UDAYSINGH RAJPUT

PRINCIPAL
KLES'S Basavaprabhu Kore
Arts, Science and Commerce College
CHIKODI - 591 201





ಶ್ರೀ ಶಾಂತಪ್ಪಣ್ಣಾ ಮಿರಜಿ ಪಟ್ಟಣ ಸಹಕಾರಿ ಬ್ಯಾಂಕ್ ಲಿ., ಚಿಕ್ಕೋಡಿ
SHRI SHANTAPPA MIRAJI URBAN CO-OP. BANK LTD., CHIKODI

Adm. Office : Guruwar Peth, Chikodi-591 201, Dist. Belagavi, Karnataka State
Phone : 08338-273169, 272549



E-mail shantappa@mirajibank.com

Ref. No. Certificate/204/2021-22

Date: 13-09-2021

TO WHOMSOEVER IT MAY CONCERN

C E R T I F I C A T E

This is to Certify that **Miss: Umashri B. Madyali** of **Chikodi** had completed the Project work from 21st June 2021 to 23rd August 2021 on “ **A Study on Financial Statement Analysis** ”.

During her study she had been provided with the necessary informations.

We wish her every success in her future endeavours.

For Shri Shantappa Miraji Urban
Co-op. Bank Ltd., Chikodi.


General Manager



DECLARATION

I declare that the project report entitled "A Study on Financial Statement Analysis" At Shri Shantappaanna Miraji Urban Co-Op. Bank, Chikodi is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. V. S. Khot, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 21-9-2021

Place: Chikodi



Miss. Umashri B Madyali

Register No: MC191626

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

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I express my sincere gratitude to **Shri. K.N Kumbhar**, Manager, **SHRI SHANTAPPANNA MIRAJI URBAN CO-OP.BANK, CHIKODI** for providing me an opportunity to do a project in their organization.

At the outset, I would like to thank all the teaching faculty of PG Department of Commerce and Management for their valuable suggestions during project work.

My thanks are also to library staff for their cooperation during the course of project work and I am also thankful to Printers for their skillful printing of this project.

Finally I owe my deep sense of gratitude to my parents, friends and relatives for their constant encouragement and support.

Miss. Umashri B Madyali

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CHAPTER: 1

INTRODUCTION AND RESEARCH DESIGN

- 1.1 INTRODUCTION**
- 1.2 REVIEW OF LITERATURE**
- 1.3 STATEMENT OF PROBLEM**
- 1.4 NEED FOR THE STUDY**
- 1.5 OBJECTIVES OF THE STUDY**
- 1.6 SCOPE OF THE STUDY**
- 1.7 RESEARCH METHODOLOGY**
- 1.8 LIMITATIONS OF THE STUDY**
- 1.9 CHAPTER SCHEME**

**A Study on Financial Statement Analysis at Shri Shantappa Miraji
Urban Co-op. Bank Ltd., Chikodi**

INTRODUCTION AND RESEARCH DESIGN

1.1: INTRODUCTION

Financial statements are written records that convey the business activities and the financial performance of a company. Financial statements are often audited by government agencies, accountants, firms, etc. to ensure accuracy and for tax, financing or investing purposes.

Financial statement analysis is the process of analyzing a company's financial statements for decision-making purposes. External stakeholders use it to understand the overall health of an organization as well as to evaluate financial performance and business value. Internal constituents use it as a monitoring tool for managing the finances.

1.2 REVIEW OF LITERATURE

a) Jothi, K. & Geethalakshmi, A. (2016)

This study tries to evaluate the profitability and financial position of selected companies of the Indian automobile industry using statistical tools like, ratio analysis, mean, standard deviation, correlation. The study reveals the positive relationship between profitability, short term and long term capital.

b) K.R Subramanyam (2014)

Financial statement analysis emphasizes effective business analysis and decision making by analysts, investors, managers and other stakeholders of the company.

c) M.Y Khan and P.K Jain (2011)

Have explained that the statements provide a summarized view of the financial position and operations of a firm. Therefore much can be learnt about a firm from a careful examination of its financial statements as invaluable documents/performance report. The analysis of financial statements is thus, an important aid to financial analysis.

A Study on Financial Statement Analysis at Shri Shantappaanna Miraji Urban Co-op. Bank Ltd., Chidkodi

d) Susan ward (2008)

Emphasis that financial analysis using ratio's between key values help investors cope with the massive amount of numbers in a company financial statement. For example, they can compute the percentage of net profit a company is generating on the funds it has deployed.

e) Kennedy and Muller (1999)

Has explained that "the analysis and interpretation of financial statements are an attempt to determine the significance and meaning of financial statements data so that the forecast may be made of the prospects for future earnings ability to pay interest and debt maturities and profitability and sound dividend policy".

f) T.S Reddy and Y.Hari Prasad Reddy

Without subjecting these to data analysis many fallacious conclusions might be drawn concerning the financial conditions of the enterprise financial statement analysis is undertaken by creditors, investors and other financial statement users in order to determine the creditworthiness and earning potential of an entity.

1.3 STATEMENT OF PROBLEM.

The present study is conducted to identify the performance of the bank in the current year as well as previous year by finding out the liquidity, solvency, and financial activities and also to determine the effectiveness of the working of the bank.

1.4 NEED OF THE STUDY

The study of intra firm helps to company to know financial position and solvency of both competitors and company itself which assist the survival and growth of the business. This study helps in identify the competitive strength of company among its competitors. The study helps the company to know the strength and weaknesses of similar business unit which provide platform to get success in the market.

A Study on Financial Statement Analysis at Shri Shantappa Miraji Urban Co-op. Bank Ltd., Chidkodi

1.5 OBJECTIVES OF THE STUDY

- 1) To know the financial status of the bank.
- 2) To identify the financial strength and weaknesses of the bank.
- 3) To study the financial performance of the bank.
- 4) To measure the operational efficiency of the concern.

1.6 SCOPE OF STUDY

The study focuses mainly on the financial performance and various trends at Shri Shantappa Miraji Urban Co-Operative. Bank Ltd., Chikodi.

1.7 RESEARCH METHODOLOGY

The process of data collection begins after a research problem has been defined and research design has been chalked out. Here in this project report the data collected is through secondary data.

There are two types of data

1) Primary data:

It is first hand data, which is collected by the researcher itself, this through interviewing and discussion with concerned authorities in the institution.

2) Secondary data:

It is the data which is already passed through primary data. The secondary data for the study were collected from bank's annual report, profit & loss, manual and more information collected through the internet.

Tools Used for Analysis.

- 1) Comparative statement.
- 2) Trend analysis.

1.8 LIMITATIONS OF THE STUDY

- 1) Comparative statements are generally calculated on past financial statements and thus forecasts for the future are based on the past.
- 2) Financial statement data is recorded by conventional procedures followed over the years.

**A Study on Financial Statement Analysis at Shri Shantappa Miraji
Urban Co-op. Bank Ltd., Chikodi**

3) The balance sheet reflects the position of the concern on the given data.

1.9 CHAPTER SCHEMES

CHAPTER 1: INTRODUCTION AND RESEARCH DESIGN

Introduction of the study, statement of the problem, objectives of the study, research methodology and limitation of the study.

CHAPTER 2: CONCEPTUAL FRAMEWORK

This chapter deals with meaning of financial statement analysis and interpretation, term deposits, Special schemes and types of financial statement. Significance and objectives of financial statement analysis.

CHAPTER 3: BANK PROFILE

It gives the profile of the bank where the project is conducted. History of the bank objectives, structure of bank and SWOT analysis.

CHAPTER 4: DATA ANALYSIS AND INTERPRETATION

This chapter gives details regarding the analysis and interpretation of data.

CHAPTER 4: FINDINGS SUGGESTIONS AND CONCLUSION

This chapter deals with findings, suggestions and conclusions of the study.

CHAPTER: 2**CONCEPTUAL FRAMEWORK****2.1 MEANING****2.2 NATURE OF FINANCIAL STATEMENT****2.3 OBJECTIVES OF FINANCIAL STATEMENT****2.4 TYPES OF FINANCIAL STATEMENT****2.5 ATTRIBUTES OF FINANCIAL STATEMENT****2.6 LIMITATIONS OF FINANCIAL STATEMENT****2.7 METHODS OF FINANCIAL STATEMENT ANALYSIS****2.8 ADVANTAGES AND LIMITATIONS OF FINANCIAL STATEMENT ANALYSIS****2.9 CONCEPT OF CO-OPRATIVE BANK****2.10 OBJECTIVES OF CO-OPRATIVE BANK****2.11 TYPES OF CO-OPRATIVE BANK**

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CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

Finance is lifeblood and never contours of business just as circulation of blood necessary in human body maintaining life. Finance is very essential for smooth running of business financial management involves managerial activities concerned with procurement and utilization of fund business purposes. an important requirement for success of any business organization in the provision of sufficient amount of founder capital it can't work unless it has got sufficient amount to its disposal to purchase machine and materials, building, premises, meet today to day expenses and other purposes.

FINANCIAL STATEMENT:

Financial statements involve the system of accounting and its principles. Accounting is the process of identifying, measuring and communicating economic information to permit informed judgment and decision by users' information. It involves recording, classifying and summarizing various business transactions.

Meaning of financial statement:

A financial statement is a collection of data organized according to logical and consistent accounting procedures. Its purpose is to convey an understanding of some financial aspects of a business firm.

2.2 NATURE OF FINANCIAL STATEMENT

Generally, financial statements are prepared in order to disclose the financial position of business concerns at a point of time and also operating results during the period under review.

The values shown in the financial statements never convey the current or economic values. The data shown in the financial statements are greatly affected by the following facts

1) Record facts:

All the business transactions which are having financial character alone are recorded in the books of accounts (journals, ledger and other subsidiary books).

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2) Accounting convention:

There are four types of accounting conventions. They are convention of conservatism, convention of full disclosure, convention of consistency and convention of materiality.

3) Postulates:

There are some postulates and assumptions just like accounting concepts and conventions. Such postulates and assumptions are used for preparing.

4) Personal judgment:

Personal judgment plays a vital role in the preparation of financial records and financial statements. The management accountants may use their judgment accounts choosing the method of valuation of closing inventory.

➤ Parties Interested In Financial Statements And Their Utility

Each group of society is directly or indirectly affected by the activities of a business entity. They have been interest in the profits, development and progress of the enterprise.

- Management
- Investors
- Debenture holders
- Prospective investors
- Banks and trade creditors
- Govt and their agencies
- Employees
- Cutomers
- Public
- Trade association
- Stock exchanges

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2.3 OBJECTIVES OF FINANCIAL STATEMENTS

Financial statements are the source of information on the basis of which conclusions are drawn about the profitability and financial position of a concern.

- 1) To provide reliable financial information about economic resources and obligations of a business firm.
- 2) To provide other needed information about changes in net resources arising out of business activities.
- 3) To provide reliable information about changes in such economic resources and obligations.
- 4) To provide financial information that assists in estimating the earning potential of a business.

2.4 TYPES OF FINANCIAL STATEMENT

There are four financial statements as below.

1) Balance sheet:

It is also referred to as a statement of financial position or condition. Report on a company's assets, liabilities and net equity as of a given point in time

2) Income statement:

It is also referred to as a profit and loss statement, which reports on a company's results of operations over a period of time.

3) Statement of retained earnings:

It explains the changes in a company's retained earnings over the reporting period.

4) Statement of cash flows:

It reports on a company's cash flow activities; particularly its operating, investing and financing activities

2.5 ATTRIBUTES OF FINANCIAL STATEMENTS

Financial statements should possess the following attributes if they are to serve properly to different categories of people

- Relevance
- Accuracy and freedom from bias

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- Comparability
- Analytical presentation
- Promptness
- Generally accepted principles
- Consistency
- Authenticity
- Compliance with law

2.6 LIMITATION OF FINANCIAL STATEMENTS

The summary of accounts maintained by a business firms is presenting in the form of financial statements. The accounts expressed in these statements are based on vouchers and logical.

- 1) Financial statements are essentially interim reports.
- 2) Lack of precision and definiteness
- 3) Lack of objective judgment
- 4) Records only monetary facts
- 5) Artificial view
- 6) Scope of manipulations
- 7) Historical in nature
- 8) Inadequate information

PROFIT AND LOSS ACCOUNT OR INCOME STATEMENT.

The balance sheet, as discussed above indicates firms' financial position in at specific date, hence it is considered as a very significant statement by bankers and lenders but, it fails to indicate whether a firm is making or losing money. Therefore creditors and financial analysis have recently started paying more attention to the earning capacity of the firm as a measure of financial strength, the earning capacity of the firm as a measure of financial strength. The earning capacity of firm is reflected by profit and loss account or income statement.

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FUNCTIONS OF INCOME STATEMENT:

P&L account or income statement reveals the flow of revenues and expenses during a period of time. It also reveals the changes occurred in balance sheet from the end of one period to the end of another period. The important functions of the profit and loss account are as below.

1) Accumulation of data:

Profit and loss shows all items of revenues, expenses and net profit of firm for a period of time in a concise form thus, it accumulates economic data.

2) Measurement of net income:

It measures the net income of the firm by matching revenues and expenses according to generally accepted accounting principles. The capacity or profitability of the firm is reflected by profit and loss account.

3) Communication:

It communicates information regarding the operating result of the firm to the owners and other parties interested in the firm.

BALANCE SHEET:

Balance sheet is one of the most significant financial statements of business firm. It is generally known by various titles such as:

- Economic or general balance sheet
- Statement of financial position
- Statement of assets and liabilities
- Statement of resources and liabilities
- Statement of assets, liabilities and owners fund etc.

A balance sheet contains information about the assets, liabilities and Owners interest income of the business at a particular point of time.

INTRODUCTION FINANCIAL STATEMENT ANALYSIS

Financial statement analysis is the process of reviewing and analyzing a company's financial statements to earn income in future these statements include the income statement, balance sheet, statement of cash flows notes to accounts and a statement of changes in equity

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Financial statement analysis is a method or process involving specific techniques for evaluating risks, performance, financial health and future prospects of an organization.

STEPS INVOLVED IN THE ANALYSIS OF FINANCIAL STATEMENT

From the study of the meaning of analysis of the financial statements it is clear that the work of analysis of financial statements involves three steps they are below

- 1) Analysis
- 2) Comparison
- 3) Interpretation

1) Analysis:

The data shown in the financial statements are either the balance of individual accounts or groups of balance of many account as a result, they lack homogenizing & uniformity

2) Comparison:

Mere splitting up or regrouping of the figures found in the financial statement into the desired component parts is not sufficient for judging the profitability and the financial status of an enterprise.

3) Interpretation:

After the financial statements are analyzed or dissected into comparable component parts and the relative magnitude of the comparable components parts is measured through comparison, the results must be interpreted.

TYPES OF FINANCIAL STATEMENT

Financial statement analyses are classified according to their objectives, materials used and modus operandi.

Types of financial statement Analysis

- 1) On the basis of material used:
 - a) External analysis
 - b) Internal analysis
- 2) On the basis of Modus operandi
 - a) Horizontal analysis

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- b) Vertical analysis
- 3) On the basis of objectives:
 - a) Short term analysis
 - b) Long term analysis

2.7 METHODS OR TOOLS OF FINANCIAL STATEMENT ANALYSIS

The analysis and interpretation of financial statements is used to determine the financial position and results of operations as well.

The following methods of analysis are generally used:

- 1) Comparative statement analysis
- 2) Common size statement analysis
- 3) fund flow statement analysis
- 4) Cash flow statement analysis
- 5) Statement of changes in working capital
- 6) Ratio analysis
- 7) Cost volume profit analysis
- 8) Trend percentage analysis

1. COMMON SIZE STATEMENTS

In case of common size statements the financial figures are reported or converted into percentages to some common base for these items in the financial statements are presented as a percentages or ratios to total of the items and common base for comparison is provided. Each percentage shows the relation of the individual item to its respective total.

2. COMMON SIZE INCOME STATEMENTS

In case common size income statements the sales figure is assumed to be equal to 100 and all other figures of cost or expenses are expressed as percentages off sales a comparative income statement for different period helps to reveal the efficiency or otherwise of incurring any cost or expense. If it is being prepared for two firms. It shows the relative efficiency of each cost item for the two firms.

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3. COMPARATIVE STATEMENT

These financial statements are so designed as to provide time perspective to the various elements of financial position contained these statements give the data for all the periods so as to show:

1. Absolute money values of each item separately for each of the period
2. Increase or decrease in absolute data in terms of money values
3. Increase and decrease in terms of percentages
4. Comparison expressed in ration
5. Percentage of totals

4. COMPARATIVE INCOME STATEMENT

The comparative income statements give an idea of the progress of a business concern over a period of time. The figures in comparative statements can be used for identifying the direction of changes and also the trends in different indicators of performance of an organization. Such comparative statements are necessary for the study of trends and direction of movement in the financial position and operating results.

5. COMPARATIVE BALANCE SHEET:

The comparative balance sheet is the study of the trend of some items, group of items and computed items in two or more balance sheets of same business enterprise. The changes in periodic balance sheet items reflected the conduct of business. The changes can be absorbed by a comparison of the balance sheet at the beginning and at the end of the period and these changes can help in presenting an opinion about the progress of an enterprise.

OBJECTIVES OF FINANCIAL STATEMENT ANALYSIS

- 1) To determine the profitability or early capacity of the firm
- 2) To know the progress of the concern
- 3) To judge financial position of the concern
- 4) To assets the debt capacity or borrowing capacity of the firm
- 5) To know the trends of the business
- 6) To estimates the future prospects of the concern

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2.8 ADVANTAGES OF FINANCIAL STATEMENT ANALYSIS

- 1) Evaluation of past performance
- 2) Indication of current position
- 3) Prediction of future performance
- 4) Planning and decision making
- 5) Tax determination
- 6) Credit decision

2.8.1 LIMITATIONS OF FINANCIAL STATEMENT ANALYSIS

1) Comparison of financial data:

Comparison of one company with another can provide valuable clues about the financial health of an organization.

2) Analysis is based on the historical data:

The financial analysis is based on historical data which means it does not take into consideration price changes and inflation into account while analyzing the financial data.

2.9 CONCEPT OF CO-OPERATIVE BANK

Meaning of co-operative bank:

"A form organization wherein persons voluntarily associate together as human beings on the basis of equity for the promotion of the economic interest of themselves"

Features:

Co-operative societies are organized and managed on the principle of co-operative. Self help and mutual help. They function with the rule of "one member one vote". Co-operative perform all the main banking functions of deposits supply of credit and provision of remittance facilities. co-operative banks provide limited banking products and are functionally specialist in agriculture related products. co-operative banks now provide housing loans, vehicle loans, industrial loans, hypothecation loans etc. Some co-operative are scheduled Banks while other non scheduled Banks co-operative Banks are subject to CRR and liquidity requirement and other scheduled and non scheduled Banks requirements is less than commercial Banks.

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CHARACTERISTICS OF CO-OPERATIVE BANK

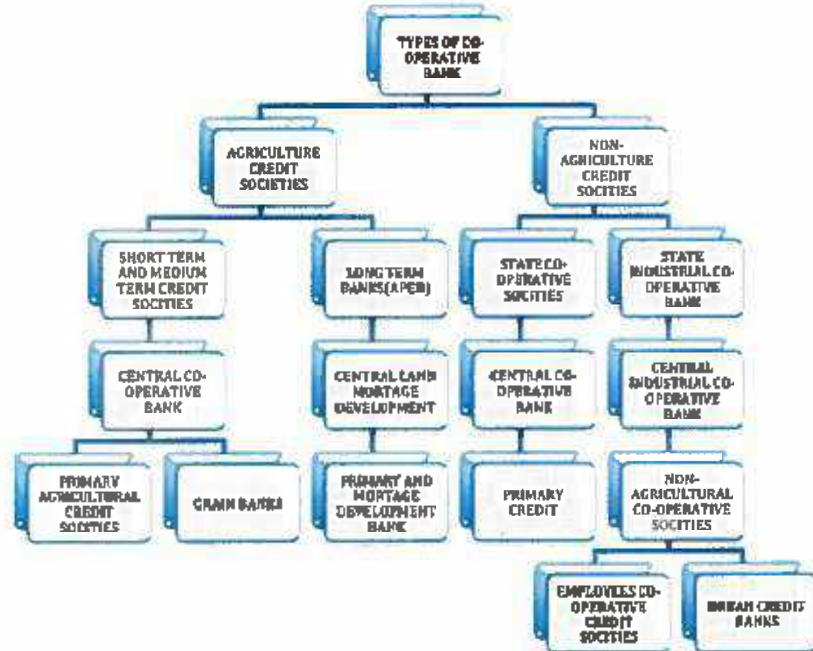
- It is an association of persons.
- It is an undertaking.
- It is a voluntary organization.
- It is a democratic organization.
- The key now is service and profit.
- The basis is equality.
- It is based on proportionality and equity.
- It is a socio economic movement.
- It is a universal movement fund all over the world.
- It is an autonomous body on the principles of democracy

2.10 OBJECTIVES OF CO-OPERATIVE BANK:

- 1) To rationalize the existing regulatory and supervisory approach keeping in view the heterogeneous character entities in the sector.
- 2) To facilitate a focused and continuous system of supervision through enhanced use of technology.
- 3) To put in place a mechanism that addresses the problems of dual control, given the present legal framework, and the time consuming process in bringing requisite legislative changes.
- 4) To identify the unviable entities in the sector and provide an exit path for such entities.

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2.11 Types of Co-operative Bank



The co-operative Bank has a history of more than 100 years. The co-operative Banks are an important part in the Indian financial systems. The co-operative movement originated in the west but the importance that such Banks assumed in India is rarely paralleled anywhere else. In the world their role in rural financing continues even today and their business in urban areas also has increased. Phenomenally in recent years mainly due to Sharp increase in the number of primary co-operative Bank and cooperative societies. The co-operative Banks in urban area mainly finance various categories of people for self employment industries, small scale units, and home finance consumer finance. Personal finance etc. co-operative movement is quite established in India. The first legislation on co-operative was passed in 1904 in the beginning of the 20th century availability of credit in India more a particularly in rural area was almost absent. The rural folk had to depend on the money lenders, who lent often at various rates of interest.

CHAPTER: 3

BANK PROFILE

3.1 BANK PROFILE

3.2 ORIGIN AND HISTORY OF BANK

3.3 STRUCTURE OF URABAN CO-OP BANK

3.4 BOARD OF DIRECTORS

3.5 PRODUCT OVERVIEW

3.6 DEVELOPMENT OVERVIEW

3.7 SWOT ANALYSIS

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BANK PROFILE

3.1 BANK PROFILE

Name	Shri Shantappa Miraji Urban co-operative Bank, LTD. Chikodi
Address	944,945 Guru war peth, CHIKODI
Date of Establishment	23rd June 1961
Sector	Co-operative Bank
Register number	8206 date 23-6-1961
RBI register number	ACD/KA/271/P27-5-1981
Head office	Chikodi Tq: chikodi. Dist: Belagavi. Pin code:591201
Founder	Shri Shantappa Miraji
Net profit	1.76 Crore
Deposits	185.29 crore
Loans	92.94 crore
Phone number	08338-273169,272549
Email	smucbank@yahoo.com

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3.2 ORIGIN AND HISTORY OF THE BANK

Shri Shantappa Miraji Urban Co-Operative Bank aim is to provide a world class banking facility to common people of the societies economically rate so as to be preferred provider of the banking services in the area where bank operates and to achieve a healthy growth in profit. This will be partly used for the benefits of society and for upliftment of masses and general of cooperative movement.

3.2.1 History:

The Shri Shantappa Miraji Urban Bank Co-Operative Bank, Ltd. is one of the large units built on sound financial footing in Karnataka state co-operative movement and has attained the sound rank in the phenomenal growth of branches quantitatively and qualitatively in the state and the first rank in Belagavi districts. The co-operative credit society established in the 1994, due non recovery of loans it was in great financial distress and was the average of liquidation. At the juncture with enthusiastic efforts the popular local ex-president Shri Shantappa Miraji along with his associate late Shri Neelakhantha Hampannavar and other member who were gifted with a vision about shape of organization laid a strong foundation by converting society in to urban co-operative Bank on 23rd June 1961. The first chairman of Shri Shantappa Miraji

A leading co-operative Bank of the Belagavi district was founded by visionary and positive thinker Shri Shantappa Miraji in 1961 to cater the banking needs of common man. He was a true co-operative who established and developed the bank in the real spirit of co-operative principles. It is proud to say that he had done the so called "financial inclusion" 55 years back by opening branches in the village less than 1000 populations he is the first person to open the branch at Belagavi which was commented but realizing the potential and other opened the branches in nook and corner of Belagavi it is really worth mentioning that he is one of the most uncommon leader amongst those called leaders of the district who had never added any penny to his wealth but spent almost all this share of wealth and life for the growth of the society by establishing many co-operative education, social and charitable institution which have become a role model to others.

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3.3 STRUCTURE OF URBAN CO-OP. BANK LTD., CHIKODI



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Urban Co-op. Bank Ltd., Chikodi**

3.4 BOARD OF DIRECTOR

FOUNDER	SHRI SHANTAPPA MIRAJI
CHAIRMAN	SHRI SURESH GHARBUDE
VICE CHAIRMAN	SHRI ANIL SADALGE
GENERAL MANAGER	SHRI K.N KUMBARA
DIRECTOR	SHRI YESHWANT MIRAJI
DIRECTOR	SHRI IRAPPA HAMPPANVAR
DIRECTOR	SHRI SANJAY KUMAR PATIL
DIRECTOR	SHRI MAHANTESH BHATE
DIRECTOR	SHRI RAVI KUMAR ROKHADE
DIRECTOR	SHRI MAHAVEER PATIL
DIRECTOR	SHRI AMARANTH BASARAGI
DIRECTOR	SMT MALA DESAI
DIRECTOR	SHRI MAHESH LADAGE
DIRECTOR	SHRI JEETENDRA SANGALE
DIRECTOR	SHRI GANGADAR MAGENNAVAR
DIRECTOR	SHRI ASHOK DANA VADE

VISION:

“To be most admired co-operative bank in Belagavi district, their first main vision is to more expansion of the branches and services cross the district”.

MISSION:

“Explore and enhance the quality of life of farmers through financial security and support by providing products and services that would be helpful to him in his path of prosperity”.

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AREA OF OPERATION:

Head office: chikodi

Branches

- Examba
- Manjari
- Kothali
- Karoshi
- Goa- ves, Belagavi
- R.k colony chikodi
- Nasalapur
- Saundatti
- Autonagar- Belgaum
- Nipani
- Athani
- Urag-khurd

CUSTOMER:

- 1) Member
- 2) Farmer
- 3) Business people
- 4) Professional
- 5) Salaried people
- 6) Student
- 7) Daily wages workers

ACHIEVEMENTS

1. They are the first co-operative, bank to start e-stamp facility in Belagavi
2. They are the first co-op bank to start RTGS/NEFT facility in Belagavi
3. They are the first co-op bank to start members deaths relief fund and welfare fund

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AWARDS:

- Bank received " best bank recovery achievement in Belagavi" by co-operative development in 1997
- Shri Shantappa Miraji Received "Sahakar Ratna" Award by Govt Of Karnataka

COMPETITORS:

- ❖ Bireswar co-operative societies
- ❖ Basaweshar co-operative societies
- ❖ D.T patil co-operative bank ltd
- ❖ D.C.C Bank

CONDUCT OF MEETINGS

- ❖ Annual general meeting-once in every year
- ❖ Board meetings-every month
- ❖ Staff meetings-every two months or three month

Special features of the bank:

- eight hours full services
- Fully computerized
- Housing loans and vehicle loan is available at low rate of interest
- Attractive rates of interest on term deposits
- Quick services with smiling faces
- Safe Locker facility, big locker and new cabinet
- General insurance and Yashwini Rait Vima Raksha Yojana service facility

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OTHER KEY PERFORMANCE DATA:

Year	Member	Share capital	Reserves	Deposits	Loan	Net profit	Working capital
2010-11	10740	370.64	1287.49	824231	5262.68	85.16	10122.22
2016-17	11849	589.41	2373.14	15069.63	8681.94	170.56	18414.69
2017-18	11904	627.82	2523.45	15218.78	9102.01	175.74	18789.16
2018-19	11891	653.92	2713.63	16817.45	9098.35	185.05	20627.61
2019-20	12041	686.42	2859.37	18528.50	9294.44	176.48	22593.34

3.5 PRODUCT OVERVIEW:

Shri Shantappa Miraji urban co-operative bank provide services to their customers

1) Banking:

- Saving account
- Current account
- Cash credit
- Fixed deposits
- CTS clearing facility

2) Advance:

- Vehicle loans
- Business loans
- Immovable property loans
- Housing loans
- Industrial loan
- Education loan
- Domestic loan

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3) **Advanced against other security:**

- Loan ornament
- Security of self

4) **Other services:**

- Demand draft facility
- Locker facility
- Pan card facility
- E-stamp facility
- Loan linked insurance plan
- Prime minister suraksha vimha yojana

INTEREST RATES ON DEPOSITS

Period	General	Sr.Czn
46days -90 days	6.00%	6.50%
91 days -180 days	7.00%	7.50%
181days-364 days	8.00%	8.50%
1 year-below 2 years	9.50%	10.00%
2 years	10.00%	10.50%
Above 2 year	9.50%	10.00%

➤ **RTGS/NEET:**

RTSG- Real time gross settlement.

NEET-National Electronic Fund Transfer.

❖ **Benefits of RTGS/NEET Services:**

- RTGS/NEET is free cost for any amount.
- The beneficiary account is credited on the someday.
- Physical cheque/demand draft not required.
- Avoid long waiting period.
- Reduce time and cost.
- Reduce paper work.

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➤ **Transfer limit :**

- RTGS eligibility transaction above 200000/-
- NEFT eligibility :no limit.

➤ **Required information:**

- Amount to be remitted.
- Account number to be debited.
- Name of the beneficiary bank
- IFSC of receiving branches.
- Account number of the beneficiary.

➤ **PMSBY:**

(PRADHAN MANTRI SURKSHA BIMA YOJANA)

Accident insurance covers of Rs200000/- at just Rs 12 premium.

• **Scheme information:**

- ✓ Individual account holder of bank can apply.
- ✓ Age should be between 18-70 years.
- ✓ Claim amount will be paid to account holders nominee in case of accidental.
- ✓ Annual premium Rs12/-will debited to account holder account.

➤ **SMS BANKING SERVICES:**

- The Shri Shantappa Miraji urban co-op bank continually adds banking service and facilities to its portfolio to ensure the comfort of its customer.
- SMS facility for simple and easy to use banking facility for the information based banking service like balance enquiry, mini statement or status on a cheque and many more.
- The SMS banking features updates customer regarding any transaction immediately through text alerts

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Upcoming facilities:

- Rupay card (ATM card)
- Pass book printing
- Personalized CTS cheque book
(Cheque Truncation System)

➤ CTS Clearing

CST is a cheque clearing system undertaken by the reserve bank of India. For the quicker cheques are clearing

As the term proposes truncation in the course of discounting the flow of the physical cheques in its was of clearing instead of this an electronic image of the cheque is transferred with vital essential data.

➤ Benefits of CTS

- Time, money and manpower expended on transfer of cheques from banks to clearing house are eliminated.
- Clearing related frauds become less plausible.
- Probability of cheques misplaced transit is eliminated.
- CTS are more advanced and more secure.
- It provides quicker clearance of cheques.
- Reduced operational risk and risk related to paper clearing.
- There are no extra charges levied for a collection of cheques drawn on a bank located within the grid, further providing no geographical restrictions.

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➤ **E-STAMP:**

E-Stamping is a computer based application and a secured way of paying non judicial stamp duty to the government

• **Benefits:**

- ✓ E-Stamp certificate can be generated within minutes.
- ✓ E-Stamp certificate generated is temper proof.
- ✓ Authenticity of the e-stamp certificate can be checked through the inquiry model.
- ✓ E-stamp certificate generated has a unique identification number.
- ✓ Specific denomination is not required.
- ✓ E-stamp certificate can be checked by any person through recommended site

3.6 DEPARTMENT OVERVIEW

A State special regulatory body that oversees the operation of financial institutions within its jurisdiction the primary responsibility of banking department is to ensure that the financial system is accessible and stable and safe for all customers. Different departments exist in different sector. In banking sector. Some major departments are:

- Department of banking operation and development.
- Department of communication.
- Department of currency management.
- Department of information technology.
- Human resource development.
- Customer service department
- Legal department.
- Recovery department.

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3.7 SWOT ANALYSIS:

Securities need to perform a SWOT analysis of emerging scenario to take advantage of changing state of affairs. This global forum of persons attempts to answer some of these emerging issues of concern.

Strengths:

- The bank is well established
- Efficient and hardworking staff.
- A new innovative product and service.
- Strong location and infrastructure.
- The bank has high goodwill in the market for their service.
- Quality process and products.

Weakness:

- Staff competition especially by other cooperative banks and commercial Banks. Could impact on its growth and hence slowdown in earnings growth.
- Lengthy procedure to grant loans.

Opportunities:

- Rural banking.
- A development market such as the internet
- Recently going for CBS core banking services.
- Moving into new market segments that offer improved profits.

Threat:

- A competitor has a new innovative product and services.
- Unrecovered loan
- Customer shift
- Globalization and privatization.

CHAPTER: 4

DATA ANALYSIS AND INTERPRETATION

Table 4.1 Shows Income Statement on 2017,2018,2019 &2020

Table 4.2 Shows Balance Sheet for the Year 2017, 2018, 2019 And 2020

Table 4.3 Shows Common Size Income Statements for the Year 2016-17 and 2018-2019

Table 4.4shows Common Size Income Statements for the Year2018-19 and 2019-20

Table 4.5 Shows Common Size Balance – Sheet for the Year 2016-17 and 2017-2018

Table 4.6 Shows Income Statement for the Year 2018-19 and 2019-20

Table 4.7 Shows Comparative Income Statement for the Year 2016-17 and 2017-18

Table 4.8 Shows Comparative Income Statement for the Year 2018-19 and 2019-2020

Table 4.9 Shows Comparative Balance – Sheet for the Year 2016-17 and 2017-18

Table 4.10 Shows Comparative Balance – Sheet for the Year 2018-19 and 2019-20

Table 4.11 Shows Revenue from Operations

Table 4.12 Shows Profit before Depreciation

Table 4.13 Shows Profit after Depreciation

Table 4.14 Shows Shareholders Fund

Table 4.15 Shows Current Asset

Table 4.16 Shows Current Liabilities:

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DATA ANALYSIS AND INTERPRETATION

Table 4.1 Shows Income Statement for the Year 2017, 2018, 2019 and 2020

PARTICULARS	2016-17 (In lacks)	2017-18 (In lacks)	2018-19 (In lacks)	2019-2020 (In lacks)
Revenue from operations	3697.27	4348.27	6377.52	9443.85
Total Revenue (A)	3697.27	4348.27	6377.52	9443.85
Less : Expenses				
1) Employees Benefit Expenses	457.44	589.89	699.92	975.18
2) Other Expenses	2781.08	3252.92	4975.75	7550.24
Total Expenses (B)	3238.52	3842.81	5675.67	8525.42
Profit before depreciation (A-B)	458.75	505.46	701.85	918.43
Less : Depreciation	178.01	124.08	190.07	206.34
Profit after depreciation	280.74	381.38	511.78	712.09

(Source: Annual Report)

**A Study on Financial Statement Analysis at Shri Shantappaanna Miraji
Urban Co-op. Bank Ltd., Chidkodi**

Table 4.2 Shows Balance Sheet for the Year 2017, 2018, 2019 And 2020

PARTICULARS		2016-2017	2017-2018	2018-2019	2019-2020
		In lacks	In lacks	In lacks	In lacks
1	Equity & Liabilities				
	1 Shareholders Fund :				
	a. Share Capital	409.16	541.13	707.18	1002.55
	b. Reserve & Surplus	1391.58	1847.19	2512.05	3398.37
	Total Shareholders Fund (A)	1800.74	2388.32	3219.53	4400.92
	2 Non- current liabilities :				
	a. Long term loans	345.03	1086.97	74185	2839.05
	b. Other long term borrowings	22558.53	31748.63	48863.89	67528.84
	Total Non -current liabilities (B)	22903.56	32835.60	49605.74	70367.89
	3 Current liabilities				
	a. Short term borrowings	5606.90	5989.14	7026.06	8581.40
	b. Short term provisions	1149.57	1210.92	1949.93	2611.40
	c. Inter Bank adjustments	8001.56	11953.92	19499.75	24217.24
	d. Other current liabilities	102.96	113.32	197.18	242.09
	Total Current Liabilities (C)	14860.93	19267.3	28604.92	35652.13
	Total Equity & Liabilities (A+B+C)	39565.29	54491.22	81430.19	110420.94
2	Assets				
	1 Non Current/Fixed Assets				
	a. Tangible Assets	303.47	333.82	430.46	443.66
	b. Intangible Assets	524.46	556.64	775.47	884.99
	c. Non Current Investments	133.90	172.97	247.23	288.30
	Total Non Current Assets (A)	961.83	1063.43	1453.16	1616.95
	2 Current Assets				
	a. Current investments	4806.04	8025.34	13788.11	13673.29
	b. Inventories	0.00	0.00	0.00	0.00
	c. Trade Receivables	1229.13	1290.48	1362.92	1529.05
	d. Cash & Cash Equivalents	1383.16	2286.18	3259.02	1819.36
	e. Short term loans & Advances	23183.57	29871.87	42117.23	67565.09
	f. Inter Bank Adjustments	8001.56	11953.92	19499.75	24217.20
	Total Current Assets (B)	38603.46	53427.79	79977.03	108803.99
	Total Assets (A+B)	39565.29	54491.22	81430.19	110420.94

(Source: Annual reports)

**A Study on Financial Statement Analysis at Shri Shantappa Miraji
Urban Co-op. Bank Ltd., Chidkodi**

Table 4.3 Shows Common Size Income Statements for the Year 2016-17 and 2018-2019

Particulars	2016-17		2017-18	
	In Lacks	% of Increase or Decrease	In Lacks	% of Increase or Decrease
Revenue from operations.	3697.27	100.00	4348.27	100.00
Total Revenue (A)	3697.27	100.00	4348.27	100.00
Less : Expenses				
1) Employees benefit expenses	457.44	12.37	589.89	13.57
2) Other expenses	2781.08	75.22	3252.92	74.81
Total Expenses (B)	3238.52	87.59	3842.81	88.38
Profit before depreciation (A-B)	458.75	12.41	505.46	11.62
Less : Depreciation	178.01	4.81	124.08	2.85
Profit after depreciation	280.74	7.59	381.38	8.77

(Source: Annual reports)

INTERPRETATION

The above table shows that during the year the revenue from operations has increased by 17.61% from Rs.3697.27 lakhs to Rs.4348.27 lakhs. The society has displayed a good performance by increasing its profits. The Society is also gaining after making provision from the depreciation. Operating profits are increased as compared to operating losses.

**A Study on Financial Statement Analysis at Shri Shantappaanna Miraji
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**Table 4.4: Shows Common Size Income Statements for the Year 2018-19
and 2019-20**

Particulars	2018-19		2019-20	
	In Lacks	% of Increase or Decrease	In Lacks	% of Increase or Decrease
Revenue from operations.	6377.52	100.00	9443.85	100.00
Total Revenue (A)	6377.52	100.00	9443.85	100.00
Less : Expenses				
1) Employees benefit expenses	699.92	10.97	975.18	10.33
2) Other expenses	4975.75	78.02	7550.24	79.95
Total Expenses (B)	5675.67	88.99	8525.42	90.27
Profit before depreciation (A-B)	701.85	11.01	918.43	9.73
Less : Depreciation	190.07	2.98	206.34	2.18
Profit after depreciation	511.78	8.02	712.09	7.54

(Source: Annual Reports)

Interpretation:

The above table shows that during the year the revenue from operations has increased by 48.08% from Rs.6377.52 lakhs to Rs.9443.85 lakhs. The society has displayed a good performance by increasing its profits. The Society is also gaining after making provision from the depreciation. Operating profits are increased as compared to operating losses.

A Study on Financial Statement Analysis at Shri Shantappa Miraji
Urban Co-op. Bank Ltd., Chikodi

Table 4.5 Shows Common Size Balance – Sheet for the Year 2016-17 And 2017-
2018

Particulars		2016-17		2017-18	
		In Lacks	% of Increase or Decrease	In Lacks	% of Increase or Decrease
1	Equity & Liabilities				
1	Shareholders Fund :				
	a. Share Capital	409.16	1.03	541.13	0.99
	b. Reserve Surplus	1391.58	3.52	1847.19	3.39
	Total Shareholders Fund (A)	1800.74	4.55	2388.32	4.38
2	Non- current liabilities :				
	a. Long term loans	345.03	0.87	1086.97	1.99
	b. Other long term borrowings	22558.53	57.02	31748.63	58.26
	Total Non- current liabilities (B)	22903.56	57.89	32835.60	60.26
3	Current liabilities				
	a. Short term borrowings	5606.90	14.17	5989.14	10.99
	b. Trade payables	0.00	0.00	0.00	0.00
	c. Short term provisions	1149.57	2.91	1210.92	2.22
	d. Inter Bank adjustments	8001.56	20.22	11953.92	21.94
	e. Other current liabilities	102.96	0.26	113.32	0.21
	Total Current Liabilities (C)	14860.93	37.56	19267.3	35.36
	Total Equity & Liabilities (A+B+C)	39565.29	100.00	54491.22	100.00
2	Assets				
1	Non Current/Fixed Assets				
	a. Tangible Assets	303.47	0.77	333.82	0.61
	b. Intangible Assets	524.46	1.33	556.64	1.02
	c. Non Current Investments	133.90	0.34	172.97	0.32
	Total Non Current Assets (A)	961.83	2.43	1063.43	1.95
2	Current Assets				
	a. Current investments	4806.04	12.15	8025.34	14.73
	b. Trade Receivables	1229.13	3.11	1290.48	2.37
	c. Cash & Cash Equivalents	1383.16	3.50	2286.18	4.20
	d. Short term loans & Advances	23183.57	58.60	29871.87	54.82
	e. Inter Bank Adjustments	8001.56	20.22	11953.92	21.94
	Total Current Assets (B)	38603.46	97.57	53427.79	98.05
	Total Assets (A+B)	39565.29	100.00	54497.22	100.00

(Source: Annual Reports)

**A Study on Financial Statement Analysis at Shri Shantappaanna Miraji
Urban Co-op. Bank Ltd., Chidkodi**

Interpretation:

The above table shows that During the year 2016-17 the total equity and liability is Rs.39567.29 lakhs that is treated as 100%. And total assets is Rs.39565.29 Lakhs that is treated as 100%. So based on this each items of the liabilities and assets are expressed in the ratio that is as below:

1. Total share capital fund is expressed in the ratio of – 4.55 %
2. Total Non- current the liabilities is expressed in the ratio of – 57.89 %
3. Total current liabilities is expressed in the ratio of 37.56 %
4. Total fixed assets is expressed in the ratio of – 2.43 %
5. Total current assets is expressed in the ratio of – 97.57 %

The above table shows that During the year 2017-18 the total Equity and Liability is Rs.54491.22 lakhs that is treated as 100%. And a total asset is Rs.54491.22 lakhs that is treated as 100%. So based on this each items of the liabilities and assets are expressed in ratio that is as below:

1. Total share capital fund is expressed in the ratio of – 4.38 %
2. Total Non- current liabilities is expressed in the ratio of – 60.26 %
3. Total current liabilities is expressed in the ratio of 35.36 %
4. Total fixed assets is expressed in the ratio of – 1.95 %
5. Total current assets is expressed in the ratio of – 98.05 %

**A Study on Financial Statement Analysis at Shri Shantappa Miraji
Urban Co-op. Bank Ltd., Chidkodi**

Table 4.6 Shows Income Statement for the Year 2018-19 And 2019-20

Particulars		2018-19		2019-2020	
		In Lacks	% of Increase or Decrease	In Lacks	% of Increase or Decrease
1	Equity & Liabilities				
	1 Shareholders Fund :				
	a. Share Capital	707.48	0.87	1002.55	0.91
	b. Reserve Surplus	2512.05	3.08	3398.37	3.08
	Total Shareholders Fund (A)	3219.53	3.95	4400.92	3.99
	2 Non-current liabilities :				
	a. Long term loans	741.85	0.91	2839.05	2.57
	b. Other long term borrowings	48863.89	60.01	67528.84	61.16
	Total Non-current liabilities (B)	49605.74	60.92	70367.89	63.73
	3 Current liabilities				
	a. Short term borrowings	7026.06	8.63	8581.4	7.77
	b. Trade payables	0.00	0.00	0.00	0.00
	c. Short term provisions	1949.93	2.39	24217.24	21.93
	d. Inter Bank adjustments	19449.75	23.89	242.09	0.22
	e. Other current liabilities	179.18	0.22	35652.13	32.29
	Total Current Liabilities (C)	28604.92	35.13	110420.94	100.00
	Total Equity & Liabilities (A+B+C)	81430.19	100.00	110420.94	100.00
2	Assets				
	1 Non Current/Fixed Assets				
	a. Tangible Assets	430.46	0.53	443.66	0.40
	b. Intangible Assets	775.47	0.95	884.99	0.80
	c. Non Current Investments	247.23	0.30	288.30	0.26
	Total Non Current Assets (A)	1453.16	1.78	1616.95	1.46
	2 Current Assets				
	a. Current investments	13788.11	16.93	13673.29	12.38
	b. Trade Receivables	1362.92	1.67	1529.05	1.38
	c. Cash & Cash Equivalents	3259.02	4.00	1819.36	1.65
	d. Short term loans & Advances	42117.23	51.72	67565.09	61.19
	e. Inter Bank Adjustments	19449.75	23.89	24217.20	21.93
	Total Current Assets (B)	79977.03	98.22	108803.99	98.54
	Total Assets (A+B)	81430.19	100.00	110420.94	100.00

(Source: Annual Reports)

**A Study on Financial Statement Analysis at Shri Shantappa Miraji
Urban Co-op. Bank Ltd., Chidkodi**

INTERPRETATION:

The above table shows that During the year 2018-19 the total equity and liability is Rs.81430.19 lakhs that is treated as 100%. And total assets is Rs.81430.19 Lakhs that is treated as 100%. So based on this each items of the liabilities and assets are expressed in the ratio that is as below:

1. Total share capital fund is expressed in the ratio of – 3.95 %
2. Total Non- current the liabilities is expressed in the ratio of – 60.92 %
3. Total current liabilities is expressed in the ratio of 35.13 %
4. Total fixed assets is expressed in the ratio of – 1.78 %
5. Total current assets is expressed in the ratio of – 98.22 %

The above table shows that During the year 2019-2020 the total Equity and Liability is Rs.54491.22 lakhs that is treated as 100%. And a total asset is Rs.54491.22 lakhs that is treated as 100%. So based on this each items of the liabilities and assets are expressed in ratio that is as below:

1. Total share capital fund is expressed in the ratio of – 3.99 %
2. Total Non -current liabilities is expressed in the ratio of – 63.73 %
3. Total current liabilities is expressed in the ratio of 32.29 %
4. Total fixed assets is expressed in the ratio of – 1.46 %
5. Total current assets is expressed in the ratio of – 98.54 %

**A Study on Financial Statement Analysis at Shri Shantappa Miraji
Urban Co-op. Bank Ltd., Chikodi**

Table 4.7 Shows Comparative Income Statement for the Year 2016-17 And 2017-18

Particulars	2016-17	2017-18	Increase Or Decrease	% of Increase or Decrease
	In Lacks		In Lacks	
Revenue from operations.	3697.27	4348.27	651.00	17.61
Total Revenue (A)	3697.27	4348.27	651.00	17.61
Less : Expenses				
1) Employees benefit expenses	457.44	589.89	132.45	28.95
2) Other expenses	2781.08	3252.92	471.84	16.97
Total Expenses (B)	3238.52	3842.81	604.29	18.66
Profit before depreciation (A-B)	458.75	505.46	46.71	10.18
Less : Depreciation	178.01	124.08	-53.93	-30.30
Profit after depreciation	280.74	381.38	100.64	35.85

(Source: Annual Reports)

Interpretation:

1. There is an increase of Rs.651.00 lakhs in total revenue as a result there is an increasing profit before Depreciations by Rs.46.71 lakhs as compared to the previous year.
2. In operating expenses there is an increase of Rs.604.29 lakhs. The increase in operating expenses is less than proportional as compared to increase in total revenue. This results operating profit.
3. And after the Depreciation of the assets, there be society has gain the profit of Rs. 100.64 lakhs as compared to the previous year.

**A Study on Financial Statement Analysis at Shri Shantappa Miraji
Urban Co-op. Bank Ltd., Chikodi**

Table 4.8 Shows Comparative Income Statement for the Year 2018-19 And 2019-2020

Particulars	2018-19	2019-20	Increase Or Decrease	% of Increase or Decrease
	In Lacks		In Lacks	
Revenue from operations.	6377.52	9443.85	3066.33	48.08
Total Revenue (A)	6377.52	9443.85	3066.33	48.08
Less : Expenses				
1) Employees benefit expenses	699.92	975.18	275.26	39.33
2) Other expenses	4975.75	7550.24	2574.49	51.74
Total Expenses (B)	5675.67	8525.42	2849.75	50.21
Profit before depreciation (A-B)	701.85	918.43	216.58	30.86
Less : Depreciation	190.07	206.34	16.27	8.56
Profit after depreciation	511.78	712.09	200.31	39.14

(Source: Annual Reports)

Interpretation:

The above table shows

1) There is an increase of Rs.3066.33 lakhs in total revenue as a result there is an increasing Profit before Depreciations by Rs.216.58 lakhs as compared to the previous year.

2) In operating expenses there is an increase of Rs.2849.75 lakhs. The increase in operating expenses is less than proportional as compared to increase in total revenue.

3) This results operating profit. And after the Depreciation of the assets, the society has gain the profit of Rs.200.31 lakhs as compared to the previous year.

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Urban Co-op. Bank Ltd., Chidkodi

Table 4.9 Shows Comparative Balance – Sheet for the Year 2016-17 and 2017-18

PARTICULARS		2016-17	2017-18	Increase or Decrease	% of Increase or Decrease
		In lacs	In lacs	In lacs	
1	Equity & Liabilities				
1	Shareholders Fund :				
	a. Share Capital	409.16	541.13	707.18	1002.55
	b. Reserve Surplus	1391.58	1847.19	2512.05	3398.37
	Total Shareholders Fund (A)	1800.74	2388.32	3219.53	4400.92
2	Non- current liabilities :				
	a. Long term loans	345.03	1086.97	74185	2839.05
	b. Other long term borrowings	22558.53	31748.63	48863.89	67528.84
	Total Non- current liabilities (B)	22903.56	32835.60	9932.04	43.36
3	Current liabilities				
	a. Short term borrowings	5606.90	5989.14	382.24	6.82
	b. Trade payables	0.00	0.00	0.00	0.00
	b. Short term provisions	1149.57	1210.92	61.35	5.34
	c. Inter Bank adjustments	8001.56	11953.92	3952.36	49.39
	d. Other current liabilities	102.96	113.32	10.36	10.06
	Total Current Liabilities (C)	14860.99	19267.3	4406.31	29.65
	Total Equity & Liabilities (A+B+C)	39565.29	54491.22	14925.93	37.72
2	Assets				
1	Non Current/Fixed Assets				
	a. Tangible Assets	303.47	333.82	30.35	10.00
	b. Intangible Assets	524.46	556.64	32.18	6.14
	c. Non Current Investments	133.90	172.97	39.07	29.18
	Total Non Current Assets (A)	961.83	1063.43	101.60	10.56
2	Current Assets				
	a. Current investments	4806.04	8025.34	3219.3	66.98
	b. Trade Receivables	1229.13	1290.48	61.35	4.99
	c. Cash & Cash Equivalents	1383.16	2286.18	903.02	65.29
	d. Short term loans & Advances	23183.57	29871.87	6688.3	28.35
	e. Inter Bank Adjustments	8001.56	11953.92	3952.36	49.39
	Total Current Assets (B)	38603.46	53427.79	14824.33	38.40
	Total Assets (A+B)	39565.29	54491.22	14925.93	37.72

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INTERPRETATION:

The above table shows that as Compare to the 2016-17&2017-18

1. There is increase in total shareholders fund by Rs.587.58 lakhs. And 32.63%
2. There is increase in total Non-current liabilities by Rs.9932.04 lakhs and 43.36 %.
3. There is increasing total currently liabilities by Rs.4406.31 lakhs and 29.65 % and in Total Equity and liabilities are increased by Rs.14925.93 and 37.72 %.
4. And in fixed assets there is an increase of Rs.101.60 lakhs and 10.56 %.
5. Similarly there is increasing Total Current Assets of Rs.14824.33 lakhs and 38.40% and in Total Assets are increased by Rs.14925.93 and 37.72%.

A Study on Financial Statement Analysis at Shri Shantappa Miraji
Urban Co-op. Bank Ltd., Chikodi

Table 4.10 Shows Comparative Balance – Sheet for the Year 2018-19 and 2019-20

PARTICULARS		2018-19	2019-20	Increase or Decrease	% of Increase or Decrease
		In lacs	In lacs	In lacs	
1	Equity & Liabilities				
1	Shareholders Fund :				
	a. Share Capital	707.48	1002.55	295.07	41.71
	b. Reserves & Surplus	2512.05	3398.37	886.32	35.28
	Total Shareholders Fund (A)	3219.53	4400.92	1181.39	36.69
2	Non- current liabilities :				
	a. Long term loans	741.85	2839.05	2097.2	282.70
	b. Other long term borrowings	48863.89	67528.84	18664.95	38.20
	Total Non- current liabilities (B)	49605.74	70367.89	20762.15	-41.85
3	Current liabilities				
	a. Short term borrowings	7026.06	8581.4	1555.34	22.14
	b. Trade payables	0.00	0.00	0.00	0.00
	b. Short term provisions	1949.93	2611.4	661.47	33.92
	c. Inter Bank adjustments	19449.75	24217.24	4767.49	24.51
	d. Other current liabilities	179.18	242.09	62.91	35.11
	Total Current Liabilities (C)	28604.92	35652.13	7047.21	24.64
	Total Equity & Liabilities (A+B+C)	81430.19	110420.94	28990.75	35.60
2	Assets				
1	Non Current/Fixed Assets				
	a. Tangible Assets	430.46	443.66	13.2	3.07
	b. Intangible Assets	775.47	884.99	109.52	14.12
	c. Non Current Investments	247.23	288.30	41.07	16.61
	Total Non Current Assets (A)	1453.16	1616.95	163.79	11.27
2	Current Assets				
	a. Current investments	13788.11	13673.29	-114.82	-0.83
	b. Trade Receivables	1362.92	1529.05	166.13	12.19
	c. Cash & Cash Equivalents	3259.02	1818.36	-1439.66	-44.17
	d. Short term loans & Advances	42117.23	67565.09	25447.86	60.42
	e. Inter Bank Adjustments	19449.75	24217.20	25447.86	60.42
	Total Current Assets (B)	79977.03	108803.99	28826.96	36.04
	Total Assets (A+B)	81430.19	110420.94	28990.75	35.60

(Source: Annual Reports)

**A Study on Financial Statement Analysis at Shri Shantappaanna Miraji
Urban Co-op. Bank Ltd., Chidkodi**

INTERPRETATION:

The above table shows that as Compare to the 2018-19&2019-20

1. There is increase in total shareholders fund by Rs.1181.39 lakhs. And 36.69%
2. There is increase in total Non-current liabilities by Rs.20762.15 lakhs and 41.85 %.
3. There is increasing total currently liabilities by Rs.7047.21 lakhs and 24.64 % and in Total Equity and liabilities are increased by Rs.28990.75 and 35.60 %.
4. And in fixed assets there is an increase of Rs.163.79 lakhs and 11.27 %.
5. Similarly there is increasing Total Current Assets of Rs.28826.96 lakhs and 36.04% and in Total Assets are increased by Rs.28990.75 and 35.60%.

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Table 4.11 Shows Revenue From Operations:

REVENUE FROM OPERATIONS (amt in Lakhs)			
YEAR	Revenue from operation	Growth over the base year	Growth Rate
2016-17	3697.27	-	-
2017-18	4348.27	651.00	17.61
2018-19	6377.52	2680.25	72.49
2019-20	9443.85	5746.58	155.43

(source:annual report)

Graph 4.11 Shows Revenue From Operations



Interpretation:

The above table shows that Revenue from operation is increasing year by year as shown in above chart. That is in the year 2016-17, 2017-18, 2018-19 and 2019-20 the revenue from operation is 3697.27 lakhs, 4348.27 lakhs 6377.52 lakhs and 9443.85 lakhs respectively.

If we consider the growth rate of the operating revenue by assuming 2017 is base year. Society is gaining its operating revenue. That is in the year 2018 growth rate is 17.61% and in 2019, 72.49% and lastly in the 2020- 155.4%. There is a positive growth in the operating revenue.

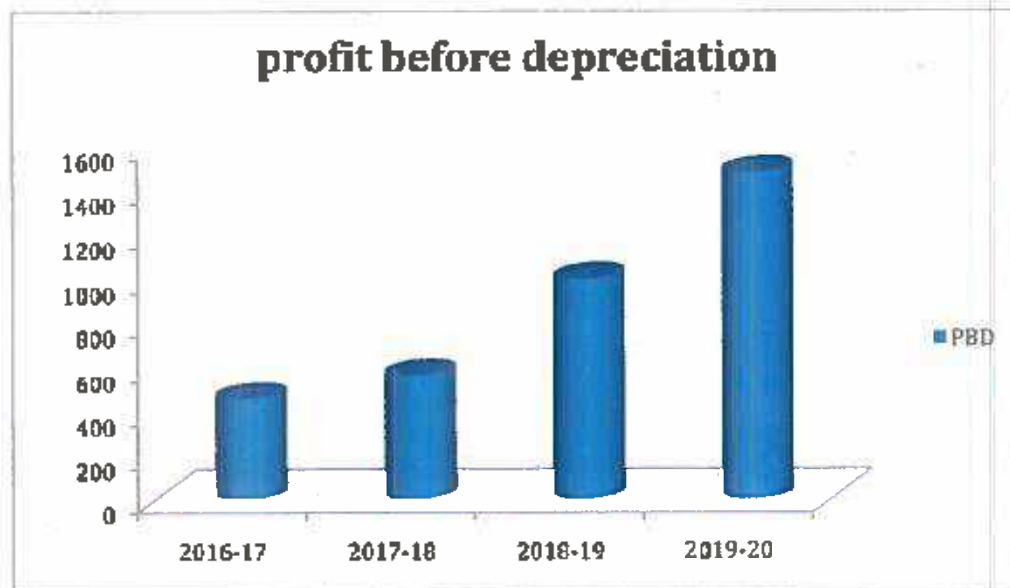
**A Study on Financial Statement Analysis at Shri Shantappa Miraji
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Table 4.12 Shows Profit before Depreciation:

PROFIT BEFORE DEPRECIATION (amt in Lakhs)			
YEAR	PBD	Growth over the base year	Growth rate
2016-17	458.75	-	-
2017-18	505.46	46.71	10.18
2018-19	701.85	243.1	52.99
2019-20	918.43	459.68	100.20

(Source: Annual Reports)

Graph 4.12 Shows Profit Before Depreciation:



Interpretation:

The above table shows that Profit before depreciation is increasing step by step as shown in the above chart. That is in the year 2016-17, 2017-18, 2018-19 and 2019-20 the profit before depreciation is 458.75 lakhs, 505.46 lakhs, 701.85 lakhs and 918.3 lakhs respectively.

If we consider the growth rate of the Profit before depreciation by assuming 2019 is base year. Society is gaining its profit. That is in the year 2018 growth rate is 10.18% & in 2019 – 52.99% and lastly in the 2020 – 100.20%. There is a positive growth in the profit.

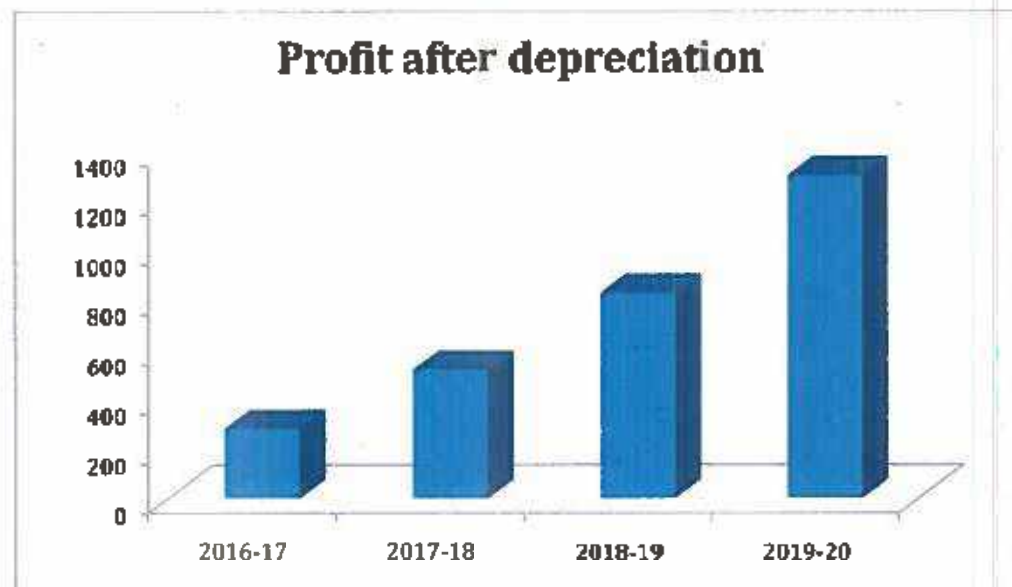
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Table 4.13 Shows Profit After Depreciation:

PROFIT AFTER DEPRECIATION (amt in Lakhs)			
YEAR	PAD	Growth over the base year	Growth Rate
2016-17	280.74	-	-
2017-18	381.38	100.64	35.85
2018-19	511.78	231.04	82.30
2019-20	712.09	431.35	153.65

(Source: Annual Reports)

Graph 4.13 Shows Profit After Depreciation:



Interpretation:

The above table shows that Profit after depreciation also Society performance is good in 2018 – 35.85%, 2017 -82.30% & 2020-153.65% increase in the profit. When compared to 2017, which has considered as base year.

In both cases that is profit before depreciation and profit after depreciation there is a increase in the profit because of decrease in the operating & administrative expenses.

**A Study on Financial Statement Analysis at Shri Shantappaanna Miraji
Urban Co-op. Bank Ltd., Chidkodi**

Table 4.14 Shows Shareholders Fund

SHOREHOLDERS FUND(amt in lakhs)			
YEAR	Shareholders fund	Growth over the base year	Growth year
2016-17	1800.74	=	=
2017-18	2388.32	587.58	32.63
2018-19	3219.53	869.97	34.50
2019-20	4400.92	1181.39	36.69

(Source: Annual Reports)

Graph 4.14 Shows Shareholders Fund



INTERPRETATION:

From the above table we can analyze shareholder fund in 2016-17 taken as a base year. The growth rate is 2017-18 32.63%, 2018-19 34.50% and 2019-20 36.69%

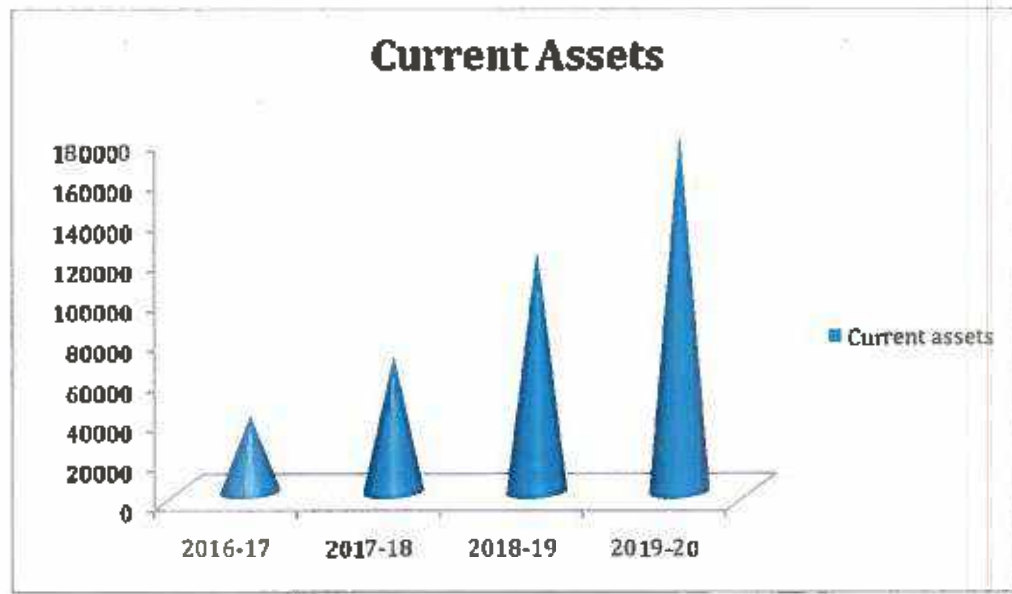
**A Study on Financial Statement Analysis at Shri Shantappaanna Miraji
Urban Co-op. Bank Ltd., Chidkodi**

Table 4.15 Shows Current Assets

CURRENT ASSETS(amt in Lakhs)			
YEAR	Current Assets	Growth over the base year	Growth Rate
2016-17	38603.46	-	-
2017-18	53427.79	14824.33	38.40
2018-19	79977.03	41373.57	107.18
2019-20	108803.99	70200.53	181.85

(Source: Annual Reports)

Graph 4.15 Shows Current Asset



Interpretation:

From above table shows that In 2017 current assets are 38603.46 lakhs, 2018 - 53427.79 lakhs, 2019 - 79977.03 lakhs and 2020 - 108803.99 lakhs. Here, if you consider the 2014 is as base year than the growth rate of the current assets is 2018 - 38.40%, 2019 - 107.18% & 2020 - 181.85%. The percentage increase in the growth is favorable or good for the society.

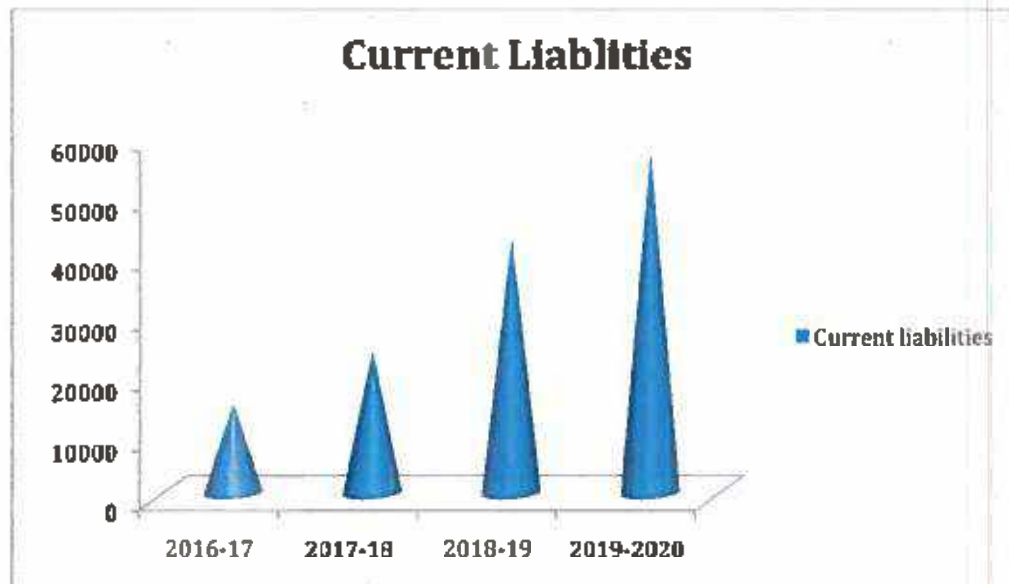
**A Study on Financial Statement Analysis at Shri Shantappaanna Miraji
Urban Co-op. Bank Ltd., Chidkodi**

Table 4.16 Shows Current Liabilities:

CURRENT LIABILITIES(amt in Lakhs)			
YEAR	Current Liabilities	Growth over the base year	Growth Rate
2016-17	14860.99	-	-
2017-18	19267.30	4406.31	29.65
2018-19	28604.92	13743.93	92.48
2019-2020	35653.13	20792.14	139.91

(Source: Annual Reports)

Graph 4.16 Shows Current Liabilities:



Interpretation:

The above table shows that the current liabilities also showing an increasing trend in just like the current assets. Which are increased by 29.65%, 92.48% and 139.91% in 2018, 2019 & 2017 respectively. The increase in the current liabilities it's not good for the society. There is increases the current liabilities because of the increases provisions made by the society and interbank adjustment

CHAPTER: 5

FINDING, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

5.2 SUGGESTIONS

5.3 CONCLUSION

**A Study on Financial Statement Analysis at Shri Shantappa Miraji
Urban Co-op. Bank Ltd.. Chidkodi**

FINDING, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS:

- The net profit was low 280.74 lacks during the period 2016-17 and high 712.09 lacks during the period 2019-20. It shows that the net profit has an increasing trend during the period of study. The society can provide fair rate of return to their equity shareholders.
- The society has strong recovery policy
- Society is performing its overall operations successively
- The society has made some changes in the rate of interest on loan in the current year
- The society has better return on investment since profit is high
- The trend percentage of the various components of profit and loss account from 2016-17 to 2018-19 Revenue from operation and operating expenses shows an increasing trend over the period of study. In the case of net profit it shows an increasing trend up to 2019-20.
- The equity share capital was 409.16 lacks during the period 2016-17 and it increases to 1000.55 lacks during the period 2018-19. It shows that the equity share capital has an increasing trend during the period of study. The society can operate its activities in effective manner.
- The assets were very well handled and the efficiency of the society being higher.
- The society has better return on investment since profit is high.
- The society has been increased by year by year and total assets and total liabilities for the year 2016-17 to 2019-20 shows increasing trend
- The assets were very well handled and the society being higher

**A Study on Financial Statement Analysis at Shri Shantappaanna Miraji
Urban Co-op. Bank Ltd., Chidkodi**

5.2 SUGGESTION:

In view of the findings and the conclusions of the study, the following recommendations are suggested to analysis the financial performance of selected SHRI SHANTAPPANNA MIRAJI URBAN CO-OP.BANK., LTD CHIKODI

- The society can introduce a new attractive scheme for the depositors.
- The company should reduce the administrative and office expenses to increase their net profit. The program should be analyzed every time to time by some financial expert, so that heavy changes in financial performance can be reduced.
- The company can concentrates more on reserves for the expansion of the business in the future.
- The deposits are to be increased for the purpose of expansion of the deposit should be moderate.
- In order to improve the financial leverage the management shall build equity capital by collecting shares from existing and new membership increase, retain profit or converting cash members of the cooperative should increase their own capital to finance fixed assets in order to reduce leverage ratio, this can be enhanced by selling additional share capital.
- To improve the liquidity position of co operative societies, the all co operative societies shall maintain adequate cash reserves from operating activities.

**A Study on Financial Statement Analysis at Shri Shantappa Miraji
Urban Co-op. Bank Ltd., Chikodi**

5.3 CONCLUSION:

The study was conducted on Analysis Of Financial Statement At Shri Shantappa Miraji Urban Co-Operative Bank Ltd. Chikodi. In the course of study, I have acquired theoretical and also practical knowledge in the society.

By all over study this project I would like to include that society has efficient reserves and surplus in the year 2018-19. Through that society can manage current liabilities very well. And in the year 2018-19 society position is very good compared to the last year performance and also there are increases in the branches. That shows the development of the society overall growth and development.

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**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON UTILISATION OF FUNDS"**

AT

**VIDYASHREE BRAHMISUNDARI MAHILA MULTI-
PURPOSE COOPERATIVE SOCIETY KAGWAD**

Submitted to

RANI CHANNAMMA UNIVERSITY, BELAGAVI



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

**Miss. Varsha Magdum
M.COM-IV SEMESTER
REGISTER NO: MC191627**

UNDER THE GUIDANCE OF

SHRI. S. M. BHOSAGE

**K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that Miss. Varsha D Magdum has satisfactorily completed the Project Report Entitled " A Study on Utilisation of Funds" At Vidhyashree Brahmisundari Mahila Multi-Purpose Cooperative Society, Kagwad for the partial fulfilment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year 2020-2021.


SHRI. S. M. BHOSAGE

PROJECT GUIDE


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1361

**VIDYASHREE BRAMHISUNDARI MAHILA
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Ref. No.

Date : 09 / Sep / 2021

CERTIFICATE

This is to certify that Miss Varsha Magdum M. Com 4th semester student of K. L.E. Society's Basavaprabhu Kore Arts science & Commerce college Chikkodi has done her project work antitled as "A study on utilization of fund of Vidyashree Bramhisundari Mahila Multi - purpose Co op Society Nyt, Kagwad

During 4th semester period i.e., from 21/07/2021 to 25/08/2021 this period her conduct wad good. We wish all the best in her future career. We wish all the success in her future and all the best

Place : Kagwad

Date : 09 / Sep / 2021

Yours Faithfully

[Signature]
Secretary

**VIDYASHRI BRAHMISUNDARI MAHILA
MULTI PURPOSE CO-OP SOCIETY
LTD., KAGWAD**

DECLARATION

I declare that the project report entitled "A Study on Utilisation of Funds" At Vidhyashree Brahmisundari Mahila Multi-Purpose Cooperative Society, Kugwad " is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. S. M. Bhosage, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 17/09/2021

Place: Chikodi



Miss. Varsha D Magdum

Register No: MC191627

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

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At the outset, I would like to thank all the teaching faculty of PG Department of Commerce and Management for their valuable suggestions during project work.

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Miss. Varsha D Magdum

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CHAPTER 1
INTRODUCTION AND RESEARCH DESIGN

- 1.1 Introduction
- 1.2 Review of Literature
- 1.3 Statement of the Problem
- 1.4 Need for the Study
- 1.5 Objectives of the Study
- 1.6 Scope of the Study
- 1.7 Research Methodology
- 1.8 Limitations of the study
- 1.9 Chapter Scheme

CHAPTER 1 INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

Finance is essential for every business enterprise to carry out its activities because finance is one of basic requirements of all economic activities. The word 'bank' is derived from the Italian word, "banco" the French word "banque", the Latin word, "banca" which means a bench or desk used for changing currency and lending money.

Banks are the financial mediators playing very important role in economic development of all the nations of the world and form the core of money market so banking is the life blood of the modern commercial institution accepting money as deposit for lending besides the accepting the deposit & lending money banks possess the character of an agent because of its various agency services since all the banking function are carried on with the aim of making profit, it is regarded as a commercial institution.

Finance is the set of activities dealing with the management of funds. More specifically it is the decision of collection and use of funds. It is a branch of economics that studies the management of money and other assets.

Finance is also the science and art of determining if the funds of an organization are being used properly. Through financial analysis, companies and businesses can take decision and corrective action towards the sources of income and the expenses and investments that need to be made in order to stay competitive.

Finance is the blood of business. It flows in mostly from sale of goods services. It flows out for meeting various types of expenditure. The activating element in any business which may be on industrial or commercial undertaking is the finance.

Business finance has been defined as those activities which have to do with the provision and management of funds for the satisfactory conduct of business. Business finance is defined as that business activity which is concerned with the acquisition and Conservation of capital fund in meeting the financial needs and Overall objectives of business enterprises .so we can say Business finance is mainly developed around three objectives expenditure.

The activating element in any business which may be on industrial or commercial undertaking is the finance. Business finance has been defined as those activities which have to do with the provision and management of funds for the satisfactory conduct of business.

A Study on Utilisation of Funds At Vidhyashree Brahmisundari Mahila Multi-Purpose cooperative Society, Kagwad

Business finance is defined as that business Activity which is concerned with the acquisition and Conservation of capital fund in meeting the financial needs and Overall objectives of business enterprises. So we can say Business finance is mainly developed around three objectives.

Finance is the lifeblood of any organization, be it nano, small, large, for-profit, not-for-profit, etc. It is, therefore, extremely important that the finances of the organization are managed in the most efficient and efficient manner to ensure long-term viability, sustainability and profitability (except not-for-profit organization).

Utilization of fund in addition to their economical procurement. Thus, business finance, in the words of. Authman and Dongall may broadly be defined as "activity which is concerned with the planning, raising, controlling and administering of funds used in the business."

Use of funds is governed by the fund authority for the specified account. Managers responsible for understanding the restrictions on use for all fund types, and for any trust account utilized by the department.

The fund utilisation report gives details concerning the way funds were used in a selected period of time. It shows the amounts issued from a fund selected and how much was paid back or deposited to the fund. To get to this screen, go to loans/portfolio Reports/Analysis Reports/fund Utilisation.

To ensure optimum funds utilisation. Once the funds are procured, they should be utilized in maximum possible way at least cost. To ensure safety on investment, i.e. funds should be invested in safe venture so that adequate rate of return can be achieved.

1.2 REVIEW OF LITERATURE:

Kishor niivrutti jagatap(2013):

Mention that the cooperative banking system is most important part of Indian financial system. Especially in rural area the agricultural credit cooperatives and urban cooperative banks in urban area.

Guptha Jyoti and Jain suman (2012):

Posited that urban cooperative banks are providing most of the banking services such as saving and current accounts, safe deposits lockers, loan, advances or mortgages to the general and business people.

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Sanjay Kantil Das [2012]:

In their article "Operational and financial performance analysis of Meghalaya cooperative Apex Bank" published in Journal on banking financial services and insurance research, Volume 2, Issue No. 3, (Page No. 20-39) concluded that MCAB is one of the top most cooperative banking institutions in Meghalaya and renders services towards the common people as friend, philosopher and guide. The bank earned consistent profit during the years from inception except a few years.

R.S. Shirasi [June, 2012]:

In their article "A study of financial working and operational performance of Urban Co-operative Banks in Pune District" published in Indian Streams Research Journal, Volume 1, Issue No. V, (Page No. 1-4) concluded that it is observed that there is regional imbalance in the growth of UCBs in India. Five states viz., Maharashtra, Gujarat, Karnataka, Andhra Pradesh and Tamil Nadu account for 1661 UCBs out of 2104 in the country as at end March 2003. In 2008 out of total UCBs were registered in Maharashtra state. And in Pune there are 14 blocks. The total number of UCBs registered in Pune district was 60 as on 31-03-2008 out of these 60 UCBs 44 UCBs were concentrated in Pune city where is 13 UCBs scattered 13 blocks of the district as on 31-03-2008

Tejani Rachana [2011]:

In their article "Financial inclusion and performance of rural co-operative banks in Gujarat" published in Research journal of finance and accounting, Volume 2, Issue No.6, and (Page No. 40-50) concluded that there is lot of opportunity for the commercial banks to explore the rural unbanked areas. Though RRBs and PACS have good coverage but most of them are running into losses. Again, the number of kisan credit cards issued and the amount of credit granted under it is also showing a declining trend. Commercial banks should seize this opportunity rather than looking at it as a social obligation

Adhir ambovane(2011):

Agued that the cooperative banks play a vital role in bolstering the common individual and financing his business and personal needs especially in agricultural dominated rural area.

Rajiv Kumar and Kaur Jasmindeep [2010]:

In their article "Financial Appraisal of Haryana State Co-operative Apex Bank" published in Advances in management, Volume 3, Issue No. 12, (Page No. 41-48) concluded that results of the study showed that in the membership of the bank, major share was of cooperatives. Whereas, individuals and government had very less percentage share and in paid up share capital, the maximum share was in the hands of cooperative, government share was minimum in it.

A Study on Utilisation of Funds At Vidhyashree Brahmisundari Mahila Multi-Purpose cooperative Society, Kagwad

Anil Matkar (2010):

Studied the services provided by the cooperative banks in Maharashtra. The author has collected primary and secondary data for the getting insides and facts about the services provided.

Sing and Sing (2006):

Studied the funds management in the District Central co-operative Bank (DCCBs) of Punjab with specific reference to the analysis of financial margin. It noted that a higher proportion of own funds and the recovery concerns have results in the increased margin of the central co-operative Banks and thus had a larger provisions for non-performing assets.

Mavaluri, Boppana and Nagarjuna(2006):

Suggested that performance of banking in terms of profitability, productivity, asset quality and financial management has become important to stable the company. They found that public sectors, banks have been more efficient than other banks other.

Jain (2001):

Has done a comparative performance analysis of district central co-operative Banks (DCCBs) of western India, namely Maharashtra, Gujarat and Rajasthan and found that DCCBs of Rajasthan have performed better in profitability and liquidity as compared to Gujarat and Maharashtra.

Bhaskaran and Josh (2000):

Concluded that the recovery performance of co-operative credit institutions continues to unsatisfactory which contributes to the growth of NPA even after the introduction of prudential regulations. They suggested legislative and policy prescriptions to make co-operative credit institutions more efficient, productive and profitable organization in tune with competitive commercial banking.

1.3 STATEMENT OF THE PROBLEM:

As study is pertaining to utilisation of fund of study unit. It is an entitled as "A study of utilisation of fund of Vidhyashree Brahmisundari Mahila Multi-purpose cooperative society Kagwad".

1.4 NEED FOR THE STUDY:

Deposits are a crucial part of any investment and savings plan, although during a recession deposit account may pay considerably less interest due to low rates, bank deposits provide savers with a measure of safety that cannot be found elsewhere. Actively managing deposits accounts will ensure that the know how these savings investments work.

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This study is mainly concentrated on the lending practices pattern and influence in the organization performance. It also helps to know the objectives and goals as well as it help to ascertain people's response on bank lending.

Use of funds is governed by the funds authority for the specified fund type, or in the case of trust for the specified account.

The study is taken on utilization of funds in "Vidyashree Brahmisundari Mahila Multi-purpose cooperative society Kagwad." This study shows us the procedure that are taken place for purpose of receiving deposits from the customers/lenders and also with respect to the study of the whole organization and the process followed in that organization.

1.5 OBJECTIVES OF THE STUDY:

- 1 To study about the Deposit Mobilization by the Bank.
- 2 To study To study about fund utilization by the bank

1.6 SCOPE OF THE STUDY:

The present case study of "Vidyashree Brahmisundari Mahila Multi-purpose cooperative society Kagwad" covers a study on "fund utilisations". The study also deposits are studied by analyzing the financial statement of the society. The present study covers the period of 5 years.

1.7 RESEARCH METHODOLOGY:

The present study is mainly based on the primary and secondary data viz.; discussion, annual report of the bank for the respective year is from 2017 to 2021, etc. The necessary primary data is collected through informal discussion with the secretary, founder, Accounts Executive and also with the members of the bank.

Tools for data collection:

The tools for data collection are divided into two parts i.e.

- 1) Primary data
- 2) Secondary data

1) Primary Data:

This data is being collected by the help and guidance of Shri. Appasahab A Magdum who is the Kagwad branch manager of in "Vidyashree Brahmisundari Mahila Multi-purpose cooperative society Kagwad". The conversation helped to have a idea about the these bank, its functions and other aspects of the bank.

A Study on Utilisation of Funds At Vidhyashree Brahmisundari Mahila Multi-Purpose cooperative Society, Kagwad

2) Secondary Data:

Secondary data which includes the annual report of the bank for the past years helped to study the financial aspects of the bank. This data shows about the gain/ loss in the financial statement of the bank. It is the data, which gives relevant information in the different fields of "Vidyashree Brahmisundari Mahila Multi-purpose cooperative society Kagwad". The secondary data also includes the data collected from other sources mentioned below.

Secondary data source data collection:

- Annual Report
- Books
- Reference material.

1.8 LIMITATIONS OF THE STUDY:

My research was limited because of the fact that the major source of data was from the annual reports of the bank, which were subject to accounting policies and practices followed by the organization

The major limitations are:

- Due to strict confidently policy of the company the accounts departments provided only screened information.
- Accuracy of the data provided cannot be guaranteed which does not give a clear idea about the actual functioning of the society.
- Due to busy schedule of secretary, founder, accounts executive, the company's financial statements obtain secondary data.
- Project report completion period is short.

1.9 Chapter Scheme

Chapter 1 Introduction and Research Design

The first chapter gives details about Introduction of the study, Statement of the problem, Need of the study, Objectives of the study, Scope of the study, Research methodology and limitations of the study

Chapter 2 Conceptual Framework

It gives detailed information about banking sector and utilisation of fund in India.

Chapter 3 Bank Profile

It gives the profile of the bank where the project is conducted. It also explains about future plan of the bank.

Chapter 4 Data Analysis and Interpretation

This chapter gives details regarding the analysis and interpretation of data. It also consists of the tables, graphs, and its interpretation.

Chapter 5 Findings, Suggestions and conclusion

This chapters includes findings, suggestions based on the findings and conclusion.

CHAPTER-2
CONCEPTUAL FRAME WORK

- 2.1 Term Loan
- 2.2 Term Deposits
- 2.3 Opening of Deposit Accounts
- 2.4 Process of Opening Accounts
- 2.5 Types of Loans

CHAPTER-2 CONCEPTUAL FRAME WORK

Utilization of fund With Reference To The Vidyashree Brahmisundari Mahila Multi-
purpose cooperative society Kagwad

2.1 TERM LOAN

The Vidyashree Brahmisundari Mahila Bank involved same of loan account that charges interest rate based on amount of loan and type of account. That is Gold Loan, Surety Loan, Pigmy Loan, Fixed Deposit Loan, Lcc Deposit Loan, Vehicle/Mortgage Loan, Bal-Sangati Deposit Loan, Cash Credit Loan, etc.

Meaning of loan

An understanding of the several essential elements of a term loan is necessary in order to appreciate fully the important and unique position that such loan have come to occupy in the business credit market of the unit states .the basic elements that define a term loan are:

- (1) Credit extended to a business concern
- (2) A direct relationship between borrower's and lender;
- (3) Provision a time of making the loan that some part the principal repayable after the passage of one year. The repayment provision used of fund by borrowers or loan agreement may be associated with term loan; none of these are essential characteristics.

A term loan is a monetary loan that is repaid in regular payments over a set period of time. Term loans usually last between one and ten years, but May last as long as 30 years in some cases. A term loan usually involves an unfixed interest rate that will add additional balance to be repaid.

A term loan is a loan from a bank for a specific amount that has a specified repayment schedule and a fixed or floating interest rate.

Definition of loan:

In finance, a loan is the lending of money by one or more individuals, organizations, or other entities to other individuals, organizations etc. The recipient incurs a debt and is usually liable to pay interest on that debt until it is repaid as well as to repay the principle amount borrowed.

A loan is when you receive money from a friend, bank or financial institution in exchange for future repayment of the principal, plus interest.

2.2 TERM DEPOSITS:

A term deposit account is an account where the investor or depositor agrees to a fixed term and interest rate for locking their money away in an account. These accounts offer more security on the rate of return that the investor can expect when compared with high interest savings accounts.

The history behind the terms deposit is that the bank offers a high interest rate and return to the depositor when there is certainty over the length of time that the bank can have access to the depositor's money to relend to other borrowers (and therefore, borrowers make a profit). The bank rewards the secured term from the depositor with a high interest paid to the depositor.

Deposits are a crucial part of any investment and savings plan, although during a recession deposit account may pay considerably less interest due to low rates, bank deposits provide savers with a measure of safety that cannot be found elsewhere. Actively managing deposits accounts will ensure that the know how these savings investments work.

There are two types of term deposits:

- Recurring Deposits.
- Fixed Deposits.

1) Recurring Deposit:

A recurring deposit is a special kind of term deposit offered by banks which helps people with regular income to deposit a fixed amount every month into their recurring deposit account and earn interest at the rate applicable to fixed deposits.

2) Fixed Deposit

A fixed deposit (FD) is a financial instrument provided by banks or NBFCs which provides investors a higher rate of interest than a regular savings account, until the given maturity date. It may or may not require the creation of a separate account.

2.3 OPENING OF DEPOSIT ACCOUNTS:

INTRODUCTION

Acceptance of deposits and maintenance of deposit accounts is the core activity of any bank. The deposit is the major resource and mainstay of a bank and the main objectives is to mobilize adequate deposits.

The opening of an account is the first entry point for any person to become a customer of the bank. The Negotiable Instrument Act, 1881 provides certain rights, liabilities

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and protections to the issuers/drawers, payees, endorsees, drawees, collecting banks and paying/drawee banks, which will be available only if the bank makes or receives payment of a cheque/draft payable to order in due course. Any payment or collection of a negotiable instrument is deemed in due course only when the bank acts in good faith and without negligence and so for a customer.

It is necessary for bank to know their customer and to put in proper systems and procedures. The practice of obtaining proper introduction is not treated as a mere formality, but as a measure of safe-guard against opening of accounts by undesirable persons or in fictitious names with a view to depositing unaccounted money.

Meaning

A deposit account is a bank account maintained by a financial institution in which a customer can deposit and withdraw money. Deposit account can be savings accounts, current accounts or any of several other types of accounts explained below. Additionally, some banks pay customers interest on their account balances.

Transactions on deposit account are recorded in a bank's books, and the resulting balance is recorded as a liability of the resulting balance is recorded as a liability of the bank and represents an amount owed by the bank to the customer. Some banks charge fees for transactions on a customer's account. Additionally, some banks pay customers interest on their account balance.

2.4 PROCESS OF OPENING ACCOUNTS:

- ❖ The account is normally opened with a meeting between the bank official and the customer.
- ❖ The bank will insist upon prospective depositors to furnish introduction for opening not only current and cheque operated saving bank account but also all deposit accounts including call, short term and fixed deposits. The bank ensures to satisfy themselves about the identity of the depositors.
- ❖ Where the party is not able to provide an introduction satisfactorily, he must provide sufficient proof of his antecedents before the account is allowed to be opened.
- ❖ When an introducer does not personally call at the branch to introduce an account, the fact of having introduced a new account is not confirmed from him in writing.
- ❖ The bank will send a letter to the customer and the introducer and seek their confirmation for opening the account/giving introduction.
- ❖ The bank obtains photographs of the depositors/account holders who are authorized to operate the account at the time of opening of all new accounts.

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- ❖ It obtains complete address of depositors and records these in the books and the account opening forms so that the parties could be traced without difficulty, in case of need. Independent confirmation of the address of the account holder is obtained in all cases.
- ❖ The bank is required to obtain PAN/GIR number of a depositor opening an account with an initial deposit of Rs. 50,000 and above.
- ❖ The opening of new account is authorized only by the Bank Manager.

The bank ensures that all account opening formalities are undertaken at the bank's premises and no document is allowed to be taken out for execution. Where it is absolutely necessary to make exception of the above rule, bank may take precaution

Such as deputing an officer to verify the particular, obtaining a signed photograph on a suitably formed verification sheet, mailing a copy of the account opening form and accompanying instructions to the client for necessary verification before any operations are conducted in account.

While recognizing the role of co-operative banks in providing basic and affordable banking services in their respective area of operation, it is observed that in some co-operative banks, the requirement of minimum balance continues to deter a sizeable section of population from opening/maintaining bank accounts.

With a view to achieving the objective of greater financial inclusion, all co-operative banks are to make available a basic banking 'no frills' account either with 'nil' or very low minimum balances as well as charges that would make such accounts accessible to vast sections of population. The nature and number of transactions in such accounts could be restricted, but made known to the customer in advance in a transparent manner.

Types of opening account

Whether you are a housewife or a college student, a business owner or a business house, a retired professional or Indian living abroad, not having a bank account is unimaginable. Based on the purpose, frequency of transaction, and location of the account-holder banks offer a bouquet of bank accounts to choose from. Here is list of some of the types of bank accounts in India.

1. Current account:

A current account is a deposit account for traders, business owners, and entrepreneurs, who need to make and receive payments more often than others. These accounts hold more liquid deposits with no limit on the number of transactions per day. Current account allow overdraft facility, that is withdrawing more than what is currently available in the account. Also, unlike saving accounts, where you earn some interest,

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these are zero-interest bearing accounts. You need to maintain a minimum balance to be able to operate current accounts.

2. Saving account:

A saving bank account is a regular deposit account, where you earn a minimum rate of interest. Here, the number of transactions you can make each month is capped. Banks offer a variety of Savings Account based on the type of depositor, features of the product, age or purpose of holding the account, and so on there are regular savings accounts, savings account, and so many more.

You have the option to pick from a range of savings products. There are zero-balance savings account and also advanced ones with features like auto sweep, debit cards, bill payments and cross-product benefits.

A cross-product benefit is when you have a savings account with a bank and get to avail special offers on opening a second account such as a demat account.

3. Salary account:

Among different types of bank accounts, your salary account is the one you have opened as per the tie-up between your employer and the bank. This is the account, where salaries of every employee are credited to at the beginning of the cycle. Employees can pick their type of salary account based on the features they want. The bank, where you have a salary account, also maintains reimbursements are credited to.

4. Fixed deposit account:

To park your funds and earn a decent rate of interest on it, there are different types of accounts like fixed deposits and recurring deposits.

A fixed deposit (FD) account allows you to earn a fixed rate of interest for keeping a certain sum of money locked in for a given time that is until the FD matures. FDs range between a maturity periods of seven days to 10 years. The rate of interest you earn on FDs will vary depending on the tenure of the FD. Generally, you cannot withdraw money from an FD before it matures. Some banks offer a premature withdrawal facility. But in that case, the interest rate you earn is lower.

5. Recurring deposit account:

A recurring deposit (RD) has a fixed tenure. You need to invest a fixed sum of money in it regularly every month or once a quarter to earn interest. Unlike FDs, where you need to make a lump sum deposit, the you need to invest here is smaller and more frequent. You cannot change the tenure of the RD and the amount to be invested each month or quarter. Even in the case of RDs, you face a penalty in the form of a lower

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interest rate for premature withdrawal. The maturity period of an RD could range between six months to 10 years.

6. NRI accounts:

There are different types of bank accounts for Indians or Indian-origin people living overseas. These accounts are called overseas accounts. They include to types savings accounts and fixed deposit NRO or non-resident ordinary and NRE or non-resident external accounts. Banks also offer foreign currency non-resident fixed deposit accounts.

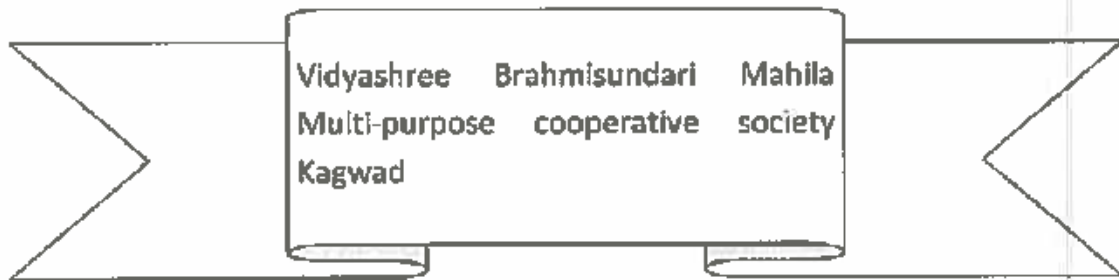
2.5 Types of loans:

1. Surety of Loans
2. Machinery Loan
3. Medium term Loans
4. Gold Loans
5. Mortgage Loans
6. Fixed Deposit Loans
7. Pigmy Deposit Loan

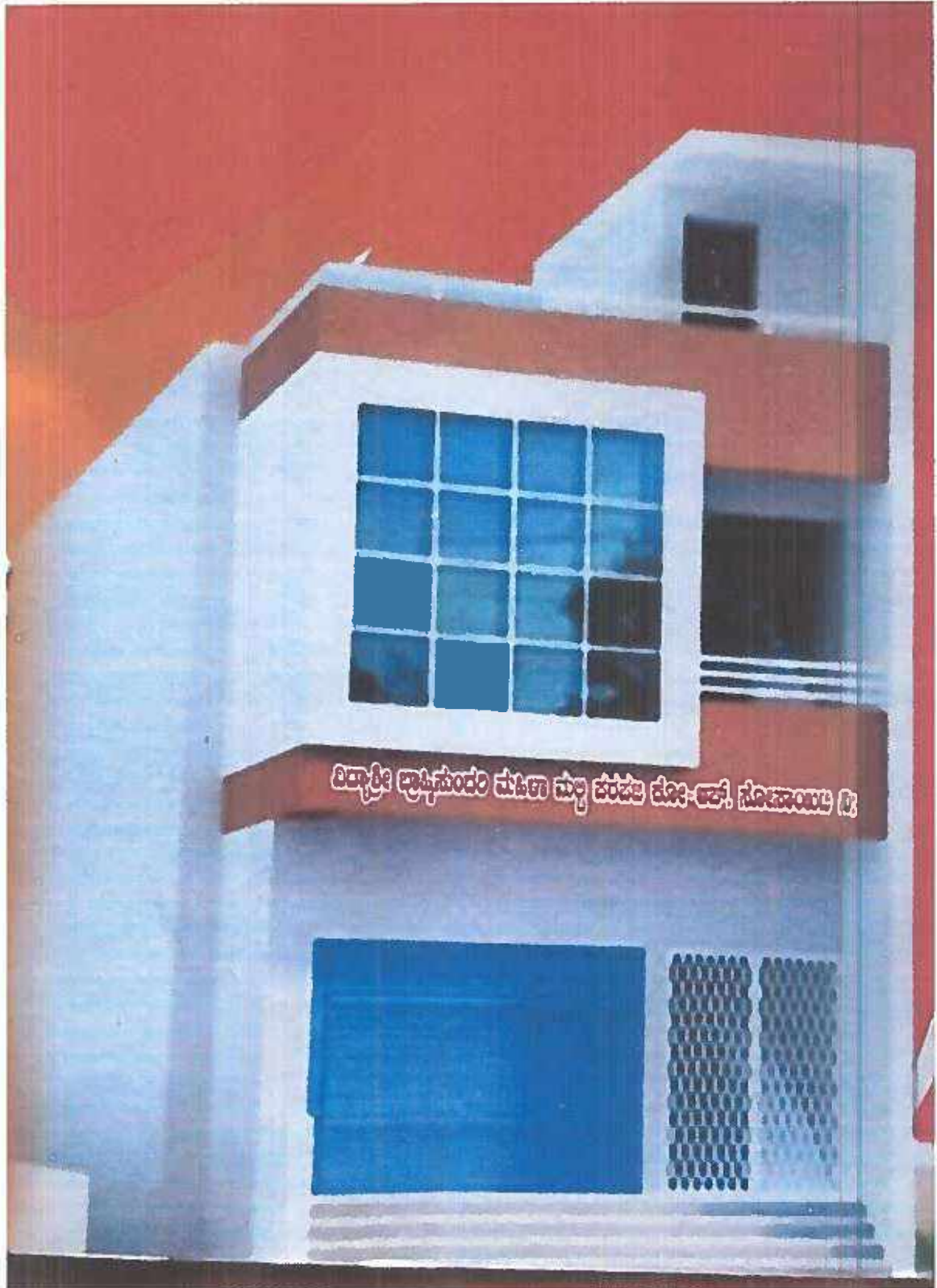
CHAPTER-3 PROFIL OF BANK

- 3.1 History**
- 3.2 Society's Profile**
- 3.3 Organization Structure**
- 3.4 Board of Directors**
- 3.5 Staff Members**
- 3.6 Pigmy Collectors**
- 3.7 Types of Accounts**
- 3.8 SWOT Analysis**
- 3.9 Information Technology**
- 3.10 List of Department and Functions**
- 3.11 characteristics of Credit Bank**
- 3.12 Advantages of Credit Bank**
- 3.13 Limitations of Credit Bank**
- 3.14 List of Banks Relation to Bank**
- 3.15 Progress of the Bank**
- 3.16 Conduct of Meetings**
- 3.17 Vision, Mission and Objectives of the Society**
- 3.18 Product and Services Profile**
- 3.19 Requirement to Open an Account**
- 3.20 SWOT Analysis**
- 3.21 Learning Experience**

CHAPTER-3
PROFIL OF BANK



A Study on Utilisation of Funds At Vidhyashree Brahmisundari Mahila Multi-Purpose cooperative Society, Kagwad



A Study on Utilisation of Funds At Vidhyashree Brahmisundari Mahila Multi-Purpose cooperative Society, Kagwad

3.1 HISTORY:

Vidyashree Brahmisundari Mahila Multi-purpose cooperative society, Ltd. Kagwad. Was established on 2004 at Kagwad. Kagwad taluka, in Belgaum District, By Sou. Jyoti S malgaveand Board of Directors.

The bank started, it is working with the share capital of Rs 3, 95, 00 deposits of Rs 8,50,950 and 596 members. In that time numbers of banks are already working but they are not given economic helps to poor and small-scale agriculturists but Vidhyashree Brahmisundari Mahila Multi-purpose cooperative society, Ltd., Kagwad was mainly established on these objectives. It was provide facilities to agriculture sector

It is the goodwill of bank Vidyashree Brahmisundari Mahila Multi-purpose cooperative society Kagwadhas made repaid growth between the start period of time from 2004 to 20. The organization was progressed in share capital, deposits, investments, advances, profit and loss account.

The organization is providing more personalized services. The Bank was established by people of social responsibility. The staff in this Bank co organization very good they are communicating to customers freely and giving suggestions or guidance to the customers

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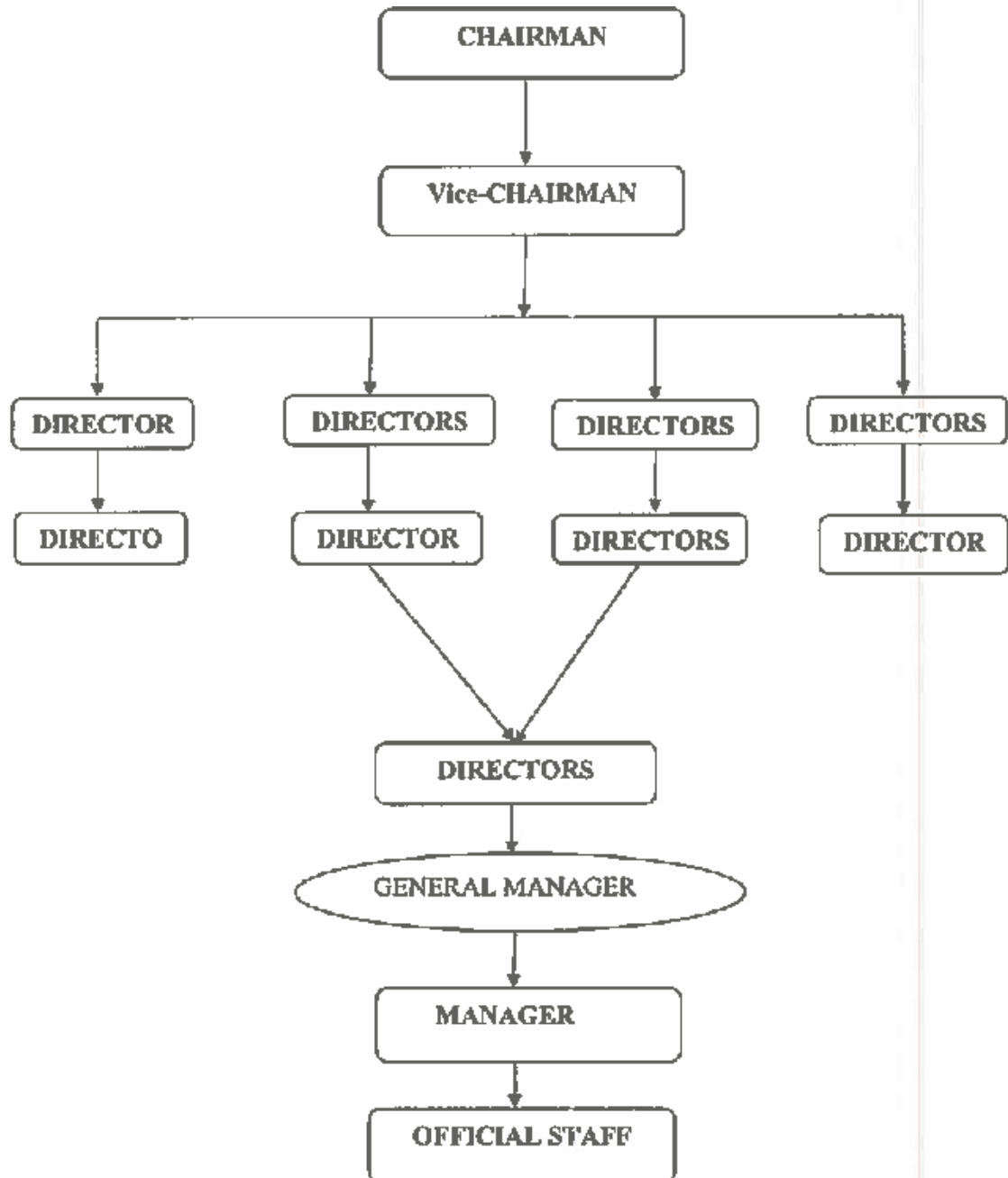
3.2 SOCIETY'S PROFILE

Name of the Society	Vidyashree Brahmisundari Mahila Multi-purpose cooperative society Kagwad
Address of the Society	Kagwad Tal;Kagwad Dist;Belgaum Pin: 591223
Phone No.	0339-264208
Year of Establishment	16 th July 2004
Founder	Sou. Jyoti S Malgave
Chairman	Sou Sunita K Chougule
Vice-Chairman	Sou Aruna P Karav
Directors	<ul style="list-style-type: none"> • Mrs. Sunita K. Chougule • Mrs. Swati S. Kavatage • Mrs. Vimal B. Chougule • Mrs. Ashwini A. Kinange • Miss. Susheela M. Chougule • Mrs. Aruna P. Karav • Mrs. Heena J. Jamadar • Mrs. Nirmla C. Malaganve • Mrs. Prema R. Mali • Mrs. Krishnabai R. Bajantri
Chief Executive Officer	Appasabh A Magdum
Chartered Accountant	A V Chaugule

A Study on Utilisation of Funds At Vidhyashree Brahmisundari Mahila Multi-Purpose cooperative Society, Kagwad

3.3 ORGANIZATION STRUCTURE

Vidyashree Brahmisundari Mahila Multi-purpose cooperative society Kagwad



3.4 BOARD OF DIRECTORS



**Sou. Sunita K Chougule
(Chairman)**



**Sou. Aruna P Karav
(Vice Chairmen)**



Sou. B S Kinange



Sou. V S Gobaje



Sou. J A Magdum



Sou. V B Chougule



Sou. A A Khot



Sou. S S Pavar

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3.7 TYPES OF ACCOUNTS:

1. DEPOSIT ACCOUNTS:

Deposit term	New interest rate	
1. Fixed Deposits		
Minimum 46 to 90 days	8.00%	
91 to 180 days		9.00%
181 days to 364 days	10.00%	
1 year to 2 years	11.00%	
2 year to 3 years	11.50%	
For 3 years	12.00%	
2. Saving Deposits	2.00%	
5. Pigmy Deposits	5.00%	

2. LOAN ACCOUNTS:

Name of Loan	Amount	Rate of interest
Surety loan	20000 to 50000	15.00%
Mortgage loan	1 Lakh to 5 Lakhs	15.00%
Vehicle loan	25000 to 5 Lakhs	15.00%
Gold loans	Up to 80% of gold valuation	14.00%
Fixed deposit loan	Depend on rate of interest of FD	12.00%

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3.8SWOT Analysis

<p>Strength</p> <ul style="list-style-type: none"> • The bank has a sound network i.e. it providing mobile sms service to their customer. • The bank is having well experienced, trained, most dedicated and committed staff. • In has a strong customer base. 	<p>Weakness</p> <ul style="list-style-type: none"> • Tedious procedures have to be followed before advancing loans causing inconvenience to customers.
<p>Opportunities</p> <ul style="list-style-type: none"> • The bank can optimize the growth opportunities arising out of retail banking and small and medium enterprises (SMEs). • Further expansion of business networks and possible arrangements of sharing networks of other banks by issuing mutual funds and insurance 	<p>Threat</p> <ul style="list-style-type: none"> • Bank is facing competition from its other Private Sector Banks • Changing economic policies of Government will have serious impact on interest rates and reserve ratio maintained with RBI .

3.9INFORMATION TECHNOLOGY:

The bank is continuously focusing on improvement in IT related functions to have an edge over other market players. The bank continues to leverage information technology as a strategic tool for its business operations, to gain competitive advantage by offering customer convenience and improved services as well as

A Study on Utilisation of Funds At Vidhyashree Brahmisundari Mahila Multi-Purpose cooperative Society, Kagwad

improving productivity and efficiency. UTI Bank technology strategy emphasis enhanced level of customer services through multi channel banking and straight through processing, and cost efficiency through wider and focus market reach and opportunities for cross selling.

As a measure to reduce operational cost, increase the deposit base and enhance customer service, the bank in increasing the number of ATMs. The bank has introduced the Intranet banking facility-titled connect.

Staff:

This refers to organizations human resources. How organizations human resource is developed, trained, socialized, integrated, motivated and how their career development is managed.

The Vidyashree Brahmisundari Mahila Multi-purpose cooperative society encourages every member of the Bank to practice the Indian principles of work: service with devotion. Sound management practices, professionalism of a high caliber, a cohesive group policy which charters of independence in individual operations are the strengths of the. Bank, weaves together different operations into one single stand of its corporate value system.

At Bank believe that people are the key resources-especially in a high tech competitive environment. It is the people behind the work, behind the product and behind the service that make the difference. That is the reason we take exceptional care to hire the best - both in terms of qualification and attitudes, and constantly train and upgrade their skills.

Skills

Skills refer to distinctive capabilities of personnel or of the organization as a whole. Skills are that for which the staff to develop appropriate new skills, for which it requires a learning environment. If the staff managers are to acquire the skills, then there needs to be an appropriate learning environment. One that:

- Is driven by desire to realize the vision.
- Has a sharing culture with mutual support.
- Provides space and time for learning. Preferably closely linked to specific tasks and objectives (just in time learning).
- Allows risk
- Tolerates failure, provided it is part of the learning process.
- Has visible recognition for success that is built on new learning.

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- Where skills and experience cannot be resourced or developed internally within the required timescales then external companies will need to be retained.

In short skills refer to the fact that employees have the skills needed to carry out the company's strategy. Training and development ensuring people know how to do their jobs and stay up to date the latest techniques.

3.10 LIST OF DEPARTMENT AND FUNCTIONS:

Department of the Bank

- Credit department
- Operation department
- Cash department
- Clearing department
- Customers Relation
- Cash Management Service

1. Credit Department:

This department mainly concentrates on lending activities to its customers and client. For smoothing of its activities it has further sub department. This department provides different loan like personal loan, housing loan, education loan, agriculture loan etc. While providing loan it evaluate the capability, back ground of client and analyze the risk involved in recollecting the same. To operate its activity it has given maximum decision power by management which will help to run organization successfully. As it is credit department it involves more risk and uncertainty towards its client and customers, so that the contribution to other department for achieving targets usually less. And it has also its future plans for achieving its goals.

Functions:

- Examining the proposals.
- Documentations.
- Disbursements of loans.
- Recovering the loan.
- Credit appraisal.

2. Operation Department:

It is department which is taking care of daily banking activities for smooth running of organization. The operation has been delegated average decision authority bin their routine work by management. It full co-operation with other department and also it is necessary for other department for smooth running. The department has been appraised

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by the management with different criteria, like by customer satisfaction, by branch performance. As it is an operation department, so it will contribute to all departments in achieving their planned targets.

Function

- Out-station cheque realization.
- Attending customer's queries.
- ATN office in charge.
- Handling day to day transactions.
- Cash and clearance.
- Handling govt. business.

3. Marketing Department:

It is the department, which will take care of organization expansion by way of achieving targeted goals. Means in this department it mainly concentrate on selling security, acquiring more number of deposits, accounts etc. The marketing department has been given decision power 50-90% by the management to achieve their target and, make it success. For achieving of this success department has supporting and go-operate with this department. Hence the marketing department performance has appraised with technique like, by customer satisfaction, by branch performance, by self-appraisal, by giving targets. Therefore to achieve this target marketing department has its own plan and strategies like,

-By obtaining new customers.

-By generating new business through existed customers.

Functions:

- Achieving branch targets.
- Coordinating with sales executives.
- Customer service.

4. Cash Department:

In this department it evaluates the daily requirements of gash, based on this it is going to maintain liquidity. If the bank having heavy cash liquidity, this department will kept all cash in to higher authority bank. The department has been given 50-80% of decision power by management to their routine activities. It has given more contribution to other departments in achieving their goals in terms of co-operation. As

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it is cash department there are no any future plans. But as per present scenario market it is going to act.

Functions:

- o Handling daily cash transaction.
- o Balancing cash figure at the end of day.
- o Maintaining cash level of the bank.
- o Maintaining liquidity.

5. Clearing Department:

It is department which is taking care of customer work regarding receiving out station cheques and Odds. The department has given average decision power by the management. Regarding go-operation it has contributing to other department as much as possible. As it is clearing department it had no any future plans but it is ready accept all positive changes towards improvement.

Functions:

- a. Clearance of out stations cheque.
- b. Clearance of locals cheque

Product and Services

Consumer banking

Bank is providing in consumer banking the following products and services:-

- Savings Account
- Priority Banking
- Fixed Deposits
- Loan facility
- Bal-sangathi deposit facility

Services

- o Cash Management Services
- o Trade Service
- o Lending/Financing
- o

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Cash Management Services

Through bank cash management service, bank brings to customers a wide array of collection and payment services for improved liquidity through faster access to their funds and total control on their fund movements through customized MIS reports. Banks cash management service solutions include

- Collection services that offer local cheques collection (LCC) at more than 100 locations and upcountry cheques collection (UCC) for more than 800 locations.

Lending/Financing

- Working capital finance
- Cash credit / working capital demand loan
- Term lending
- Agricultural loan
- Asset securitization
- Bank guarantees

Trade Service/Trade Finance

- Bills Discounting
- L/C Backed bill discounting
- Drawer Bill Discounting
- Drawer Bill Discounting

3.11 CHARACTERISTICS OF CREDIT BANK:

A Credit is a special type of business organization different from other forms of organization you have learnt earlier. Let us discuss its characteristics.

i. Open membership:

The membership of a credit bank is open to all those who have a common interest. A minimum of ten members are required to form a cooperative society. The credit bank Act does not specify the maximum number of members for any credit bank. However, after the formation of the society, the member may specify the maximum number of members.

ii. Voluntary Association:

Members join the Credit bank voluntarily, that is, by choice. A member can join the society as and when he likes, continue for as long as he likes, and leave the society at will.

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iv. Sources of Finance:

In a Credit bank capital is contributed by all the members. However, it can easily raise loans and secure grants from government after its registration.

v. Democratic Management:

Credit bank is managed on democratic lines. The society is managed by a group known as "Board of Directors". The members of the board of directors are the elected representatives of the society.

iv. Service motive:

Credit banks can be formed to maximize profit like other forms of business organization. The main purpose of a credit bank is to provide service to its members or members. For example, in a Consumers,

v. Separate Legal Entity:

A Credit bank is registered under the Credit bank Act. After registration a society becomes a separate legal entity, with limited liability of its members..

vii. Self-help through mutual cooperation:

Credit bank converts the weakness of members into strength by adopting the principle of self-help through mutual Co-operation. It is only by working jointly on the principle of "Each for all and all for each". the members can fight exploitation and secure a place in society.

3.12 ADVANTAGES OF CREDIT BANK:

A Credit bank form of business organization has the following advantages:

i. Easy Formation:

Formation of a Co-operative society is very easy compared to a joint stock company. Any ten adults can voluntarily form an association and get it registered with the Registrar of Co-operative Societies.

iii. Democratic Control:

A Co-operative society is controlled in a democratic manner. The members cast their vote to elect their representatives to form a committee that looks after the day-to-day administration. This committee is accountable to all the members of the society.

iv. Limited Liability:

The liability of members of a Co-operative society is limited to the extent of capital contributed by them. Unlike sole proprietors and partners the personal properties of

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members of the Co-operative societies are free from any kind of risk because of business liabilities.

vi. State Assistance:

Both Central and State governments provide all kinds of help to the societies. Such help may be provided in the form of capital contribution, loans at low rates of interest, exemption in tax, subsidies in repayment of loans, etc.

vii. Stable Life:

A Co-operative society has a fairly stable life and it continues to exist for a long period of time. Its existence is not affected by the death, insolvency, lunacy or resignation of any of its members.

3.13 Limitations of credit bank:

Besides the above advantages, the Credit bank form of business organization also suffers from various limitations. Let us learn these limitations.

i. Limited Capital:

The amount of capital that a credit can raise from its member is very limited because the membership is generally confined to a particular section of the society. Again due to low rate of return the members do not invest more capital. Government's assistance is often inadequate for most of the Co-operative societies.

ii. Problems in Management:

Generally it is seen that Credit bank do not function efficiently due to lack of managerial talent. The members or their elected representatives are not experienced enough to manage the society. Again, because of limited capital they are not able to get the benefits of professional management.

iii. Lack of Motivation:

Every Credit bank is formed to render service to its members rather than to earn profit. This does not provide enough motivation to the members to put in their best effort and manage the society efficiently.

iv. Lack of Co-operation:

The Credit bank are formed with the idea of mutual Co-operation. But it is often seen that there is a lot of friction between the members because of personality differences, ego clash, etc. The selfish attitude of members may sometimes bring an end to the society.

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v. Dependence on own Capital & Members:

The inadequacy of capital and various other limitations make credit bank not dependent on the government for support and patronage in terms of grants, loans subsidies, etc. Due to this, the government sometimes directly interferes in the management of the society and also audits their annual accounts.

3.14 LIST OF BANKS (RELATION TO BANK):

1. Axis Bank
2. BDCC Bank
3. S.B.I Bank
4. Syndicate Bank
5. KVG Bank
6. Union Bank
7. Bank of India
8. Corporation of India
9. Federal Bank
10. ICICI Bank
11. IDBI bank
12. HDFC Bank
13. Syndicate Bank
14. Karnataka Bank
15. Central Bank

COMPETITORS:

1. Shree Laxmi Credit Souharda Sahakari Ltd. Manjari branch Kagwad.
2. Prabhakar kore bank ltd. Kagwad.

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3. Arihant cooperative bank Kagwad.
4. Bhrathnath cooperative bank Kagwad.

3.15 PROGRESS OF THE BANK

Sl No	Particulars	2014-15	2015-16	2016-17	2017-18
1	No of Members	3988	4378	4853	6255
2	Share Capital	4133300	4609300	5010000	5654300
3	Reserve and Surplus	58857100	70569900	87078300	108805151
4	Deposits	704367500	1008984900	1183503000	1485735900
5	Loans and Advances	498568000	598868200	762450800	945964163
6	Working Capital	778147000	1097214000	1275591400	1600195351
7	Net Profit	10240367	16888759	22926876	29202466

3.16 CONDUCT OF MEETINGS:

- ❖ Annual General Meeting – Once in every year.
- ❖ Board of directors Meeting – Every Month.
- ❖ Staff Based Meeting
- ❖ Board meeting monthly
- ❖ Department head meeting – need based, and every month

3.17 VISION, MISSION AND OBJECTIVES OF THE SOCIETY

Vision:

"To be the most admired Credit Society in Karnataka State"

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Mission:

"Explore and enhance the quality of life of Member through financial security by providing products and services that would be helpful to him in his path to prosperity"

Objectives:

1. Enhanced Co-operation between everybody involved with an organization.
2. To provide good and quick service.
3. To earn high profits in future and improve firm's reputation.
4. To provide better facilities and also to establish branches all over the country.

3.18 PRODUCT AND SERVICES PROFILE:

- Deposits
- Short term Loans
- Long term Loans

DEPOSITS:

- Fixed Deposits
- Saving Deposits
- Recurring Deposits
- Current Deposits
- Pigmy Deposits

SHORT TERM LOANS:

- Personnel loan
- Mortgage Loan
- Vehicle Loan
- Gold Loans

3.19 REQUIREMENT TO OPEN AN ACCOUNT:

- Fill the form
- Affix a passport size photo
- Attached identity proof i.e. photo proof, address proof, etc...

3.20 SWOT ANALYSIS:

SWOT analysis means strength weakness opportunity and threats of the bank. The bank how gets the opportunity, what are the strength of the bank. How remove the threats and how specify the strength.

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Strength:

- Growth in working capital.
- Increase in goodwill.
- Good relation with other banks.

Weakness:

- Identification of new customers.
- Burden of Heavy work.
- Inexperienced personnel.

Opportunities:

- Provision for Small Scale Business loan.

Threats:

- Change in market trend.
- Change in Government regulation.
- Unrecovered loan.
- Increase in competition.

3.21 LEARNING EXPERIENCE

- I got practical knowledge in banking sector.
- I understood that how banking operations should be.
- I got information about funds.
- I got knowledge about staff in bank.
- I learnt the MIS service & how it can be developed in bank.
- I learnt the information about mobilization and utilization funds in bank.

CHAPTER – 4
DATA ANALYSIS AND INTERPRETATION

4.1 Meaning of Trend Analysis:

4.2 Meaning of Interpretation

4.3 Formula to Calculate Trend Value

TableNo -4.1 Shows Home Equity Loans

TableNo -4.2 Shows Dairy Loans

Table No-4.3 Shows Pigmy Loans

TableNo -4.4 Shows Loan And Cash Credit Deposit

Table No-4.5 Shows Bal-Sangati Deposits

Table No-4.6 Loan on Deposits

Table No -4.7 Personal Surety Loan

Table No-4.8 Shows Business Loan

Table No-4.9 Machinery Loan

TableNo -4.10 Shows Gold Loan

Table No -4.11 Shows the Net Profit

Table No -4.12 Shows Working Capital

CHAPTER – 4 DATA ANALYSIS AND INTERPRETATION

4.1 MEANING OF TREND ANALYSIS:

Trend Analysis is the practice of collecting information and attempting to spot a pattern, or trend, in the information. In some fields of study, the term "trend analysis" has more formally-defined meanings. Although trend analysis is often used to predict future events, it could be used to estimate uncertain events in the past, such as how many ancient kings probably ruled between two dates, based on data such as the average years which other known kings reigned.

4.2 MEANING OF INTERPRETATION:

An interpretation is an assignment of meaning to the symbols of a formal language. Many formal languages used in mathematics, logic, and theoretical computer science are defined in solely syntactic terms, and as such do not have any meaning until they are given some interpretation. The general study of interpretations of formal languages is called formal semantics.

4.3 FORMULA TO CALCULATE TREND VALUE (%):

$$\text{Trend Value (\%)} = \frac{\text{Current Year Amount}}{\text{Base year amount}} * 100$$

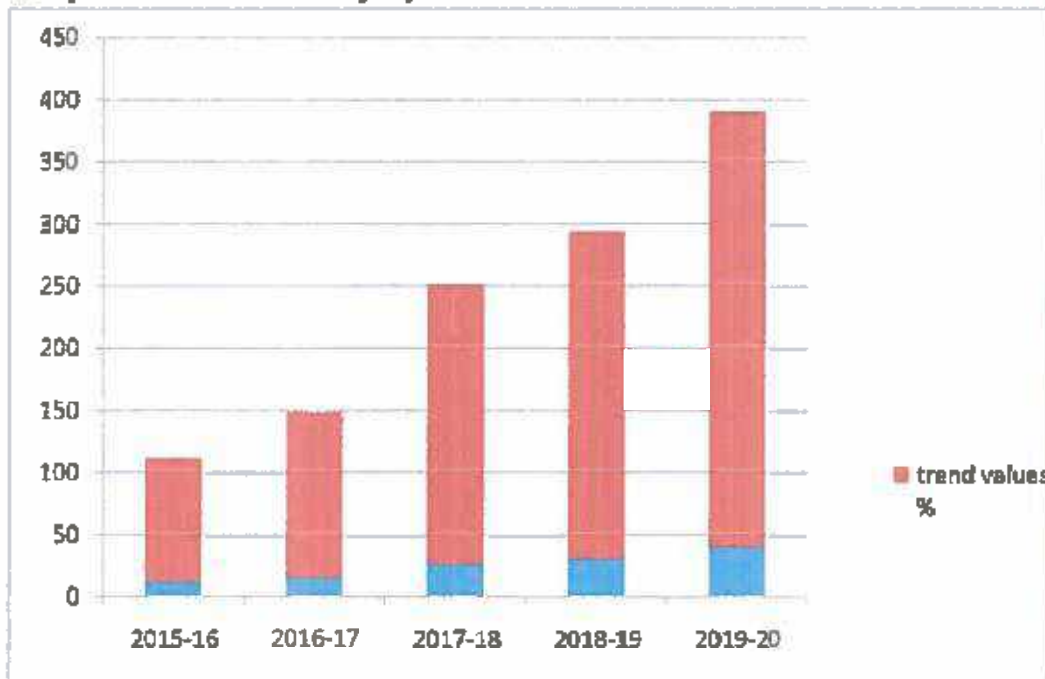
A Study on Utilisation of Funds At Vidhyashree Brahmisundari Mahila Multi-Purpose cooperative Society, Kagwad

Table -4.1 Shows Home equity loans

Year	Amount (Rs in crores)	Trend Values (%)
2015-16	11.57	100
2016-17	15.39	133.01
2017-18	26.13	225.84
2018-19	30.50	263.61
2019-20	40.51	350.12

(Source: Annual report of bank)

Graph 4.1 Shows Home equity loans



Interpretation:

The above table shows that, The amount received on home equity loans has increased from 2015 to 2020 continuously. 133.01 in the year 2016-17 and 225.84 in the year 2017-18 and 2018-2019 increased 263.61 and 2019-2020, 350.12 respectively.

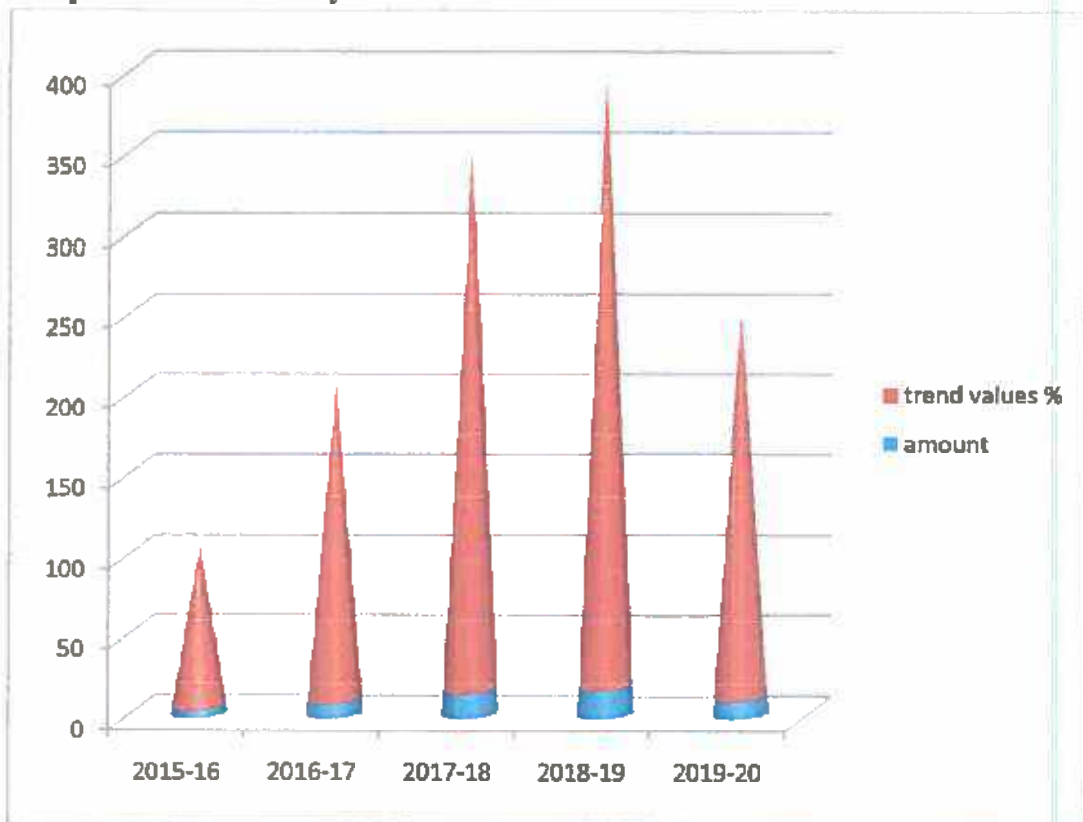
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Table -4.2 Shows Dairy loan

Year	Amount (Rs in lakhs)	Trend Values (%)
2015-16	4.71	100
2016-17	9.26	196.60
2017-18	15.66	332.48
2018-19	17.77	377.28
2019-20	11.28	239.49

(Source: Annual reports of bank)

Graph- 4.2 Shows Dairy loans



Interpretation:

As mentioned in the above table, the amount received on Dairy loans has increasing in the years 2013-18 to 2018-19 from 100% to 377.38%. And again it has decreased in the year 2019-20 from 377.38% to 239.49 respectively.

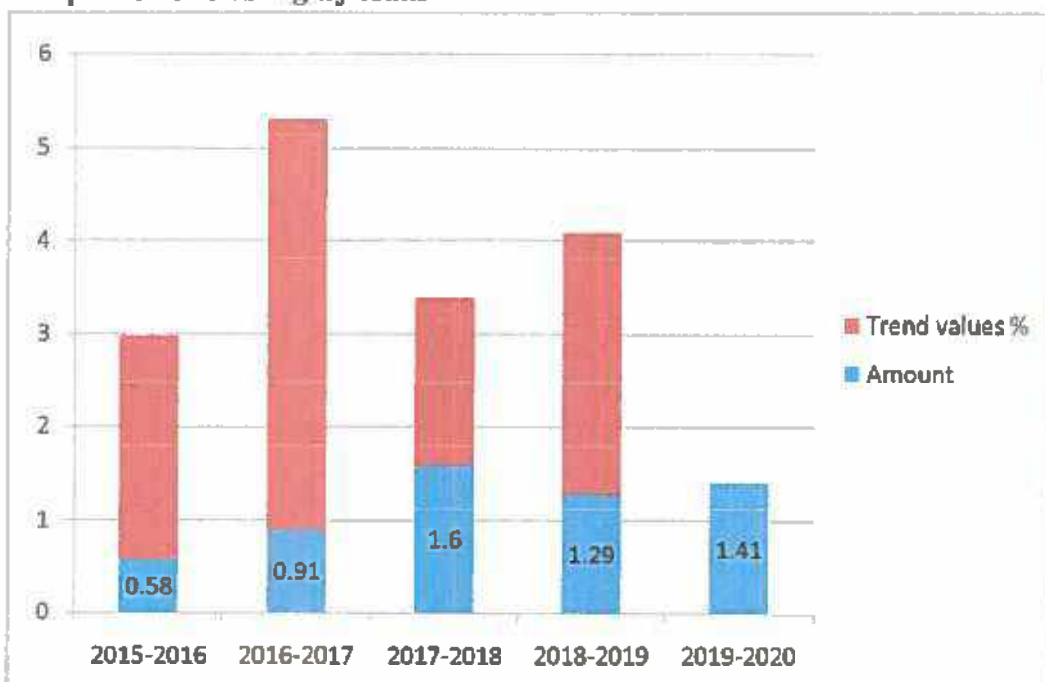
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Table- 4.3 Shows Pigmy loans

Year	Amount (Rs. In crore)	Trend values %
2015-2016	0.58	100
2016-2017	0.91	156.89
2017-2018	1.6	275.86
2018-2019	1.29	222.41
2019-2020	1.41	222.41

(Source: Annual Report of bank)

Graph- 4.3 Shows Pigmy loans



Interpretation:

The above table shows that, the amount has decreased from 100% to 156.89% in the year 2013-14, 2014-15 respectively. And the amount has increase from 156.89% to 275.86% in the year 2015-16, 2016-17 respectively. But drastic increased to 275.86% to 222.41% in the year 2017-18 and 2018-19. But the amount has decreased from 222.41% to 208.62% in the year 2019-20.

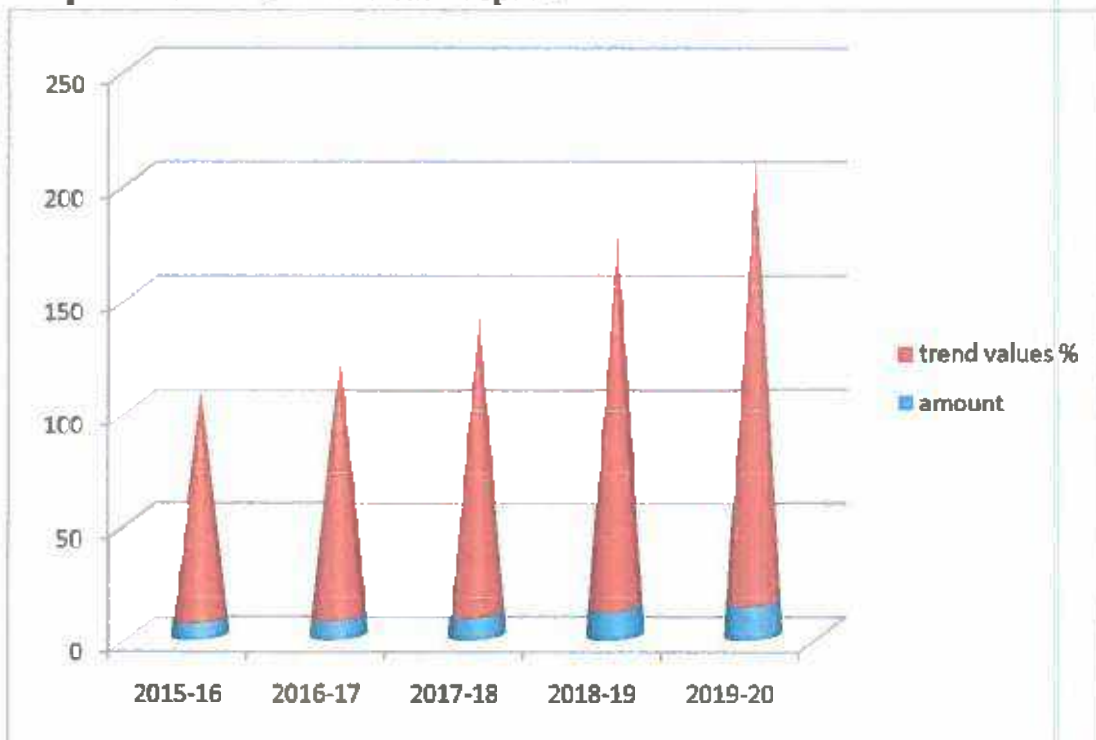
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Table -4.4 shows Loan and cash credit deposit

Year	Amount (Rs. In lakhs)	Trend Values (%)
2015-16	7.81	100
2016-17	8.82	113.30
2017-18	10.19	130.47
2018-19	12.85	164.53
2019-20	15.26	195.39

(Source: Annual Report of Bank)

Graph- 4.4 Shows loan and cash deposit



Interpretation:

The amount received of Vidhyashree Brahmisundari Mahila Multi-purpose cooperative society Loan cash credit deposit has increased from 100%, 113.30% in the year 2015-16, 2016-17 respectively. But the amount increased to 130.47%, 169.53% in the year, 2017-18, 2018-19, respectively and drastic increased to 195.39% in the year 2019-20

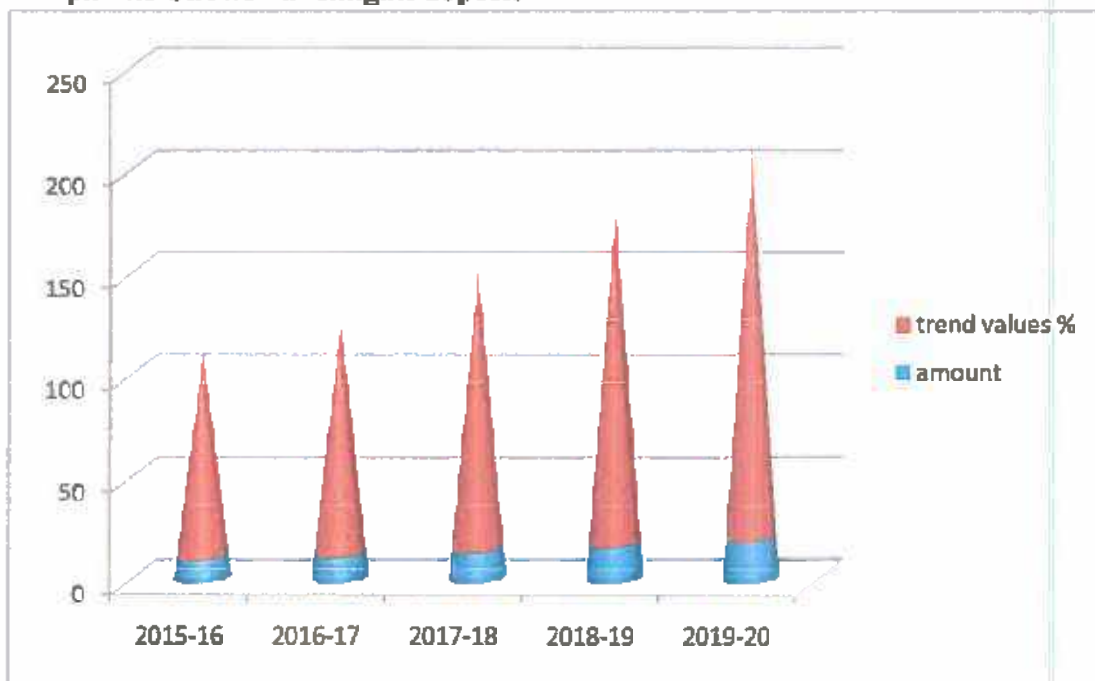
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Table- 4.5 Shows Bal-Sangati Deposits

Year	Amount (Rs. In lakhs)	Trend Values (%)
2015-16	10.19	100
2016-17	11.55	113.34
2017-18	13.89	136.31
2018-19	16.63	163.19
2019-20	19.63	192.63

(Source: Annual report of Bank)

Graph- 4.5 Shows bal-sangati deposit



Interpretation:

The amount received on Vidyashree Brahmisundari Mahila Multi-purpose cooperative society bal-sangati deposits has increased from 100%, 113.34% in the year 2015-16, 2016-17 respectively. But the amount increased to 136.31%, 163.19% in the year, 2017-18, 2018-19, respectively and drastic increased to 192.63% in the year 2019-20.

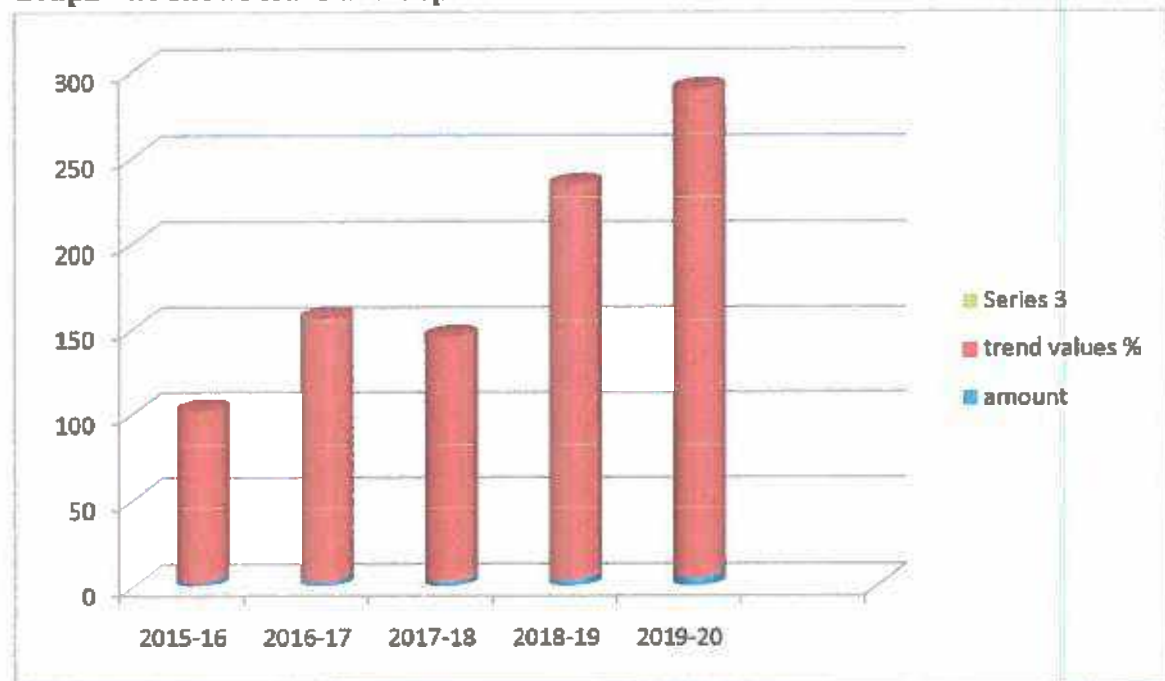
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Table- 4.6 Loan on Deposits

Year	Amount (Rs. In lakhs)	Trend values
2015-16	1.82	100
2016-17	2.79	153.29
2017-18	2.6	142.85
2018-19	4.18	229.67
2019-20	5.17	284.06

(Annual report of Bank)

Graph- 4.6 shows loans and deposit



Interpretation:

The amount paid for loans On Deposits has increased from 100% to 153.29% in the year 2016-2017, respectively. But decreased to 142.85% in the year 2017-18, and drastic increased to 229.67% in the year 2018-19 and the value decrease from 284.06% in the year 2019-20.

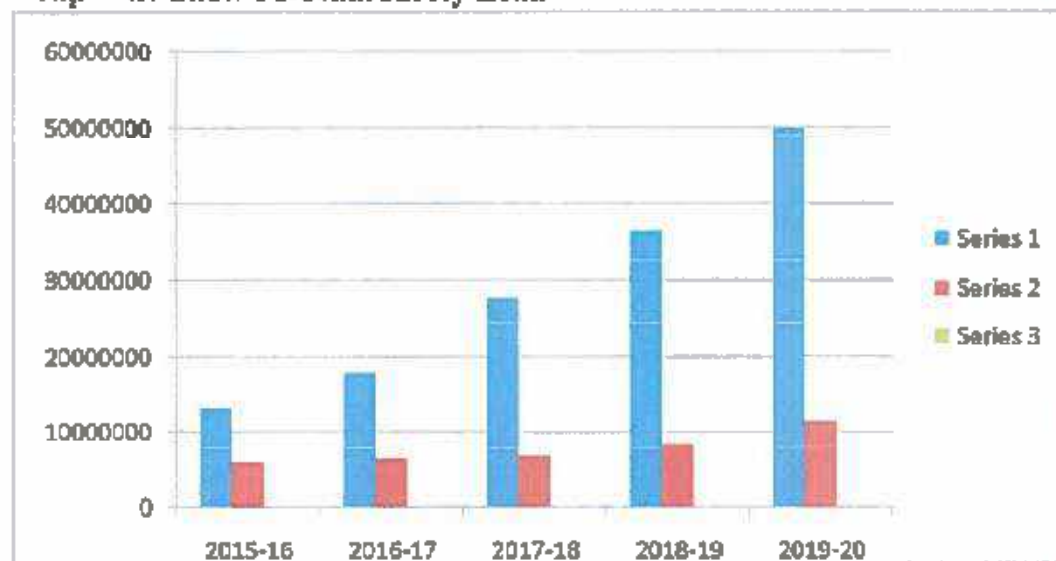
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Table- 4.7 Show Personal surety Loan

Year	Total Loans	Personal Loan	Percentage
2015-16	129762000	60326135	46.48%
2016-17	177851000	64929997	36.50%
2017-18	276868000	69023192	24.93%
2018-19	363564000	82644338	22.73%
2019-20	498568000	113769615	22.81%

(Annual report of Bank)

Graph- 4.7 Show Personal surety Loan



Interpretation:

The bank is given Personal surety loan to customers in the year 2016-17 & 2017-2018 is small difference as 46.48% & 36.50% after 2018-19 to 2019-20 it was 24.93% to 22.81% continuously decreased year by year lastly it was come down.

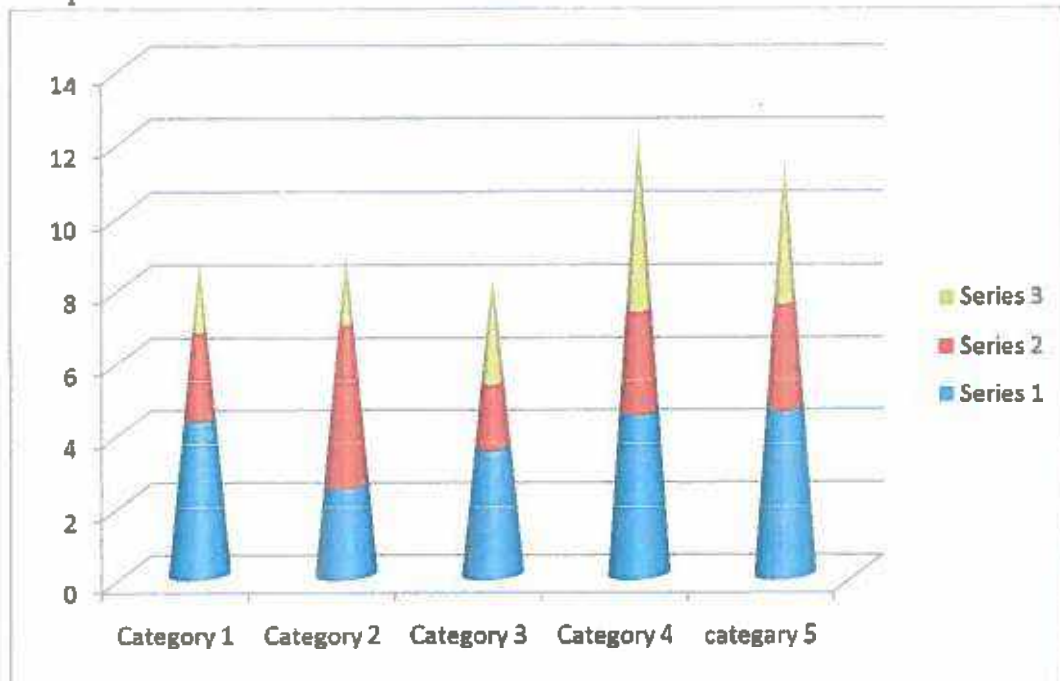
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Table- 4.8 Shows Business Loan

Year	Total Loan	Business Loan	Percentage
2015-16	129762000	72355291	55.79%
2016-17	177851000	102762307	57.78%
2017-18	276868000	168778732	60.96%
2018-19	363564000	23751636	65.33%
2019-20	498568000	33807896	67.81%

(Annual report of Bank)

Graph- 8 Shows business loan



Interpretation:

Business loan is given by the bank in the year 2015-16 to 2016-17, 2017-18, 2018-19 and 2019-20 is continuously increasing trend held it was 55.79% to 67.81% it Shows that increase in credit facility.

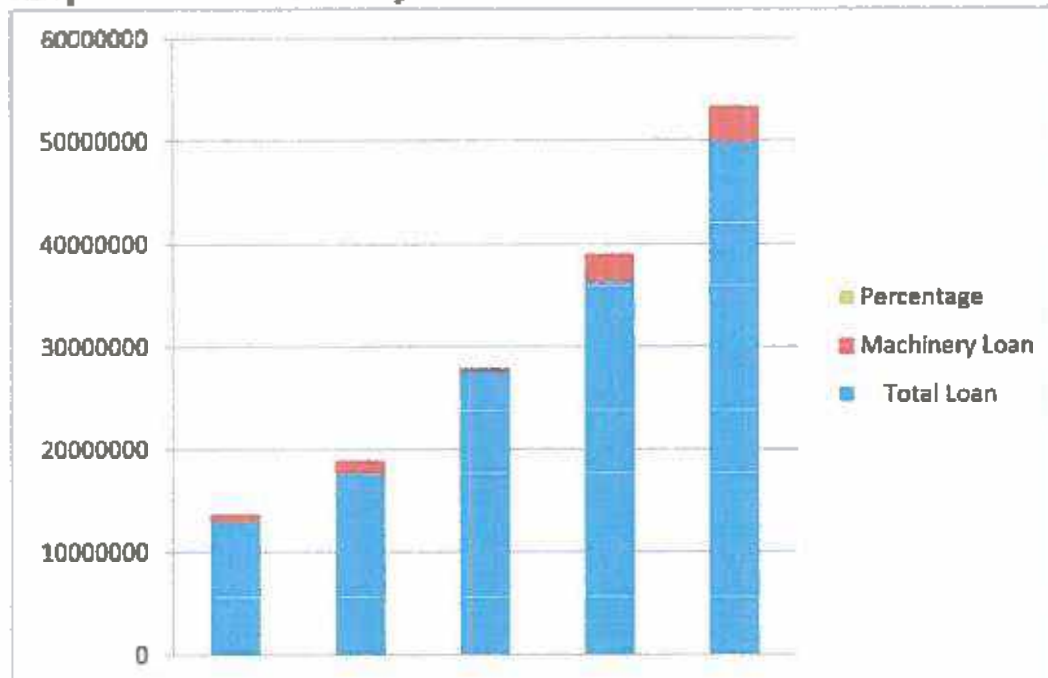
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Table- 4.9 Show Machinery Loan

Years	Total Loan	Machinery Loan	Percentage
2017-16	129762000	7279648	5.61%
2016-17	177851000	11987157	6.74%
2017-18	276868000	2696694.32	9.82%
2018-19	363564000	26940092	7.41%
2019-20	498568000	34800046	6.98%

(Annual report of Bank)

Graph- 4.9 Shows machinery loan



Interpretation

In the above table Machinery Loan is 2013-14 to 2014-15 that is 5.61% up to 9.82% is increased continuously after it was in the year 2016-17 to 2017-18 it was going down that is 7.41% to 6.98% respectively.

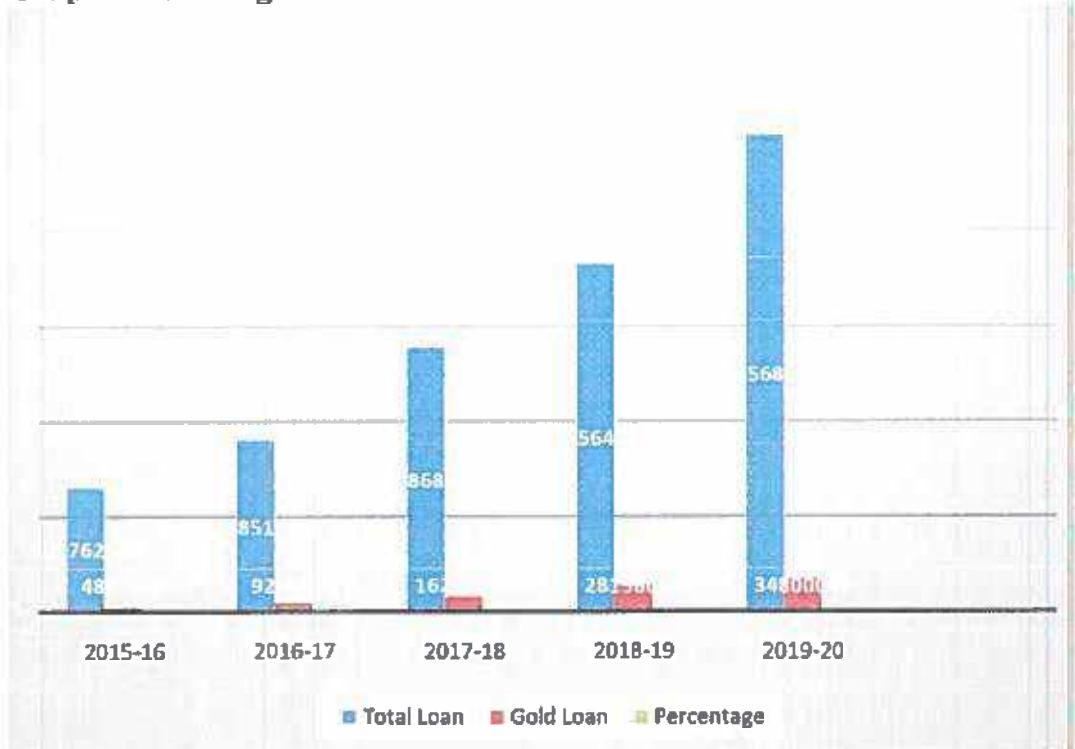
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Table -4.10 Shows Gold Loan

Year	Total Loan	Gold Loan	Percentage
2015-16	129762000	4804976	7.99%
2016-17	177851000	9294083	7.05%
2017-18	276868000	16285250	7.42%
2018-19	363564000	28156094	9.29%
2019-20	498568000	34800046	6.98%

(Annual report of Bank)

Graph- 10 Shows gold loan



Interpretation:

In the above table shows that Gold Loan is in the year 2015-16 and 2016-17 is 7.99% to 7.05% is decreased in the two years. After in the year 2017-18 to 2018-19 it was going in up that is 7.42% to 9.29% this increased in the gold loan. After in the year 2019-20 is 6.98% is decreased in the year.

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Net profit:

Net profit indicates the overall profit of the business as the whole net profit of the Vidhyashree Brahmisundari Mahila Multi-purpose cooperative society

Table- 4.11 Shows the net profit

YEAR	NET PROFIT	Percentage
2015-16	5310000	53.10%
2016-17	6076938	60.76%
2017-18	7059820	70.59%
2018-19	8863293	88.67%
2019-20	10240367	102.40%

(Source: Annual report of Kagwad)

Graph- 4.11 Show NET PROFITS



Interpretation:

Net profit for the year 2015-16 was 53.10% and it increased in the year 2016-17 and 2017-18, 2018-19, 2019-20 up to 60.76%, 70.59%, 88.67%, and 102.40%. As mentioned in the above table and chart.

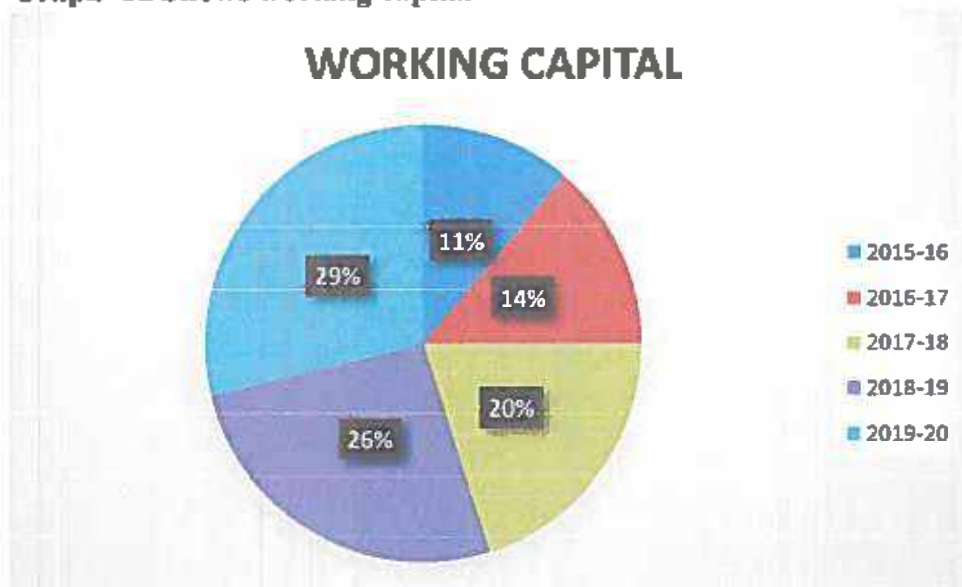
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Table- 4.12 shows working capital

YEAR	WORKING CAPITAL
2015-16	301080400
2016-17	373468000
2017-18	539934000
2018-19	703400000
2019-20	778147000

(Source: Annual report of Bank)

Graph- 12 Shows working capital



Interpretation:

Working capital is going on increasing from 2015-16 to 2016-17 and 2017-18 to 2018-19 for the years up to 2019-20 respectively.

CHAPTER-5
FINDINGS, SUGGESTIONS, AND CONCLUSION

- 5.1 Findings
- 5.2 Suggestions
- 5.3 Conclusion

CHAPTER-5 FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDING:

- The current year net profit of the organization has increased as compared to the previous years.
- There is decrease in the demand for pigmy loan.
- There is increase in the demand for the security, cash credit, hypnotization and fixed deposit loan as compared to previous years in the trend value.
- The working capital has also simultaneously increased.
- There is fluctuation in the ratio of security, cash credit and fixed deposit loans to total loans
- The amount of fixed deposits Rs 11, 57, 82,594 was found in the year 2015-16 & it has increased to Rs 40, 51, 54,320 is deposited in the year 2019-20.
- The amount of savings deposits is collected to Rs 4, 71, 48,733 in the year 2015-16 and it was increased in the year 2019-20 Rs 1,28,84,543 is savings deposits received.
- The pigmy deposits amount is collected by bank in the year 2015-16 of Rs 69,41,419 and after 5 years in the year 2019-20 the bank collected amount increased to Rs 91,34,198.
- The amount of bal-sangati deposits Rs 1,01,96,917 was found in the year 2014-15 & it has increased to Rs 1,95,53,180 is deposited in the year 2019-20..
- The bank is given loan to customers there deposits in the year 2015-16 that is 6.89% after that it was decreased year by year it is 3.35% in the year 2019-20 loan is given.
- The bank is earned good net profit it was in the year 2015-16 to 2019-20 of Rs 53,10,000 to Rs 1,02,40,367 it is rapid growth in net profit.
- The bank is owned working capital in the year 2015-16 it was Rs 30,10,80,400 and after it is increased up to 2019-20 of Rs 77,81,47,000 it shows that bank is having strong working capital.

A Study on Utilisation of Funds At Vidhyashree Brahmisundari Mahila Multi-Purpose cooperative Society, Kagwad

- The personal surety loan is in first year 46.48% and the bank is reduced its percentage at 22.81% at the last year.
- The bank is given Business loan starting 55.79% and after it was increased 67.81% in the year 2019-20.
- Machinery loan given to customers it was 5.61% and after it was 9.82% and it was reduced to 6.98%.
- The bank is given Gold Loan it is in the year 2015-16 it was 7.99% to 10.77% up to 2019-20 it was increased year by year.

**A Study on Utilisation of Funds At Vidhyashree Brahmisundari Mahila Multi-
Purpose cooperative Society, Kagwad**

5.2 SUGGESTIONS:

- The working capital of the company is increasing year by year so I would like to suggest that company should maintain the same in the future to meet its current liabilities.
- The net profit is increased year by year so i would like to suggest that bank should maintain same in future.
- The machinery loan is decreased so I would like to suggest that the bank should increase the machinery loan.
- The deposits are decreased as compare to the loan so i would like to suggest that bank should focus on increase of deposit.

A Study on Utilisation of Funds At Vidyashree Brahmisundari Mahila Multi-Purpose cooperative Society, Kagwad

5.3 CONCLUSION:

The deposits are the main sources of bank to lend money to the needy and also to invest to earn high returns. Hence, Vidyashree Brahmisundari Mahila Multi-purpose cooperative society Kagwad

also performs the same activities, it is found that there is high demand for Fixed Deposits, Savings Deposits etc., and its improving in loans and deposits etc., here the study related to Mobilization of Funds (loans and deposits) shows that how the funds are collected from the customers

Vidyashree Brahmisundari Mahila Multi-purpose cooperative society Kagwad has worked hard in the past years and also has created the goodwill by providing good service. It has also achieved good progress and there is growth in the capital which will help the organization for its further growth.

So, at last the conclusion is that there is huge competition so new innovative schemes as well modernization is necessary to stay intact in this competitive world

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PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON ONLINE STOCK TRADING"**

Submitted to

RANI CHANNAMMA UNIVERSITY, BELAGAVI



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

Mr. VINAYAK KUMBAR

M.COM-IV SEMESTER

REGISTER NO: MC191628

UNDER THE GUIDANCE OF

SHRI. S. M. BHOSAGE

**K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that Mr. Vinayak kumbar has satisfactorily completed the Project Report Entitled "A Study on Online Stock Trading" for the partial fulfillment of Degree in Master of Commerce in Rani Channamma University, Belagavi during the academic year 2020-2021.

S.M. Bhosage

SHRI S. M. BHOSAGE

PROJECT GUIDE

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DECLARATION

I declare that the project report entitled "A Study on Online Stock Trading" is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. S. M. Bhosage, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 17/9/21

Place: Chikodi


Mr. Vinayak Kumbhar

Register No: MC1916RP

Acknowledgement

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I am conscious of my indebtedness to each and every individual, who has helped me in many ways in the preparation of this project work. It would be great privileged to express words of gratitude and respect to all those who guided and inspired me throughout the completion of this project.

I sincerely express my deep sense of gratitude and appreciation to Internal Guide **Shri. S. M. Bhosage**, for his careful and valuable guidance, never ending patience and constant encouragement throughout the project.

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My thanks are also to library staff for their cooperation during the course of project work and I am also thankful to Printers for their skillful printing of this project.

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Mr. Vinayak Kumbar

A Study on online stock trading

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A Study on online stock trading

CHAPTER 1

INTRODUCTION AND RESEARCH DESIGN

- 1.1 Introduction**
- 1.2 Review of literature**
- 1.3 Statement of the problem**
- 1.4 Need for the study**
- 1.5 Objectives of the study**
- 1.6 Scope of the study**
- 1.7 Research methodology**
 - 1.7.1 Research Design**
 - 1.7.2 Universe and sampling**
 - 1.7.3 Primary data**
 - 1.7.4 Secondary data**
- 1.8 Limitations of study**
- 1.9 Chapter scheme**

A Study on online stock trading

CHAPTER-1 INTRODUCTION AND RESEARCH DESIGN

1.1 Introduction

As per the title suggest the project report has been prepared regarding the growth and development of online trading in India. Online trading was initiated by NSE in India and soon after the other exchanges also followed it. There was a major boom in yr. 2000 when lots of online trading companies came with a hang but only few were survived because of lack of computer knowledge and low internet penetration. I here are two types of online trading companies one is the banking online trading companies and the other is non-banking trading. A few examples of banking online trading companies are HDFC securities, ICICI direct.com, UTI securities etc. On the other hand on banking trading companies are sharekhan.com, angel broking, reliance Money etc. Today online trading contributes are about R-10%. It is continuously growing and has a huge market potential. A study was undertaken to determine the growth of various online trading companies in India in terms of trade done by them through online and services provided by them

Internet, the new medium that has emerged as a result of convergence between telecommunication and computer, is revolutionizing by the way business is done and is making inroads into every conceivable area of business activity. The potential of e-commerce is no longer a matter of debate. In fact, every forecast has been proved wrong, with actual figures far exceeding the forecast. The natural extension of e-commerce in the securities market is Internet based trading and securities services and it has made a great impact on the securities trading business. Issuers of securities, intermediaries, service providers and investors are increasingly selling and dealing or providing securities services on the Internet.

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1.2 Review of literature

A review of related literature is of vital importance to put any study in focus. A brief survey of related research is focused in this section. Michael J. Koop of Kiel Institute of World Economics, presented the paper titled "The influence of Capital Integration on

Rakesh H.M (2014) A Study On Individual Investors Behavior In Stock Markets Of India, JMSS (Vol.02, Issue-02), ISSN:2321-1784: The paper proposes to study the behavior of individual investors in the stock markets and the factors that influence their investment decisions, which include awareness level, investment duration etc. The research was based on the primary data collected from the city of Mysore of 150 respondents, being stock market investors. The research paper observes that only 10 % of the respondents intended to stay invested into the stock market for a period of more than 5 years. In other words, the research paper observed that people do not want to stay committed for longer period of time into the stock market despite it giving better returns. The paper analyses that annual income and annual savings are given importance by investors, but the level of savings are decided by their level of income. He states that "investors are fully aware about the stock market and they feel that market movements also affect the investment pattern of investors in the stock market.

Reena Rai (2014) Factors Affecting Investors' Decision Making Behavior In The Stock Market: An Analytical Review, Indian Journal of Applied Research (Vol.4, Issue-9), ISSN - 2249-555X: The paper under study aims to study the factors influencing an investors decision making behavior on basis of related studies. It states that the various factors that influence include various demographic factors such as gender, age, education. It is known that men are more overconfident than women. Age plays a role on the mindset of the individual and the propensity to take risk. It also explains sometimes, the pre-cautious attitude and conservatism. On the firm level the decision of the

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investors depend on capital structure average pricing, political and media exposure, trend analysis, past performance of company's stocks, expected dividend and EPS etc. Finally, it concludes that out of the various factors affecting behavior of investors

Bing Zhu (2012) The Effects Of Macroeconomic Factors On Stock Return Of Energy Sector In Shanghai Stock Market, International Journal of Scientific and Research Publications (Vol. 2, Issue-11), ISSN 2250-3153: The study aims at understanding the performance of arbitrage pricing theory (APT) in the Shanghai Stock Exchange. In finance, arbitrage pricing theory (APT) is a general theory of asset pricing that holds that the expected return of a financial asset. The research points out the fact that factors such as foreign reserve, exports, exchange rates, and unemployment rate have an impact on the returns of energy sector. As the foreign reserve increases by 1 point, the stock return of energy sector increases by 2.142004. This shows that foreign reserves have a positive direct impact on the returns of energy sector.

Dominica Celenza and Fabrizio Rossi (2012) The Relationship Between Intellectual Capital And Stock Market Performance: Empirical Evidence From Italy, Journal of Modern Accounting and Auditing (Vol. 8, Issue-11), ISSN 1548-6583: This study aims at providing a relation between the intellectual capital (IC) and returns of a company. It also aims at evaluating the value of IC.

- ◆ The accounting records are still incomplete inspite of the regulatory accounting standard. It is limited in transmitting information that is slowly reflected in the prices of securities of listed companies to the stock market.
- ◆ As the information arrives into the market, it becomes old. Compared to the degree of circulation of information in the market, the financial indicators appear to be static.
- ◆ The beta factor does not explain the market value of firms and changes in stock prices. The conclusions stand true as, the financial statements, made at

A Study on online stock trading

the end of the year; fail to inform the value of the firm. The speculation in the market also affects the investor's sentiment. The beta index indicates the systematic risks associated with the stocks and fails to elaborate the reason for changes in stock prices and market value of firms

Kushal A. Bhatt (2013) Investment and Trading Pattern of Individuals Dealing in Stock Market, The SD Transactions on Industrial, Financial & Business Management (IFBM) (Vol.1, Issue-02), ISSN: 2321 – 242X: The paper aims at studying the literacy and awareness of capital markets among investors regarding various investment avenues. To find and identify segments preferred more by the people and the influencing force behind the decision making, while investing in currently available options including stock markets. It concludes that investors are moving to new investment avenues such as equity market, mutual funds, bonds, and others like gold, land etc. This is due to the decreasing trend of bank rates. This also increases the scope of business for the investment companies. The investors are also risk sensitive. They want more safety and security. The stock markets have become very popular due to high rate of return but due to uncertainty and risk many people do not invest in equity markets. This stands true due to the lack of stability in the current market scenarios. The risk related to investment also defines the amount invested by people in the particular stock. The factors like age, occupation and income level are key factors in investment decision making of people. The other major factors being considered were market scenario, risk involved and other investment opportunities

Geetika Batra (2013) Study Of Investment Advice To Retirement Plan Partakers In India, Journal of Business Management & Social Sciences Research (JBM&SSR) (Vol.2, Issue- 08), ISSN No: 2319-5614: Investor need to think apart from public institution to private sector players. As they don't have any other source of income so if the investment plans fails, it would be disastrous on the savings front and logically, on the financial planning front. However, if one starts investment early, then the risk to reward ratio would be

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very high. Hence one should remain substantially committed to stock during this earning period

1.3 Statement of the Problem

Though there is no panacea for all problems in share trading, the researcher tries to focus on "A study on Online Trading." Business men should take every step carefully otherwise their days would be counted. Share trading which is risky is not an exception. All are not competent to enter in the field of share trading. There is a stiff competition and volatility prevailing in share trading. Fittest and tactfully taking decisions are the surveyors of share trading race. Therefore, a study entitled "A study on Online Trading." It also aims to identify the problem encountered by the investors and brokers and offer pragmatic solutions to eliminate these problems and improve its working. An efficient functioning of share market is measuring rode for the development of the economy of the country.

1.4 Need for the study

When it comes to online trading, you only need to open a trading account via internet and you're good to go. You're not bound by time and place as long as you have an internet. In online stock trading, the stock broker fee which you will have to pay is lower when compared to the commission charged by traditional method. So it is needed to study about online stock trading.

1.5 Objectives of the Study

1. To study the evolution, growth, development, and recent trends prevailing in the Stock exchanges.
2. To understand the growth , development and the procedure of share trading through On-line

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3. To analyze the opinions of trading investors towards On-line and Internet Trading
4. To assess the investment pattern of investors and their preferences in the investment.
5. To analyze the opinion and plight of investors as well as the brokers of On-line and trading in various dimensions.

1.6 Scope of the study

Economic liberalization and revolutionary development in the field of communication made it possible to trade the shares and securities through online and internet trading. The establishment of NSE and OTCEI further enhanced the online trading in our country. Online trading is another wing added to the online marketing. In those days when the investors contacted the brokers and sub brokers for the purchase of shares and waiting for days for receiving the certificates. During those days, the investors were affected due to the sudden changes in the prices of shares. There had been delay in both the purchase of shares and the delivery of share certificates. On-line share trading eliminates these draw backs in the share trading. Online trading is a fast emerging and fast expanding field in the capital market of our country. Almost in all the towns and cities of our country a large number of brokers and sub brokers are engaged in the online trading. A considerable number of investors who have already traded manually in share markets have been slowly turning towards online purchasing and selling of their shares and securities. The number of investors engaged in the online trading is also increasing rapidly. Further development in the stock market is Internet trading, which has been launched due to the growth of e-commerce. Indian market is getting ready for Internet trading during the year of 1999. National Stock exchange of India started the Internet trading by February 2000 and BSE turns the second bourse in the country to kick off net trading after its arch-rival National Stock Exchange opened in the year 2000. The excitement of stock trading is transferred to the personal computer in our living room or the laptop which we carry to wherever we move. has been India's largest exchange. The

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competition between NSE and BSE is a unique one by international standards. Both exchanges are in the same country and have the same trading hours. All major stocks trade on both exchanges, so the exchanges compete for order flow, and not just listings. The rise of NSE has proved to be a powerful spur to reforms at the BSE.

1.7 Research Methodology

"Research is an organized and systematic way of finding answers to question" Methodology is the system of broad principles or rules from which specific methods or procedures may be derived to understand different situations (or solve different problems) within the scope of a particular discipline. Unlike an algorithm, a methodology is not a formula but is set of practices.

1.7.1 Research Design

The research design is descriptive in nature. It is essentially a fact-finding approach, to study the existing state of affairs. The descriptive research studies are those studies, which are describing systematically a situation or area of interest factually and accurately.

1.7.2 Universe and sampling

The study is related to on-line and internet share trading at NSE. Throughout India, there are 1486 locations with NSE terminals. NSE is one of the largest interactive VSAT based stock exchanges in the world. Today it supports more than 3000 VSATs. Currently more than 9000 users are trading on the real time on-line NSE applications. There are 299 members in India are permitted to do the internet trading at NSE.

1.7.3 Primary data

This includes sending a questionnaire through E-mails and visiting to 100 people..

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1.7.4 Secondary data

Secondary data will be collected from books, trading journals, and from shodhganga website

1.8 Limitations of the Study

1. Findings of the survey are based on the assumption that the respondents have given information. Possibility of incorrect or partial information, factual errors, misconception of terms and expressions etc., need to be taken into an account.
2. The data do not have regional/geographical representation

1.9 Chapter scheme

Chapter1 Introduction and Research design

This chapter consists of the type of research carried out which include sample size, objective of the study, scope of the study, limitations of the study, techniques or tools for data collection and statistical tools used for analyzing the data.

Chapter2 Conceptual Framework

This chapter consists history, concept, meaning,How to create trading account. Types of online trading and their implications. Reasons for switching to online trading. Advantages and limitations of online trading.

Chapter3 Company profile

It gives profile of the online trading company where the project is conducted. It also explains about incentives of the company.

Chapter4 Data Analysis and Interpretation

This chapter consists of the analysis and interpretation of the study based on the findings of the survey.

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Chapter5 Findings Suggestions and Conclusion

This chapter gives a review of the findings of the study from the analysis of the preceding chapters and suggestions are given based on the findings and overall conclusions of the study

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CHAPTER 2 CONCEPTUAL FRAMEWORK

- 2.1 What is online trading?
- 2.2 History
- 2.3 Different types of online trading
- 2.4 Advantages of online trading
- 2.5 Disadvantages of online trading
- 2.6 Features of online trading
- 2.7 Reasons for switching to online trading
- 2.8 How to open trading account
- 2.9 How to open demat account
- 2.10 Why to open demat account

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CHAPTER-2

CONCEPTUAL FRAMEWORK

2.1 What is online trading?

Online trading involves the trading of securities through an online platform. Online trading portals facilitate the trading of various financial instruments such as equities, mutual funds, and commodities.

2.2 History

The financial market in India is growing rapidly and is expected to emerge as one of the leaders in the international arena very soon. This boom in financial markets is stimulating the growth of the Indian share market encouraging the investors to invest in the share market.

The history of the share market of India dates back to 1875. The name of the first share trading association in India was "Native Share and Stock Broker's Association" which later came to be known as Bombay Stock Exchange (BSE). This association began with 318 members. Today India can boast of 24 share markets in the various parts of the country, and a number of financial intermediaries that include banks, Non Banking Financial Corporations, Insurance companies, Mutual Funds, etc.

2.3 Different types

TRADING STYLE	TIMEFRAME	TIME PERIOD OF TRADE
Scalping	Short-term	Seconds or minutes
Day trading	Short-term	1 day max - do not hold positions overnight
Swing trading	Short/medium-term	Several days sometimes weeks
Position trading	Long-term	Weeks, months, years

Fig 1 Types of online trading

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Scalping

Scalping is the most short-term form of trading. Scalp traders only hold positions open for seconds or minutes at most. These short-lived trades target small intraday price movements. The purpose is to make lots of quick trades with smaller profit gains, but let profits accumulate throughout the day due to the sheer number of trades being executed in each trading session.

This style of trading requires tight spreads and liquid markets. As a result, scalpers tend to trade major currency pairs only (due to liquidity and high trading volume), such as EURUSD, GBPUSD, and USDJPY.

They also tend to trade only the busiest times of the trading day, during the overlap of trading sessions when there is more trading volume, and often volatility. Scalpers look for the tightest spreads possible, simply because they enter the market so frequently, so paying a wider spread will eat into potential profits.

The fast-paced trading environment of trying to scalp a few pips as many times as possible throughout the trading day can be stressful for many traders and is hugely time-consuming, given the fact you will need to focus on charts for several hours at a time. As scalping can be intense, scalpers tend to trade one or two pairs.

Day trading

For those that are not comfortable with the intensity of scalp trading, but still don't wish to hold positions overnight, day trading may suit.

Day traders enter and exit their positions on the same day (unlike swing and position traders), removing the risk of any large overnight moves. At the end of the day, they close their position with either a profit or a loss. Trades are usually held for a period of minutes or hours, and as a result, require sufficient time to analyse the markets and frequently monitor positions throughout the day. Just like scalp traders, day traders rely on frequent small gains to build profits.

Day traders pay particularly close attention to fundamental and technical analysis, using technical indicators such as MACD (Moving Average Convergence Divergence), the Relative Strength Index and the Stochastic Oscillator, to help identify trends and market conditions.

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Swing trading

Unlike day traders who hold positions for less than one day, swing traders typically hold positions for several days, although sometimes as long as a few weeks. Because positions are held over a period of time, to capture short-term market moves, traders do not need to sit constantly monitoring the charts and their trades throughout the day.

This makes it a popular trading style for those who have other commitments (such as a full-time job) and would like to trade in their leisure time. However, it is still necessary to dedicate a few hours a day to analyse the markets.

Swing traders (as well as some day traders) tend to use trading strategies such as trend trading, counter-trend trading, momentum and breakout trading.

Position trading

Position traders are focused on long-term price movement, looking for maximum potential profits to be gained from major shifts in prices. As a result, trades generally span over a period of weeks, months or even years. Position traders tend to use weekly and monthly price charts to analyse and evaluate the markets, using a combination of technical indicators and fundamental analysis to identify potential entry and exit levels.

As position traders are not concerned with minor price fluctuations or pullbacks, their positions do not need to be monitored the same way as other trading strategies, instead occasionally monitoring to keep an eye on the major trend.

2.4 Advantages

The Advantages of Online Trading are:

- Its Simple
- It is Less Expensive
- Quick & less time consuming.
- Complete Control
- Chances of Error is less
- Monitor Investment All time
- Access Reports.

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It is simple:

It enables a trader to have a hassle free trading experience. Anyone can use these platforms as specific skill is not required to carry out trading online.

It is less expensive

It is less expensive as compared to traditional mode of trading. Brokers also promote online trading as it reduces maintenance and other costs incurred by the broker.

Quick and less time consuming:

Trading can be done in a seamless manner and in less time. Before the advent of online technologies, trading was a cumbersome process as you had to visit the broker or call your broker for placing or cancelling trade orders. Now, you can carry out trading even through a smartphone in the simplest way.

Complete control:

It allows you to have complete control over your portfolio. You can place trade orders from anywhere anytime. That is the kind of flexibility you get due to online trading.

Chances of error are less:

In case of traditional offline trading, there were more chances of errors due to miscommunication between the traders and brokers. But in online trading, you can place trade orders or cancel without broker's interference and hence can manage trade transactions by yourself.

Monitor investment at all times:

You can monitor investments anytime. There are mobile trading apps that can be downloaded in your smartphone which help you stay in touch with the markets and also monitor your investment anytime and take proper strategic moves accordingly. Loss making stocks can be removed and profit making stocks can be added to your portfolio by observing the way the market moves.

Access to research reports:

You can get access to top research recommendations, reports, analysis on stock price based on various charts. There are various brokerage websites through which you can have discussions with research experts as well. You can take the best move with the help of financial advisors too.

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2.5 Disadvantages

The Disadvantages of Online Trading are:

- Hidden cost
- Technical knowledge
- System error
- No control over decision
- Limited knowledge

Hidden Cost

Although the brokerage fee is lower, other facilities have to pay more. It seems like a lot of rounding up. Brokerage charges for online trading is very low but if you need call to broker for order placement they charges 2 or 3 times higher fees for that.

Technical Knowledge

Since the trading terminal runs on a computer system, those who do not have knowledge of computer internet have to spend a lot of time learning it.

System Error

Sometimes the website may run slow, the internet may not be up to speed, the computer may not respond, the server may go down, and the trading terminus may not be convenient to use.

The mechanism or systems fails due to the less speed of internet connections, its cause huge loss in trading.

No Control Over Decision.

Greed, Fear and Patients are the main factors for stock market success. It is very difficult to control your emotions at the time of heavy market fluctuations.

Limited Knowledge

- Elimination of a broker could be mean trouble.

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- Without proper investment advice could cause big loss.
- In bull market every decision of yours earns good profit but once market change the gears then is very hard to survive in stock market.

2.6 Features of online trading

1. Single Point of Access: There are two major exchanges Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) where you can buy stocks. With the online trading account, you can choose to buy from any of these exchanges. Additionally, you will be able to sell stocks from the same platform as well. The platform gives you detailed information about every trade transaction so that you are on top of your calculations from determining the amount invested and number of shares to profits earned and other things. All of this is possible by simply accessing a single platform.

2. 24x7 Access: Not only is the access provided from a single trading account, but it is also flexible enough so that you can log in from any location and at any point in time. More importantly, you can access a trading platform like ours from your internet browsers (on a laptop, desktop PCs, etc.) as well as from applications (on your tablets, smartphones, etc.).

3. Detailed Portfolio Reporting: With an online trading account, you can get various reports of all the stocks you own. For example, you can view reports of all the existing stocks in your portfolio with key information like buy price, current market price, number of shares bought, current profit percentage, number of shares sold (if you have made any partial profit booking), and so on. The detailed reports enable you to view your stock holdings sector-wise and assess diversification possibilities.

4. Control Order Placement Process: You can place a buy or sell order from the online trading account with options to select the exchange and quantity of shares among other things. You also have control over the type of order i.e. whether you wish to transact at a current market price or set a target price for the transaction to trigger.

5. Transparency: The details shared from the online trading account also reveal the additional charges applicable for every transaction that you undertake. These include

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the brokerage charges, taxes, etc. Thus, you have more clarity on the exact calculations to be done for your trade.

6. Uninterrupted End-to-End Transactions: Your online trading account gets linked with your bank account from which you drive the funds into your stock investments. The online trading account ensures a smooth transfer of funds from your bank account to your demat account (when you wish to make a stock purchase) and from your demat account to your bank account (when you sell off any stock). The secure trading platform ensures you can complete the transactions without any issues.

7. Access to Professional Research: Companies like ours that offer online trading accounts for you comprise of a big team of well-qualified stock market analysts and experts. These professionals conduct detailed research on various companies and share the stock research reports over emails with investors who have their trading accounts with us. This provides you access to detailed and comprehensive reports and analysis of stocks, enabling you to make informed stock investment decisions.

2.7 Reason for switching to online trading

According to the respondents, the major reason for switching over to online trading was its speed. This evidence supports the earlier response. Also, it was economical and instant feedback was available about the execution. In case of off-line trading, the client has to wait till the end of the day for the broker to send him/her a statement of transactions or inform over the telephone. As of now, there has only been part conversion to online trading. This is due to the fact that online trading requires the shares to be in the dematerialized (demat) form, which the respondents may not have. Further, all the listed companies have not gone for demat as yet but will be converting very shortly out of legal necessity. The respondents mentioned quite a few reasons such as margin money required before trading, lack of personal interaction, existing friendly brokers, no trust on online system, etc. for not fully switching over. These are some of the gaps that need to be addressed by the existing sites.

The top five reasons for not trading online were:

- Security reasons associated with disclosing bank account and demat account.

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- Lack of inadequate infrastructure.
- Present broker is giving adequate service.
- Uncomfortable with computers.
- Wait and watch attitude.

2.8 How to open trading account?

Since 2000, the stock markets have become electronic. This means, trading is conducted online. Today, you need a demat and a trading account to invest in the stock market. A trading account is opened with a stock broker.

Most often, stock broking firms have thousands of clients. It is not feasible to take physical orders from every client on time. So, to make this process seamless, you open a trading account. Using this account, you can place buy or sell orders either online or phone, which will automatically be directed to the exchange through the stock broker.

Before you buy and sell on the stock market, you might want to read about How to analyse the stock market and more. Read on to know how you can open a trading account.



Fig2 steps to create trading account

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- First, select the stock broker or firm. Ensure that the broker is good and will take your orders in a timely manner. Remember, time is of utmost importance in the stock market. Even a few minutes can change the market price of the stock. For this reason, ensure that you select a good broker.
- Compare brokerage rates. Every broker charges you a certain fee for processing your orders. Some may charge more, some less.
- Some give discounts on the basis of the amount of trades conducted. Take all this into account before opening an account. However, remember that it is not necessary to choose a broker who charges the lowest fees. Good quality brokerage services provided often may need higher-than-average charges. You can even pay the brokerage in advance to avoid any more fees. Next, get in touch with the brokerage firm or broker and enquire about the trading account opening procedure. Often, the firm would send a representative to your house with the account opening form and the Know Your Client (KYC) form
- Fill these two forms up. Submit along with two documents that serve as proof of your identity and address.
- Your application will be verified either through an in-person check or on the phone, where you will be asked to divulge your personal details.
- Once processed, you will be given your trading accounts details. Congrats, you will now be able to conduct trades in the stock market

2.9 How to open demat account?

What is Demat account?

A Demat Account or Dematerialised Account provides the facility of holding shares and securities in an electronic format. During online trading, shares are bought and held in a Demat Account, thus, facilitating easy trade for the users. A Demat Account holds all the investments an individual makes in shares, government securities, exchange-traded funds, bonds and mutual funds in one place.

Importance of Demat account

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A Demat account provides a digitally secure and convenient way of holding shares and securities. It eliminates theft, forgery, loss and damage of physical certificates. With a Demat account, you can transfer securities immediately. Once the trade is approved, the shares are digitally transferred to your account. Moreover, in case events like stock bonuses, mergers, etc., you get shares automatically into your account. Your Demat account information regarding these activities is available online by simply logging into the website. You can trade on-the-go using your smartphone or desktop. So, you needn't visit the stock exchange to transact. You also enjoy the benefit of reduced transaction costs because there is no stamp duty involved with the transfer of shares. These features and benefits of a Demat account encourage a larger trade volume by investors, thus increasing the potential for lucrative returns.

How does a Demat Account work?

Trading through a Demat account is similar to the procedure of physical trading, except that a Demat account is electronic. You begin trading by placing an order through your online trading account. For this purpose, it is necessary to link both trading and Demat accounts. Once an order is placed, the exchange will process the order. Demat account details the market price of shares and the availability of shares is verified before the final processing of the order. On completion of the processing, shares are then reflected in your statement of holdings. When a shareholder wishes to sell shares, a delivery instruction note has to be provided with details of the stock. Shares are then debited from the account and the equivalent cash value is credited to the trading account.

Types of Demat account

There are two types of Demat accounts—Repatriable Demat account and Non-repatriable Demat account. Repatriable funds are deposited in a separate bank account known as the Non-Resident External Account (NRE account). Repatriable funds are those funds which can be transferred abroad. The investments made from these funds are maintained in a The Repatriable Demat account holds the investments made from repatriable funds. On the other hand, non-repatriable funds (funds which cannot be taken/transferred abroad) are deposited in a different bank account known as the Non Resident Ordinary Account (NRO account). The Non-repatriable Demat account holds the investments made from non-repatriable funds. Money can easily be transferred

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from an NRE to an NRO account. However, once the transfer is made, the repatriability is lost and the money cannot be transferred back to the NRE account.

Benefits of opening a Demat Account with Angel Broking

Angel Broking is one of the most renowned stockbroking houses in India. The Angel Group is a member of the Bombay Stock Exchange (BSE), National Stock Exchange (NSE) and the two leading Commodity Exchanges in the country: NCDEX & MCX. Here are some benefits of opening a Demat account:

- Invest Easily & Earn Better
- Gain access to the award-winning Angel Broking App - Trade, learn, and stay updated on the go. The app gives you latest news, research reports, and real-time updates on your fingertips. It also offers Portfolio Health Check to help you maintain an ace portfolio
- Get a better chance of earning higher returns with ARQ
- Fastest account opening process - Start trading in 1 hour
- Highly secure & speedy financial transactions

Steps



Fig3 Steps to create demat account

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Step 1: Choose Depository Participant (DP)

Choosing a depository participant (DP) is the first step to open a Demat account. In India, banks, stockbrokers, and online investment platforms offer DP services. While choosing a DP, it is advisable to go for a service provider whose services and features match your needs and requirements.

Step 2: Submit Demat Account Opening Form

Visit your DP's website and fill out the online Demat account opening form for opening a Demat account. Many depository participants like IIFL offer the ability to open both trading and Demat accounts.

Step 3: Fulfill KYC (Know Your Customer) Norms

Once you have duly filled the Demat account opening form, you will be asked to fulfil the Know Your Customer (KYC) norms. This would require you to submit scanned copies of KYC documents such as your identity proof, address proof, bank account statement, and income proof. It is a good idea to have all of the relevant documents by your side before applying, since this can help you get through the process faster.

Step 4: Go through the Verification Process

After submitting your Demat account opening form along with the requisite proofs, you will be asked by your DP to go through a process called 'In Person Verification' (IPV). This exercise is mandatory, and it's carried out with the intention of verifying the authenticity of your documents. Depending on your DP, you may be asked to be present in person at any one of your service provider's offices. However, many depository participants now offer IPV services online through the use of a webcam or a smartphone.

Step 5: Sign the Agreement Copies

Upon completion of IPV, you will be asked to sign an agreement with your DP. This agreement generally contains all the duties and rights of the depository participant and the investor.

Step 6: Get Your BO ID Number

Once this is done, your DP shall proceed to process your Demat account opening form. Upon approval of your application, you will be provided with a unique

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Beneficial Owner Identification Number (BO ID). This BO ID is used to access your Demat account.

2.10 Why to open demat account?

In the current scenario, if you're interested in investing in the share market, you cannot do so without a Demat account. That's how important a Demat account is to share trading. Some of the other reasons that make a Demat account so important are briefly explained below.

Safety:

With a Demat account, you don't have to worry about dealing with forged or fake share certificates. Each record of shares that you have in your account is genuine.

Convenience:

Proper storage and maintenance of physical share certificates can be tiresome. Also, there's the risk of having your certificates lost or damaged. A Demat account solves all of these issues.

Accessibility:

Since all the records associated with a Demat account are online and electronic, you can access them from anywhere and at any point in time.

Lower charges:

A Demat account does away with additional costs such as handling charges and stamp duties, which were levied on physical share certificates. This translates to lower costs and significant savings.

Multiple securities:

A Demat account doesn't merely support the equity share market. It can also be used to hold other electronic financial instruments such as bonds, mutual funds, and debt securities, among others. This enables you to track and monitor all of your investments under a single roof.

**CHAPTER 3
COMPANY PROFILE**

- 3.1 NSE Headquarter**
- 3.2 History**
- 3.3 NSE details**
- 3.4 NSE purpose, vision and values**
- 3.5 Awards and recognition**
- 3.6 Milestone of NSE**
- 3.7 Markets**
- 3.8 Technology**
- 3.9 Trading schedule**
- 3.10 Financial literacy**

CHAPTER- 3
NSE PROFILE

3.1 NSE HEADQUATER



Fig4 Company Profile

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3.2 HISTORY

National Stock Exchange was incorporated in the year 1992 to bring about transparency in the Indian equity markets. Instead of trading memberships being confined to a group of brokers, NSE ensured that anyone who was qualified, experienced, and met the minimum financial requirements was allowed to trade. In this context, NSE was ahead of its time when it separated ownership and management of the exchange under SEBI's supervision. Stock price information that could earlier be accessed only by a handful of people could now be seen by a client in a remote location with the same ease. The paper-based settlement was replaced by electronic depository-based accounts and settlement of trades was always done on time. One of the most critical changes involved a robust risk management system that was set in place, to ensure that settlement guarantees would protect investors against broker defaults.

NSE was set up by a group of leading Indian financial institutions at the behest of the government of India to bring transparency to the Indian capital market. Based on the recommendations laid out by the Pherwani committee, NSE was established with a diversified shareholding comprising domestic and global investors. The key domestic investors include Life Insurance Corporation, State Bank of India, IFCI Limited, IDFC Limited and Stock Holding Corporation of India Limited. Key global investors include Gajil FDI Limited, GS Strategic Investments Limited, SAIF II SE Investments Mauritius Limited, Aranda Investments (Mauritius) Pte Limited and PI Opportunities Fund I.

The exchange was incorporated in 1992 as a tax-paying company and was recognized as a stock exchange in 1993 under the Securities Contracts (Regulation) Act, 1956, when P. V. Narasimha Rao was the Prime Minister of India and Manmohan Singh was the Finance Minister. NSE commenced operations in the Wholesale Debt Market (WDM) segment in June 1994. The capital market (equities) segment of the NSE commenced operations in November 1994, while operations in the derivatives segment commenced in June 2000. NSE offers trading, clearing and settlement services in equity, equity derivative, debt, commodity derivatives, and currency

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derivatives segments. It was the first exchange in India to introduce an electronic trading facility thus connecting the investor base of the entire country. NSE has 2500 VSATs and 3000 leased lines spread over more than 2000 cities across India.

NSE was also instrumental in creating the National Securities Depository Limited (NSDL) which allows investors to securely hold and transfer their shares and bonds electronically. It also allows investors to hold and trade in as few as one share or bond. This not only made holding financial instruments convenient but more importantly, eliminated the need for paper certificates and greatly reduced incidents involving forged or fake certificates and fraudulent transactions that had plagued the Indian stock market. The NSDL's security, combined with the transparency, lower transaction prices, and efficiency that NSE offered, greatly increased the attractiveness of the Indian stock market to domestic and international investors.

3.3 NSE DETAILS

Type	Stock exchange
Location	Mumbai, Maharashtra, India
Founded	1992; 29 years ago
Owner	Government of India
Key people	<ul style="list-style-type: none"> ▪ Girish Chandra Chaturvedi (Chairman) ▪ Vikram Limaye (MD & CEO)
Currency	Indian rupee (₹)
No. of listings	1,952

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Market cap	US\$3.1 trillion (May 2021)
Volume	□ 8,998,811 crore (US\$1.3 trillion) (FY 2020)
Indices	NIFTY 50 NIFTY Next 50 NIFTY 500
Website	www.nseindia.com

Table1 Some details of NSE

National Stock Exchange of India Limited (NSE) is the leading government owned stock exchange of India, located in Mumbai, Maharashtra. It is under the ownership of Some leading financial institutions, Banks and Insurance companies. NSE was established in 1992 as the first dematerialized electronic exchange in the country. NSE was the first exchange in the country to provide a modern, fully automated screen-based electronic trading system that offered easy trading facilities to investors spread across the length and breadth of the country. Vikram Limaye is Managing Director & Chief Executive Officer of NSE.

National Stock Exchange has a total market capitalization of more than US\$3 trillion, making it the world's 9th-largest stock exchange as of May 2021. NSE's flagship index, the NIFTY 50, a 50 stock index is used extensively by investors in India and around the world as a barometer of the Indian capital market. The NIFTY 50 index was launched in 1996 by NSE. However, Vaidyanathan (2016) estimates that only about 4% of the Indian economy / GDP is actually derived from the stock exchanges in India.

Unlike countries like the United States where nearly 70% of the country's GDP is derived from large companies in the corporate sector, the corporate sector in India accounts for only 12-14% of the national GDP (as of October 2016). Of these only 7,800 companies are listed of which only 4000 trade on the stock exchanges

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at BSE and NSE. Hence the stocks trading at the BSE and NSE account for only around 4% of the Indian economy, which derives most of its income-related activity from the so-called unorganized sector and household spending.

Economic Times estimates that as of April 2018, 6 crore (60 million) retail investors had invested their savings in stocks in India, either through direct purchases of equities or through mutual funds. Earlier, the Bimal Jalan Committee report estimated that barely 1.3% of India's population invested in the stock market, as compared to 27% in the United States and 10% in China

3.4 NSE PURPOSE, VISION AND VALUES



Purpose
Committed to improve the financial well-being of people

VISION
To continue to be a leader, establish global presence, facilitate the financial well-being of people

Values
NSE is committed to above core values:

INTEGRITY
CUSTOMER
TRUST
EXCELLENCE
TEAMWORK

3.5 AWARDS AND RECOGNITION

2019 – 20

- 2020 Best of the Best Award for being the Index provider of the year, India
- 2020 Best of the Best Award for ETF Index Provider of the year, India
- World's Largest Derivative Exchange in terms of contracts traded

2018 – 19

- Innovative Practices Award 2018 on Sustainable Development Goals
- UN Global Compact Network India
- CSR Times Awards for Best Project in Education under the Corporate Foundation Category

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2017– 18

- FICCI CSR Award for Exemplary Innovation
- Capital Market: Vision 2020 - Best Stock Exchange of India
- 7th Annual Greentech HR Award 2017
- Golden Peacock Award for Corporate Social Responsibility
- ET NOW – CSR Leadership Award
- Green IT award
- India Achievers Awards, 2018 - NSE SME Driver of Entre-preneurship
- Datacenter Summit and Awards 2017 for Innovation
- Architecting a Digital Transformation Journey
- Ranked among India's Top 50 companies to work for
- Recognised for being among the best in India's financial services industry

2016– 17

- CII - Exim Bank Prize for Business Excellence
- Global Architecture Excellence Awards 2016 - New Service Offering Initiative

2015– 16

- Golden Peacock Innovative Product / Service Award
- The Asian Banker Achievement Awards 2015 - Stock Exchange of the Year
- FOW Awards for Asia - Best New Technology Product - Market Surveillance

2014– 15

- Futures and Options World Award for Indian Exchange of the Year
- Global Finance - Best Derivatives Providers Award 2014 for exchange performance
- CII-Exim Bank Prize for Business Excellence

2013– 14

- Capital Finance International - Best Stock Exchange Award, India

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3.6 MILESTONE OF NSE

YEAR	MILESTONES
2019 – 2020	<p>NSE launches new brand identity for NIFTY Indices</p> <p>Proposed NSE IFSC-SGX Connect receives regulatory dispensations</p> <p>NSE EMERGE achieves 200th SME listing milestone</p> <p>NSE Commodities Segment gets recognition from CBDT</p> <p>NSE opens Centre for Behavioral Science at IIMA</p> <p>Launch of Interest Rate Options on Government of India bonds</p> <p>NSE Indices launches Nifty BHARAT Bond Index Series</p> <p>NSE declared world's largest derivatives exchange 2019 by WFE</p> <p>NSE launches Request for Quote (RFQ) Platform in Debt Securities</p>
2018 – 2019	<p>Launched Commodity Derivatives segment, goBidMobile app for government securities and Tri-Party Repo of Corporate Debt Securities.</p> <p>Weekly option on NIFTY 50 was launched</p>

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YEAR	MILESTONES
	<p>E-voting for 30 corporate</p> <p>NSE derivatives access was extended to US clients</p> <p>Signs Post-Trade Technology and Strategic Partnership Agreement with Nasdaq</p> <p>MoU with London Stock Exchange Group</p>
2017 – 2018	<p>Launched currency derivatives on Non-FCYINR pairs</p> <p>Launched NIFTY SME EMERGE Index and 72 fixed income and three hybrid indices</p> <p>Entered into a MOU with The Colombo Stock Exchange (CSE)</p>
2016 – 2017	<p>Promoted NSE IFSC, the International Stock Exchange in India's first IFSC SEZ at GIFT City Gandhinagar</p>
2015 – 2016	<p>Launched NIFTY 50 index futures trading on TAI FEX</p> <p>Launched platform for sovereign gold bond issuance</p> <p>Launched an electronic book-building platform for the private placement of debt securities</p>
2014 – 2015	<p>Entered into a memorandum of understanding to enhance co-operation with the London Stock Exchange Group</p>

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YEAR	MILESTONES
	Renamed CNX NIFTY to NIFTY 50
2013 – 2014	<p>Launched NMF-I platform for mutual funds</p> <p>Launched NBF IISegment for interest rate futures</p> <p>Launched trading on India VIX index futures</p> <p>Commenced trading on NIFTY 50 (then known as CNX NIFTY) on the Osaka Exchange</p>
2012 – 2013	Launched the New Debt Segment (NDS)
2011 – 2012	<p>Commenced trading in index futures and options contracts on the FTSE 100 index</p> <p>Launched SME-specific EMERGE platform for the listing and trading of securities of SMEs</p>
2010 – 2011	Commenced trading in index futures and options on global indices, namely the S&P 500 and Dow Jones Industrial Average

Table 2 Milestones of NSE

3.7 MARKETS

NSE offers trading and investment in the following segment

Equity

- Equity
- Indices

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- Mutual fund
- Exchange-traded funds
- Initial public offerings
- Security Lending and Borrowing etc.

Derivatives

- Equity Derivatives(including Global Indices like S&P 500, Dow Jones and FTSE)
- Currency derivatives
- Commodity Derivatives
- Interest rate futures

Debt

- Corporate bonds

Equity Derivatives

The National Stock Exchange of India Limited (NSE) commenced trading in derivatives with the launch of index futures on 12 June 2000. The futures and options segment of NSE has made a global mark. In the Futures and Options segment, trading in the NIFTY 50 Index, NIFTY IT index, NIFTY Bank Index, NIFTY Next 50 index, and single stock futures are available. Trading in Mini Nifty Futures & Options and Long term Options on NIFTY 50 are also available. The average daily turnover in the F&O Segment of the Exchange during the financial year April 2013 to March 2014 stood at ₹ 1.52236 trillion (US\$21 billion).

On 29 August 2011, National Stock Exchange launched derivative contracts on the world's most-followed equity indices, the S&P 500 and the Dow Jones Industrial Average. NSE is the first Indian exchange to launch global indices. This is also the first time in the world that futures contracts on the S&P 500 index were introduced and listed on an exchange outside of their home country, USA. The new contracts include futures on both the DJIA and the S&P 500 and options on the S&P 500.

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On 3 May 2012, the National Stock exchange launched derivative contracts (futures and options) on FTSE 100, the widely tracked index of the UK equity stock market. This was the first of its kind index of the UK equity stock market launched in India. FTSE 100 includes the 100 of largest UK-listed blue-chip companies and has given returns of 17.8 percent on investment over three years. The index constitutes 85.6 per cent of UK's equity market cap.

On 10 January 2013, the National Stock Exchange signed a letter of intent with the Japan Exchange Group, Inc. (JPX) on preparing for the launch of NIFTY 50 Index futures, a representative stock price index of India, on the Osaka Securities Exchange Co., Ltd. (OSE), a subsidiary of JPX.

Moving forward, both parties will make preparations for the listing of yen-denominated NIFTY 50 Index futures by March 2014, the integration date of the derivatives markets of OSE and Tokyo Stock Exchange, Inc. (TSE), a subsidiary of JPX. This is the first time that retail and institutional investors in Japan will be able to take a view on the Indian markets, in addition to current ETFs, in their own currency and in their own time zone. Investors will therefore not face any currency risk, because they will not have to invest in dollar-denominated or rupee-denominated contracts.

In August 2008, currency derivatives were introduced in India with the launch of Currency Futures in USD-INR by NSE. It also added currency futures in Euros, Pounds, and Yen. The average daily turnover in the F&O Segment of the Exchange on 20 June 2013 stood at ₹419.2616 billion (US\$5.9 billion) in futures and ₹273.977 billion (US\$3.8 billion) in options, respectively.

Interest Rate Futures

In December 2013, exchanges in India received approval from market regulator SEBI for launching interest rate futures (IRFs) on a single GOI bond or a basket of bonds that will be cash-settled. Market participants have been in favour of the product being cash-settled and being available on a single bond. NSE will launch the NSE Bond Futures on 21 January on highly liquid 7.16 percent and 8.83 percent 10-year GOI bonds. Interest Rate Futures were introduced for the first time in India by NSE on 31 August 2009, exactly one year after the launch of Currency Futures. NSE became the

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first stock exchange to get approval for interest-rate futures, as recommended by the SEBI-RBI committee.

Debt Market

On 13 May 2013, NSE launched India's first dedicated debt platform to provide a liquid and transparent trading platform for debt-related products.

The Debt segment provides an opportunity for retail investors to invest in corporate bonds on a liquid and transparent exchange platform. It also helps institutions that are holders of corporate bonds. It is an ideal platform to buy and sell at optimum prices and help Corporates to get adequate demand when they are issuing the bonds.

3.8 TECHNOLOGY

NSE's trading systems are a state-of-the-art application. It has an uptime record of 99.99% and processes more than a billion messages every day with a sub-millisecond response time.

NSE has taken huge strides in technology in 20 years. In 1994, when trading started, NSE technology was handling 2 orders a second. This increased to 60 orders a second in 2001. Today NSE can handle 1,60,000 orders/messages per second, with infinite ability to scale up at short notice on demand, NSE has continuously worked towards ensuring that the settlement cycle comes down. Settlements have always been handled smoothly. The settlement cycle has been reduced from T+3 to T+2/T+1.

3.9 TRADING SCHEDULE

Trading on the equities segment takes place on all days of the week (except Saturdays and Sundays and holidays declared by the Exchange in advance). The market timings of the equities segment are:

- Pre-open session:
 - Order entry & modification Open: 09:00 hrs
 - Order entry & modification Close: 09:08 hrs*

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*with random closure in last one minute. Pre-open order matching starts immediately after the close of pre-open order entry.

- Regular trading session
 - Normal/Retail Debt/Limited Physical Market Open: 09:15 hrs
 - Normal/Retail Debt/Limited Physical Market Close: 15:30 hrs.
 - After market hours: 16:00 - 09:00 hrs

3.10 FINANCIAL LITERACY

NSE has collaborated with several universities like Gokhale Institute of Politics & Economics (GIPE), Pune, Bharati Vidyapeeth Deemed University (BVDU), Pune, Guru Gobind Singh Indraprastha University, Delhi, the Ravenshaw University of Cuttack and Punjabi University, Patiala, among others to offer MBA and BBA courses. NSE has also provided mock market simulation software called NSE Learn to Trade (NLT) to develop investment, trading and portfolio management skills among the students. The simulation software is very similar to the software currently being used by the market professionals and helps students to learn how to trade in the markets.

NSE also conducts online examination and awards certification, under its Certification in Financial Markets (NCFM) programmes. At present, certifications are available in 46 modules, covering different sectors of financial and capital markets, both at the beginner and advanced levels. The list of various modules can be found at the official site of NSE India. In addition, since August 2009, it offered a short-term course called NSE Certified Capital Market Professional (NCCMP). The NCCMP or NSE Certified Capital Market Professional is a 100-hour program for over 3–4 months, conducted at the colleges, and covers theoretical and practical training in subjects related to the capital markets. NCCMP covers subjects like equity markets, debt markets, derivatives, macroeconomics, technical analysis, and fundamental analysis. Successful candidates are awarded joint certification from NSE and the concerned.

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CHAPTER 4 DATA ANALYSIS AND INTERPRETATION

Table 4.2 Shows respondents experience with online trading till date

Table 4.3 Shows respondents response about amount of money invest normally

Table 4.4 Shows how often respondents trade

Table 4.5 Shows which trading respondents prefer

Table 4.6 shows respondents are settled with online trading in their psyche

Table 4.7 Shows respondents response towards shortcomings they feel in Indian online trading

Table 4.8 Shows respondents preferring media for investment

Table 4.9 Shows respondents annual income

Table 4.10 shows respondents response on monthly household income available for investment

Table 4.11 shows respondents response about where they invest their money

Table 4.12 shows respondents response on primary objective of their investment

Table 4.13 shows respondents own a computer

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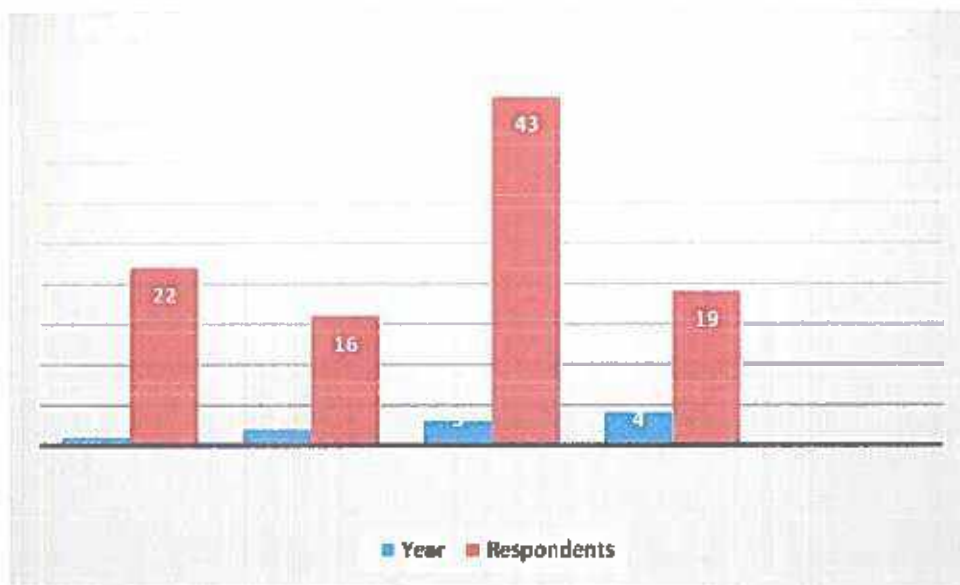
UNIT 4

DATA ANALYSIS AND INTERPRETATION

Table 4.1 Shows respondents response on how long they have been trading online

Year	Respondents
1	22
2	16
3	43
4	19

Chart 4.1



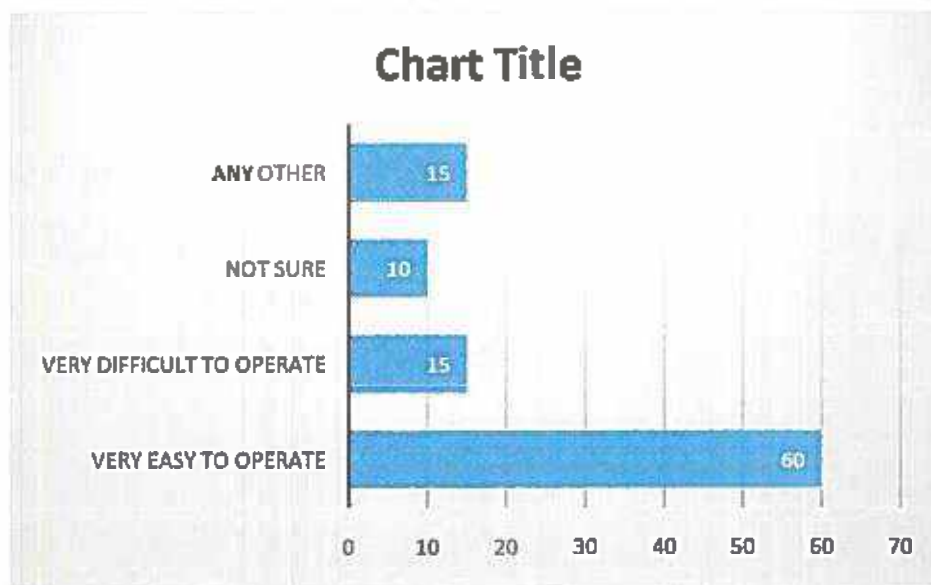
According to the above table we find that 22% people says that we are investing the money online from one year and 16% people says that we are investing the money online from 2 years and 43% to 19% people says that we are investing money online from 3 to 4 years. we can says that online trading is very popular in the moderna market.

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Table 4.2 Shows respondents experience with online trading till date

Parameters	No. of Respondents
Very easy to operate	60
Very difficult to operate	15
Not sure	10
Any other	15

Chart 4.2



INTERPRETATION

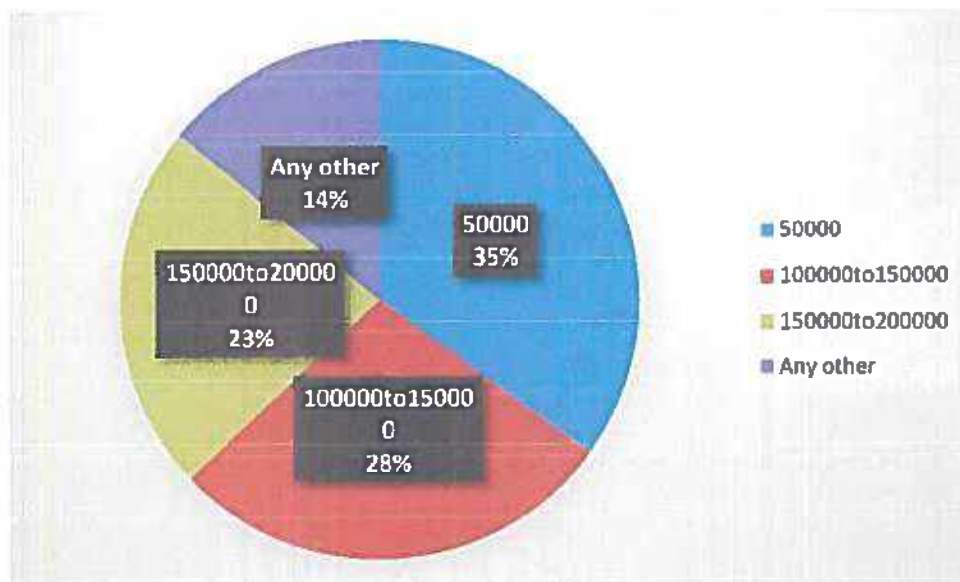
According to above table we find that 60% of people very easy to operate and 15% people find difficult to operate and 10% and 15% people find no sure and any other so we can say that online trading is very simple to operate.

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Table 4.3 Shows respondents response about amount of money invest normally

Parameters	NO. of Respondents
50000	35
100000to150000	28
150000to200000	23
Any other	14

Pie Chart4.3



INTERPRETATION

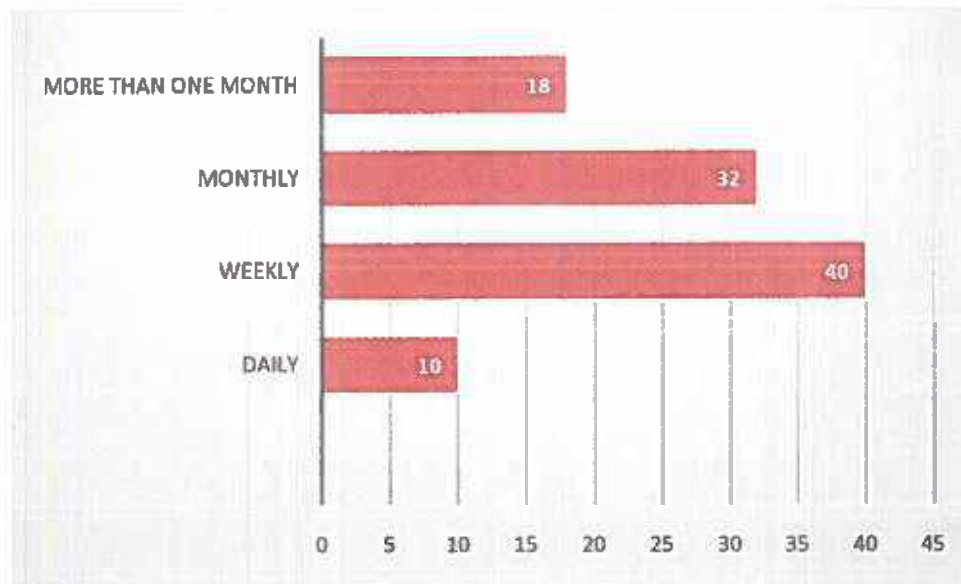
According to above pie chart we find that find that 35% of people invest money normally 50000 and 28% of people invest money 100000to150000 and 23% and 14% of people invest money between 150000to200000 and any other. So we can say that the people are not invest more money in the same market because there is a great risk involved while doing the trading.

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Table 4.4 Shows how often respondents trade

Parameters	No. of Respondents
Daily	10
Weekly	40
Monthly	32
More than one month	18

Chart 4.4



INTERPRETATION

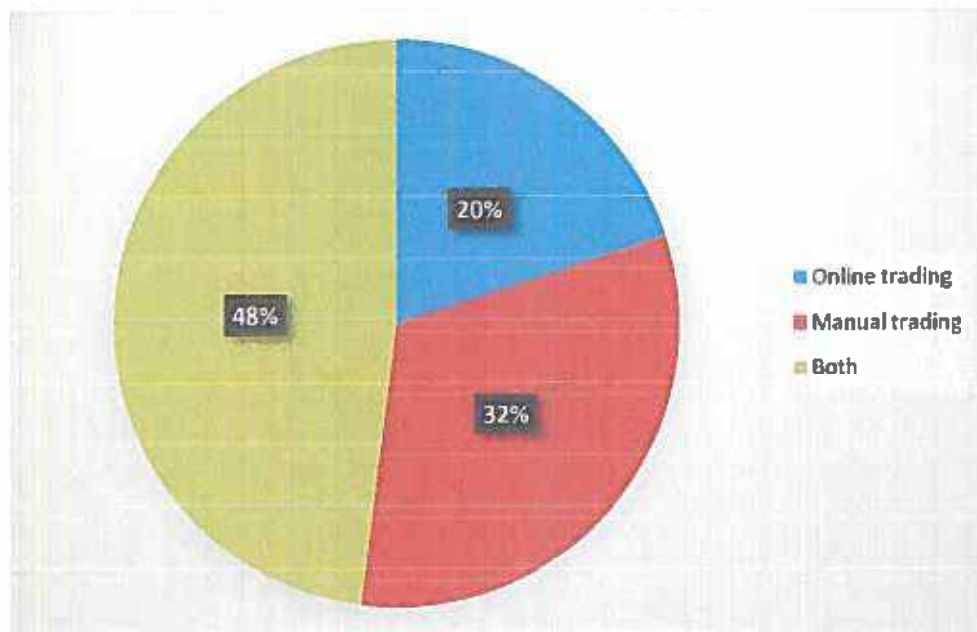
According to the table we find that 10% of people do trade daily and 40% of people do trade weekly and 32% and 18% of people do trade month and more than month. So we can say that people are generally invest in stock market weekly basis.

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Table 4.5 Shows which trading respondents prefer

Parameters	No. of Respondents
Online trading	20
Manual trading	32
Both	48

Pie Chart 4.5



INTERPRETATION

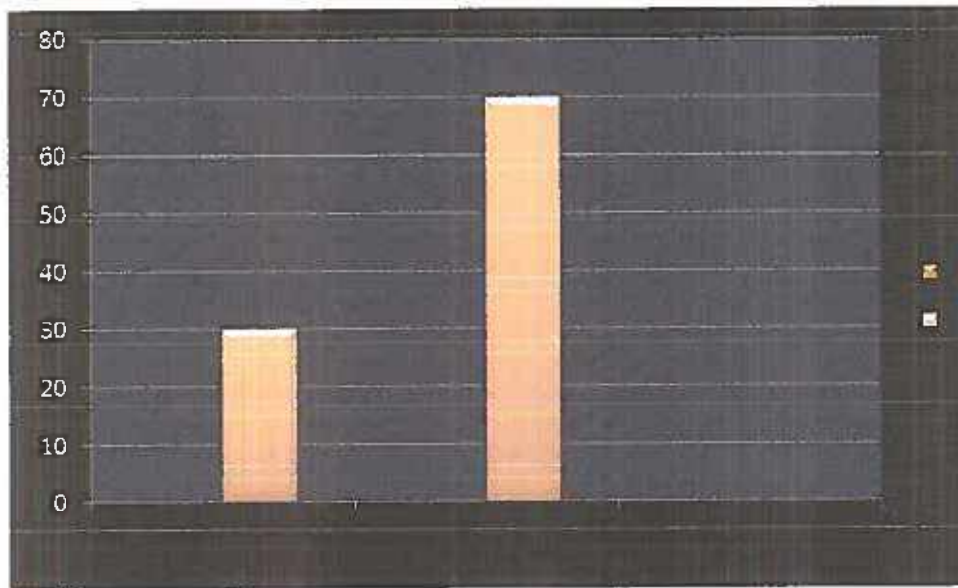
According to above table we find that 20% people prefer online trading and 32% people prefer offline trading rest of 48% people prefers both. So we can say most people are awareness about the online trading and because of this reason the mostly people are optimizing offline trading.

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Table 4.6 shows respondents are settled with online trading in their psyche

Parameters	No. of Respondents
Yes	30
No	70

Chart 4.6



INTERPRETATION

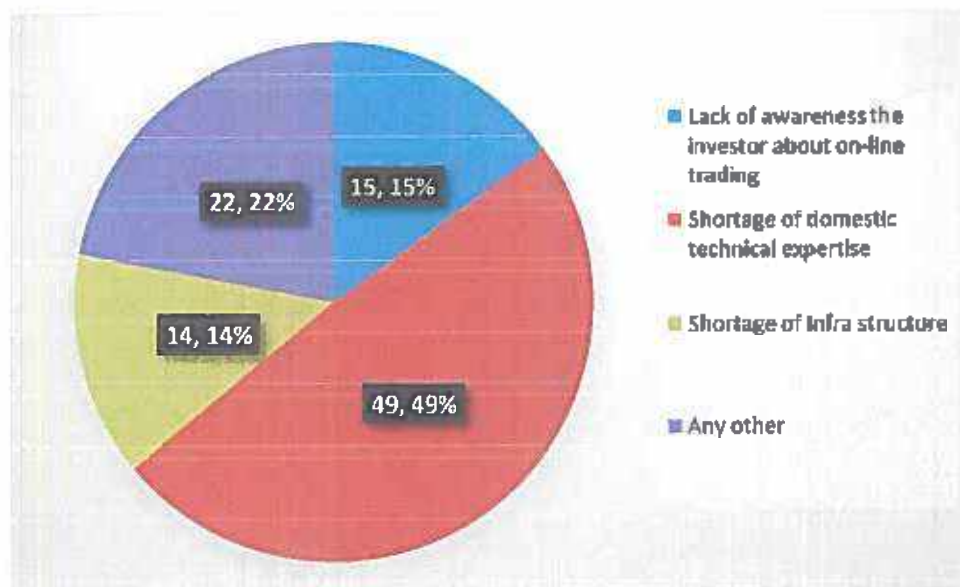
According to above table we find that 30% people says yes and 70% people says no. So we can find that online trading is not settled in the Indian psyche because some people are not experience towards online trading.

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Table 4.7 Shows respondents response towards shortcomings they feel in Indian online trading

Parameters	No. of Respondents
Lack of awareness the investor about on-line trading	15
Shortage of domestic technical expertise	49
Shortage of Infra structure	14
Any other	22

Pie Chart 4.7



INTERPRETATION

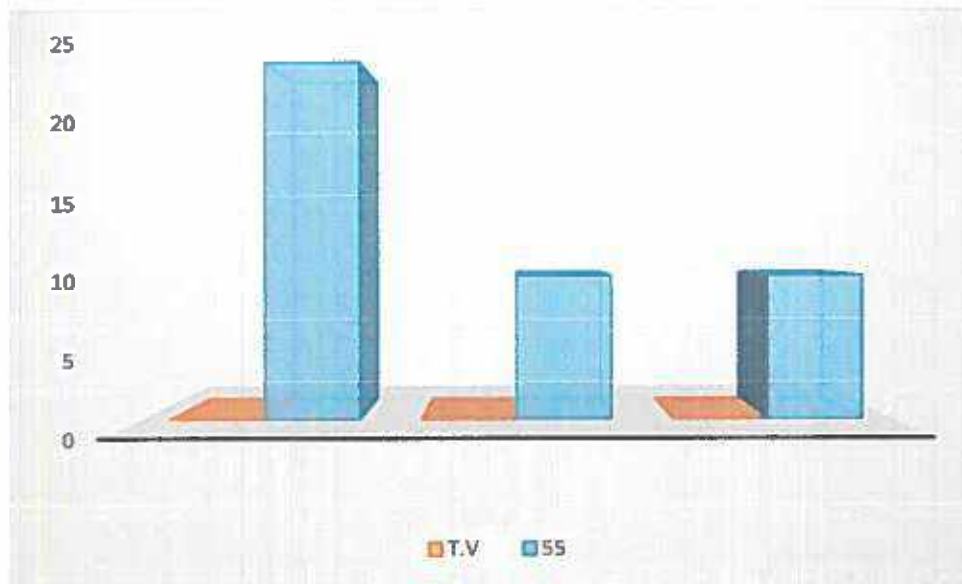
According to above table we find that 15% of people says lack of awareness and 49% says Shortage of expertise and 14% people says Shortage of infrastructure and 22% says any other. So we can say that mostly people are shortage of experience about the Indian derivatives market for share market.

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Table 4.8 Shows respondents preferring media for investment

Parameters	No. of Respondents
T.V	55
Newspaper	25
Magazines	10
Journals	10

Chart 4.8



INTERPRETATION

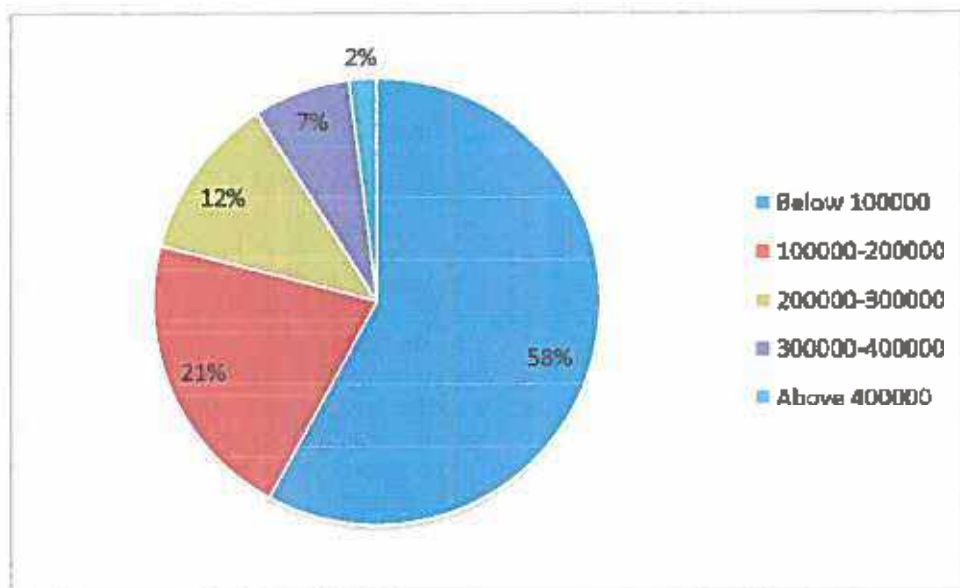
According to the above table we find that 55% people prefer T.V and 25% people prefer newspaper and 10% people prefer magazine and 10% people prefer journals. So we can suggest that mostly people are very easily grabbed the knowledge through T.V.

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Table 4.9 Shows respondents annual income

Parameters	No. of Respondents
Below 100000	2
100000-200000	58
200000-300000	21
300000-400000	12
Above 400000	7

Pie Chart4.9



INTERPRETATION

According to above table 58% respondent are having the income level of 100000-200000,21% is having 200000-300000,12% in having 300000-400000,7% of the total respondent are having more than 400000 per annum and only 2% are having less than 100000 per annum.

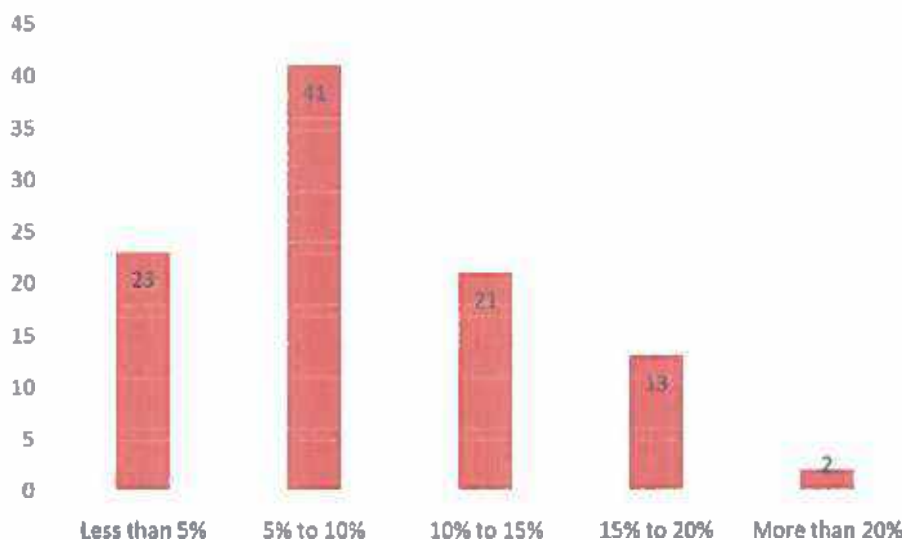
To invest in the stock market minimum 100000 or more than this should be the annual income level of the people. In India the per capita income is also increasing so we can say that there is a good opportunity for the online trading market.

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Table 4.10 shows respondents response on monthly household income available for investment

Parameters	No. of Respondent
Less than 5%	23
5% to 10%	41
10% to 15%	21
15% to 20%	13
More than 20%	2

Chart4.10



INTERPRETATION

According to the above table we find 23% of the total respondent invest less than 5% of their income 41% respondent are saying that they invest 5% to 10% of their monthly income (which is highest) Whereas the 21% investor do the investment 10%-15% of their total monthly income, 13% invest between 15%-20% of the total income and only 2% does more than 20% of their income invest in the market. We can easily understand that 75% of the total population is having a good amount of investment, so the investment is their in the market, good number of people are ready to invest a

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good amount in the market 91% of respondent is in the income level of 100000-300000 (according to the last question analysis).

Table 4.11 shows respondents response about where they invest their money

Parameters	No. of Respondents
Equity	65
Mutual found	14
Insurance	9
Term deposits	12
Others	00

Chart 4.11



INTERPRETATION

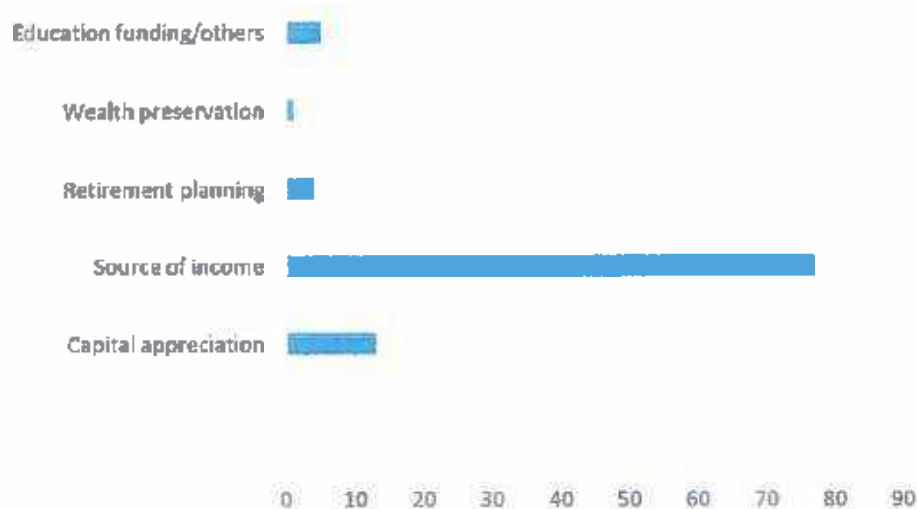
Highest number of respondent is having their investment in the equity that is 65% whereas the investment available for the mutual fund, term deposit and insurance is 14%, 12% and 19%. So the investor for equity is high which is again showing the number of opportunity for online trading

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Table 4.12 shows respondents response on primary objective of their investment

Parameters	No of Respondents
Capital appreciation	13
Source of income	77
Retirement planning	4
Wealth preservation	1
Education funding/others	5

Chart4.12



INTERPRETATION

13% of the respondent invest the money for the reason capital appreciation but most of the investor is having same motive that is source of income and retirement plan, wealth preservation and education funding for children or other are only 10%

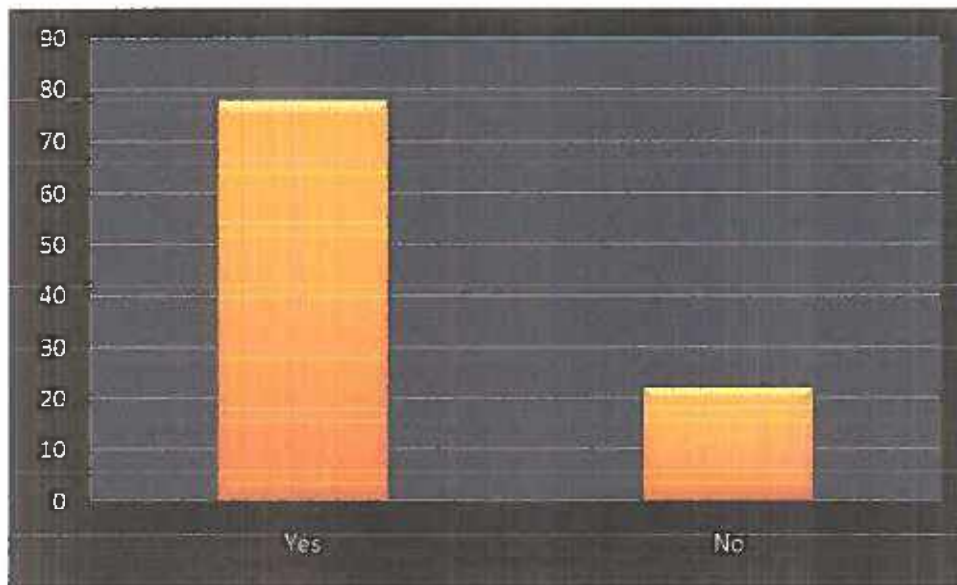
From the analysis we can have idea that the main objective of the investor to earn the money through trading in stock market 77% of the respondent achieve their objective with the help of investment in the equity market, because most of the investment take place in the form of equity.

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Table 4.13 shows respondents owe a computer

Parameters	No. of Respondents
Yes	78
No	22

Chart 4.13



INTERPRETATION

78% of the total respondent who are dealing with the stock market is having computer in their house and only 22% is not having computer in their house

The people who is having computer that is 78% can also go for online trading which can be large number of people who will go for online trading. They don't need to do a additional investment for computer to go for online trading

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CHAPTER 5

FINDING SUGGESTIONS AND CONCLUSION

5.1 Findings

5.2 Suggestions

5.3 Conclusion

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CHAPTER 5

FINDING SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

- Out of 100 respondents 43% people are saying we are investing money in online trading from 3 to 4 years
- Out of 100 respondents 60% of people are saying online trading is easy to operate
- It can be observed from the study that out of 100 respondents maximum 35% of investors are investing money normally 50000
- The study disclosed out of 100 respondents 40% investors are do weekly trade
- From these study we can say that out of 100 respondents 48% of investors are prefer both trading
- The study revealed that out of 100 respondents 70% investors mind settled
- It can be observed from the study that out of 100 respondents 49% of investors are shortage of domestic expertise
- The study revealed that out of 100 respondents 55% of investors are prefer T.V for investment
- It can be observed that out of 100 respondents maximum 58% investors annual income is 100000-200000
- From the study we can say that out of 100 respondents 41% investors are using 5%to10% monthly household income for investment
- It can be observed from the study that out of 100 respondents 65% of investors are investing their money in equity
- The study shows that out of 100 respondents 77% of investors primary objective is source of income
- The study revealed that out of 100 respondents 78% investors are having computers.

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5.2 SUGGESTIONS

The study has conducted on online stock trading in India. Based on the observation and personal discussion with investors and brokers I would like to give some suggestion to investors.

- NSE should create more awareness about online trading.
- Online trading is cheaper than offline trading, because directly investors can make invest without the help of brokers.
- Investors they can invest in any company in online trading by seeing company's growth which company is doing well in the market.
- Instant online access you can gain instant access to your account, the value of your portfolio updates immediately before your eyes.
- With online trading investors can control their investment. No sales pitches and no hassle.
- Enter online traders at anytime investors can enter online trade at anytime and from anywhere. This is very convenient if you live in a different time zone.
- NSE should not allow inside trading to investors.
- Investors has to look correctly all marketing ups and down before investing in to any company.

A Study on online stock trading

5.3 CONCLUSION

Online trading is the new concept in the stock market. In India, online trading is still at its infancy stage. Online trading has made it easy to trade in stock market as now people can trade while sitting at their home. Now stock market accessible by the people. There are some problem while doing the trade through the internet. Major problem faced by online trader is that the investors are loyal to their traditional brokers, they rely upon the suggestion given by their brokers.

Nevertheless to say that online trading has the bright future at the percentage of the trade done through online trading is increasing day by day.

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WWW.SHODHAGANAGA.COM

WWW.WIKIPEDIA.COM

WWW.RESEARCHGATE.NET

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ANNEXURE QUESTIONNAIRE

Dear Sir/Madam,

It is matter of great pleasure to introduce myself Mr Vinayak S Kumbar studying M.com in K.L.E Basavaprabhu Kore College Chikodi, as per the course requirement we need to undergo a major concurrent project entitled ' A Study On Online Stock Trading'

I am requesting you to please share your time provide in information and opinion by filling this questionnaire. Your co-operation will be highly appreciated and also this will helpful to us to serve you better in future.

1. For how long you have been trading on online trading?
 - a) 1 year c) 3 year
 - b) 2 year d) 4 year
2. How will you describe your experience with online trading till date?
 - a) Very easy to operate c) Not sure
 - b) Very difficult to operate d) Any other
3. What amount of money you invest normally?
 - a) 50000 c) 150000to200000
 - b) 100000to150000 d) Any other
4. How often do you trade?
 - a) Daily c) Monthly
 - b) Weekly d) More than one month
5. Which trading you prefer?
 - a) Online trading c) Both
 - b) Manual trading
6. Whether online trading settled in Indian investor psyche

A Study on online stock trading

a) Yes

b) No

7. What shortcomings do you feel in Indian On-Line trading?

a) Lack of awareness the investor about on-line trading

b) Shortage of domestic technical expertise

c) Shortage of Infra structure

d) Any other

8. Which media would you prefer the most for investment?

a) T.V

b) Newspaper

c) Magazines

d) Journals

9. What is your annul income?

a) Below 100000

b) 100000-200000

c) 200000-300000

d) 300000-400000

e) Above 400000

10. What percentage of your monthly household income could be available for investment?

a) Less than 5%

b) 5% to 10%

c) 10% to 15%

d) 15% to 20%

e) More than 20%

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11. Where do you often invest your money?

- a) Equity
- b) Mutual fund
- c) Insurance
- d) Term deposits
- e) Others

12. What is the primary objective of your investment?

- a) Capital appreciation
- b) Source of income
- c) Retirement planning
- d) Wealth preservation
- e) Education funding/others

13. Do you own a Computer?

- a) Yes
- b) NO

Signature

**K. L. E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



**A PROJECT REPORT ENTITLED
"A STUDY ON CUSTOMER SATISFACTION"**

AT

OM URBAN CO-OPERATIVE CREDIT SOCIETY LTD, NASALAPUR

Submitted to

RANI CHANNAMMA UNIVERSITY, BELAGAVI



**FOR THE PARTIAL FULFILMENT OF DEGREE IN MASTER OF COMMERCE
DURING THE ACADEMIC YEAR 2020-2021**

SUBMITTED BY

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M.COM-IV SEMESTER

REGISTER NO: MC191629

UNDER THE GUIDANCE OF

SHRI. V. S. KHOT

**K.L.E. SOCIETY'S
BASAVAPRABHU KORE ARTS, SCIENCE AND COMMERCE COLLEGE,
CHIKODI-591201**

PG DEPARTMENT OF COMMERCE AND MANAGEMENT



CERTIFICATE

This is to certify that Miss. Yashodha T Rayamane has satisfactorily completed the Project Report Entitled "A Study on Customer Satisfaction At Om Urban Co-operative Credit Society Ltd, Nasalapur" for the partial fulfilment of Degree in Master of Commerce in Rani Channamma University Belagavi during the academic year 2020-2021.

SHRI V. S. KHOT

PROJECT GUIDE

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AR-11/AOG/17772/90-91

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ಕ್ರೆಡಿಟ್ ಸೊಸಾಯಟಿ ಲಿ.,

ನಸಲಾಪುರ.



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NASALAPUR URBAN CO-OPERATIVE

CREDIT SOCIETY LTD.,

NASALAPUR.

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ಜಿ. ಬೆಳಗಾವಿ

Tal : Raibag

Dist : Belgaum

Ref. No: 63 | 1000 | 1000

Date: 10/08/2021

CERTIFICATE



To whom so ever it may concern

This is certify that **Miss. YASHODHA RAYAMANE** (Reg. No. MC191629) M.COM 4th SEM Student of **K.L.E. Society's Basavaprbhu Kore Arts, Science and Commerce College Chikodi-591201**, Dist: Belgaum has successfully complited the project on "A Study At Customer Satisfaction" In our Society from 25/06/2021 To 31/08/2021.

During the period of project he fond sincerer hard working.

We wish here all success for her bright future.

A.P.S.
Manager

Nasalapur Urban Co-op Credit Society Ltd.

Nasalapur

DECLARATION

I declare that the project report entitled "A Study on Customer Satisfaction" At Om Urban Co-operative Credit Society Ltd, Nassapur" is a record of independent research work carried out by me and submitted in partial fulfilment of the Degree in "Master of Commerce" as prescribed by the Rani Channamma University, Belagavi for the academic year 2020-21.

It has been prepared under the guidance and supervision of Shri. V. S.Khot, Lecturer in PG Department of Commerce and Management K.L.E. Society's Basavaprabhu Kore Arts, Science and Commerce College, Chikodi.

The Thesis or a part thereof has not been previously submitted for the award of any other degree or diploma.

Date: 31/08/2021

Place: Chikodi



Miss. Yashodha T Rayamane

Register No: MC191629

Acknowledgement

The success of any project is incomplete without mentioning the names of the people who made it possible.

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Miss. Yashodha T Rayamane

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CHAPTER – 1

INTRODUCTION AND RESEARCH DESIGN

- 1.1 Introduction
- 1.2 Review of literature
- 1.3 Statement of the problem
- 1.4 Need of the study
- 1.5 Objective of the study
- 1.6 Scope of the study
- 1.7 Research methodology
- 1.8 Limitations of the study
- 1.9 Chapter scheme

Om urban co-operative credit society ltd Nasalapur

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION:

Customer satisfaction, which refers to a customer's satisfaction of particular service of Om urban co-operative credit society, allows the customer to get the most from what services he consumes. Customers know more about their choices when they have services information and benefit from knowing their rights, hearing about alerts and warnings and finding out about safety issues. Customer satisfaction is about making the customer satisfied of his/her rights. It is a marketing term which means that customers are satisfied of facilities and services of the Om urban co-operative credit society.

Om urban co-operative credit society nutshell provides financial assistance to the people with small means to protect them from the debt trap of the moneylenders. It is a part of vast and powerful structure of Om urban co-operative credit society. This bank is a financial entity which belongs to its members, who are at the same time the owners and the customers of their society. This society is often created by persons belonging to the same local or professional community or sharing a common interest. These societies generally provide their members with a wide range of banking and financial services (loans, deposits, banking account...).

1.2 REVIEW OF LITERATURE:

A) C K Sunity (2019) in this article "Customer satisfaction in E-Banking services" stated that electronic banking incorporates system that enable individual customers to access their accounts. Transact with speed and obtain current and updated information on latest financial product and services through private and private network. It accommodates a variety of platform such as internet banking, telephonic and television based banking. Automated teller services mobile phone banking as well as personal computer based and offline banking services.

B) Dr.pratima merugu (2018)in his article "customer satisfaction towards online banking with reference To Greater Visakhapatnam City" stated that customers and deliver customer satisfaction in online banking has attained greater prominence as more and more banks compete to offer superior services to their clients making it imperative

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for banks to align their strategies in response to changing customer's need and technology.

C) Md.Khaled Bin Amir, Dr. Hasina Shreykh (2017) in their article "Analysis of customer satisfaction on online banking: A case study on "one bank limited" stated that customers are asked about their satisfaction level on online banking. After conducting a thorough research, online banking service of one bank limited, is quite good and satisfaction are greater for some parameters and less for some parameters.

D) Ms. M.Esther Krupa.(2016)in their article "A study on customer satisfaction towards E banking Service in Coimbatore City "banking is one of the emerging trends in the Indian banking | playing a unique role in strengthening the banking sector and improving service quality. It has enabled the banking to handle the payments electronically faster and in large volumes.

E) D.N.V.Krishna Reddy, Dr.M.Sudhir Reddy (2015)in their article "A Study on Customer's Perception and Satisfaction towards Electronic Banking in Chama District" stated that Information and Communication Technology (ICT) have brought about a lot of changes in almost all aspects of life. In the banking industry, it has been in the form of E-Banking or online banking or internet banking, which is now replacing the traditional banking mechanism. E-Banking has a lot of benefits which add value to enhance customer's satisfaction in terms of better quality of service offerings and simultaneously enable the bank gain.

1.3 STATEMENT OF THE PROBLEM:

Problem discovery is the first stage of any decision making and it is the main objectives of monitoring research. Identification of the problem is one of the main objectives of research. This study has been conducted in order to know the customer opinions and satisfaction towards Om urban co-operative credit society limited with reference to Nasalapur city. The present study is conducted to find out the main problem faced by the customer, and the customer satisfaction and opinion towards the bank rules, regulations, policy toward its customer. And opinion about service provided by the bank.

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1.4 NEED OD THE STUDY:

This project report is also concerned with co-operative research. The report deals with "A study on customer satisfaction towards Om urban co-operative credit society ltd.with reference to Nasalapur". Attempts have been made to analyze co-operative situation and co-operative problem. Confronted and also customer survey has been undertaken for analyzing their opinions towards Om urban cooperative credit society. Suggestions have been given for adopting suitable co-operative programs ensuring fair return on the capital invited one hand and customer satisfaction on the other hand.

1.5 OBJECTIVE OF THE STUDY:

- A study of customer satisfaction and customer loyalty.
- To analyses the satisfaction level of customers and quality of services offered by the Om urban co-operative credit society.
- A study of components of customer satisfaction.
- The general objectives of this study were to analyze the customer satisfaction with co-operative services with specific focus of Om urban co-operative credit society.
- To suggest ways to improve the level of satisfaction among the customer.

1.6 SCOPE OF THE STUDY:

The present study is undertaken in Nasalapur city. The study provides information about customer perception towards customer service provided by Om urban co-operative credit society ltd. This study is to judge the level of satisfaction of customers with respect to Om urban co-operative credit society.

1.7 RESEARCH METHODOLOGY:

Research methodology is simply the study to analyze relation between variables and elements here in this research we have dependent element as satisfaction and various independent elements like time, location, interest rate, and flexibility, there is a dependent factor or element there is customer satisfaction.

Om urban co-operative credit society ltd Nasalapur

1. Primary data:

Primary data are original data are first hand information Collected for the purpose of a particular study.

- ❖ Source of primary data
- Observation and discussion
- Questionnaire methods

2. Secondary data:

Secondary data are those which have already been collected by some other person usually in the shape of finished products.

- ❖ Sources of secondary data
- Internet, Journals, Reference material, Books

Sampling methods

Sampling design is a design, or working plan, that specifies the population frame, sample size, sampling selection and estimation methods in detail. Objective of the sampling design is to know the characteristics of population.

1. Population:

Target population for the project is customers of Om urban co-operative credit society.

2. Sample size:

Collected sample size of 25 respondents.

3. Sampling Method :

Simple random sampling

1.9 LIMITATIONS OF THE STUDY:

- A study is limited to customer who is coming to Om urban co-operative credit society.
- The sample size 25 was taken from the population for the purpose of study so there can be difference between results of sample from total population.
- Accuracy – it is difficult to know if all the respondents tend to give misleading information.
- The required time for the study is limited.

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1.10 CHAPTER SCHEME:

Unit-1 Introduction

The first chapter gives detail introduction of customer satisfaction, review of literature, statement of problem, need of the study, objectives of study, scope, and research methodology, sampling methods and limitations of the study.

Unit-2 Conceptual Framework

This chapter deals with meaning of the bank, structure of the co-operative bank, customer satisfaction, customer loyalty, benefits and important of customer satisfaction, what constitutes and tools of customer satisfaction, customer satisfaction process improvement, ways to improve customer satisfaction, how to measure customer satisfaction.

Unit-3 Bank Profile

It gives the profile of the bank where the project is conducted. It also explains about feature plan of the bank.

Unit-4 Data Analysis and Interpretation

This chapter gives details regarding the analysis and interpretation of data. It also consists of the tables, graphs, and its interpretation.

Unit-5 Findings, Suggestions and Conclusion

This chapter concluded the project report it comprises of findings, conclusion drawn from about from above analysis based on the data collected and also included suggestions.

CHAPTER -2

CONCEPTUAL FRAMEWORK

- 1.1 Introduction of banking
- 1.2 Co-operative bank
- 1.3 Customer satisfaction
- 1.4 Customer loyalty
- 1.5 Benefits and important of customer satisfaction
- 1.6 Components of customer satisfaction
- 1.7 Customer satisfaction process improvement
- 1.8 What constitutes, tools and surveys of customer satisfaction
- 1.9 How to measure customer satisfaction
- 1.10 Factors of customer satisfaction

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CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION:

A bank is a financial institution which accepts deposit, pays interest on pre-defined rates, clears checks, makes loans, and often acts as an intermediary in financial transaction. it also provides other financial services to its customer.

Bank as institution which channel people's savings into productive loan and investments. Thus banking mainly refers to deposits and loan.

2.2 CO-OPERATIVE BANK:

2.2.1 History of co-operative banking in India

Co-operative movement in India was started primarily for dealing with the problem of rural credits. This history of Indian co-operative banking started with the passing of co-operative societies Act in 190.the objective of this act was to establish credit societies "to encourage thrift,self-help and co-operative among agriculturists, artisans and persons of limited. The co-operatives societies Act1912 recognized the need for establishment of new organization for supervision, auditing and supply of co-operative credit. These organizations were.

- A union, consisting of primary societies.
- The central banks
- Provincial bank

2.2.2 structure of the co-operative banking

There are different types of co-operative credit institutions working in India. These institutions can be classified into two broad categories.

1. Agricultural credit institution:

Agricultural credit institutions are co-operative societies that are formed to provide credit at cheaper rates to the agriculturists in rural areas. It includes two types they are.

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A. Short term credit institutions:

In these types of credit facility, a company can withdraw funds more than it has in its deposits. It includes three types they are.

a. State co-operative bank:

A state co-operative bank is the bank at the top of the short term co-operative credit structure. It is generally located at the state capital. It controls, co-ordinates and finances the entire central co-operative bank in the state.

b. Central co-operative bank:

Central co-operative bank is a federation of primary credit societies operating in a specified area, usually a district. All types of primary credit societies, rural, and urban are affiliated to it.

B. Long term credit institution:

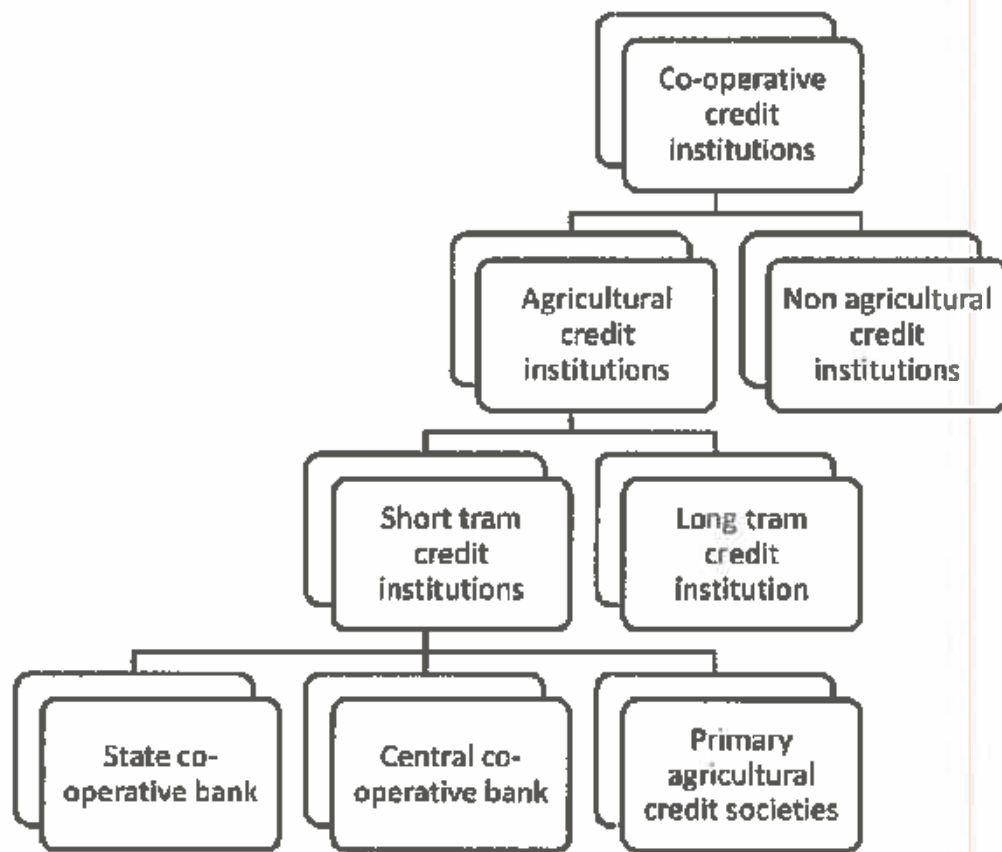
Credit given for long periods and used primarily for the expanded reproduction of fixed Capital and fixed assets (under socialism). Under capitalism in the capitalist countries the characteristic form of long term credit is the purchase of corporation securities stocks and bonds.

2. Non-agricultural credit societies:

It refers to credit societies formed in cities to provide short term credit to artisans, craftsman, small traders and middle income group, such as officer/employees. Non-agricultural credit societies are mainly of two types.

- 1) Urban banks
- 2) Salary earners societies/ employee's credit societies.

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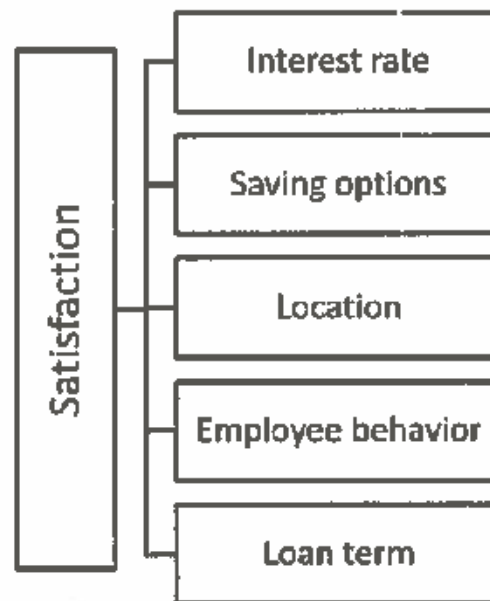


2.3 CUSTOMER SATISFICATION:

Customer satisfaction refers to the extent to which customer are happy with the products and services provided by a business. Customer satisfaction levels can be measured using survey techniques and questionnaires.

There are varies studies done to determine the level of customer satisfaction and factors affecting them. On the basis of these information and studies we can know that there number of dependent and independent variable involved in the determination of customer satisfaction. However of these various independent and dependent variables we take in consideration only few or major ones due to lack of time and resources to analyze each and every one of them. Here research will be conducted on the periphery of saving and credit co-operative.

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2.4 CUSTOMER LOYALTY:

Customer loyalty is the most important factors for the success and meeting the goal of the company. Several researches have proved that the satisfied customer is a loyal and royal owner of the organization. So, they have direct impact towards organization. On the other hand, the des-satisfied customer is considered as terrorist or vendor.

1. Quality service:

The quality service plays the most important role in the success of the business as well as a leading point for the customers to come back again for purchasing or getting the service back. It is also a result of comparison between the expectation of the customer and the service he receives from getting it.

2. Brand awareness:

The brand name or tag of the product is the main symbol to identify a certain product or service. It helps the customers to recognize brands when they seek for the products. It helps them to save money and time because they are fully assured from the company.

3. Customer satisfaction:

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Whatever a customer buys, he wants fully satisfaction from the product he purchases. A customer doesn't wish to have negative impact from the product purchased or with the service sought. The customer satisfaction plays vital role in the sustainability of the business.

2.5 BENEFITS AND IMPORTANT OF CUSTOMER SATISFICATION:

Benefits:

1. Customer loyalty
2. Support pillars
3. Growth sales revenue
4. Boost brand reputation and popularity
5. Reduce marketing expenses
6. Support during corporate crisis
7. Stand out from the competition
8. Increases brand popularity

Importance

1. Repeat customer
2. Competition differentiator
3. Reduce customer churn
4. Decrease negative word of mouth
5. Retaining customers is cost effective
6. Reputations are powerful
7. To gain market share
8. To retain customers in the long run
9. Quick services

2.6 COMPONENTS OF CUSTOMER SATISFICATION :

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Any organizations willing to have the sustainable development and progress in their entire business should have positive contribution to meet the customer satisfaction. The exact addressing and fulfillment of needs of customer in the right way at the right time helps in getting the business success and paves the way for better goodwill of the company. It is all so believed that when a customer is fully satisfied from the services, they are forced to come back again for the services.

1. Product quality or services quality:

Every customer wants to get total satisfaction from the expenses they make for. They do not want to invest their money in vain. They always try to get the maximum satisfaction from the money they spend in buying the goods or want the maximum output from the investment they make. It is a common thing that nobody wants to ruin their earning and invest their money for nothing. Therefore, if business men or the organizations want to make the maximum profit from the market then they should be able to give the reward for the customer money and the product quality or the services rendered should be high.

2. State of customer mind:

It is not obvious that we can meet the need of each and every customer. When a customer is not in good stand of mind, we cannot meet his level of satisfaction. Such cases are exceptional. When a customer is in the state of angry, whatever we do to fulfill his satisfaction it becomes useless. Our efforts do not work at that time. In such conditions we should live them as we can do nothing. But the best level should be tried to meet his/her intention. But if the dissatisfied puts the negative feedback on the social sites or WebPages then it may affect the entire business transaction.

3. Equality behavior:

The behavior among the customer should not be biased. Each and every customer has their own value and assumption. The customer paying the same amount for the same commodity should not be charged double or even a penny more to another customer. There should be fair transaction among the customers.

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2.7 CUSTOMER SATISFACTION PROCESS

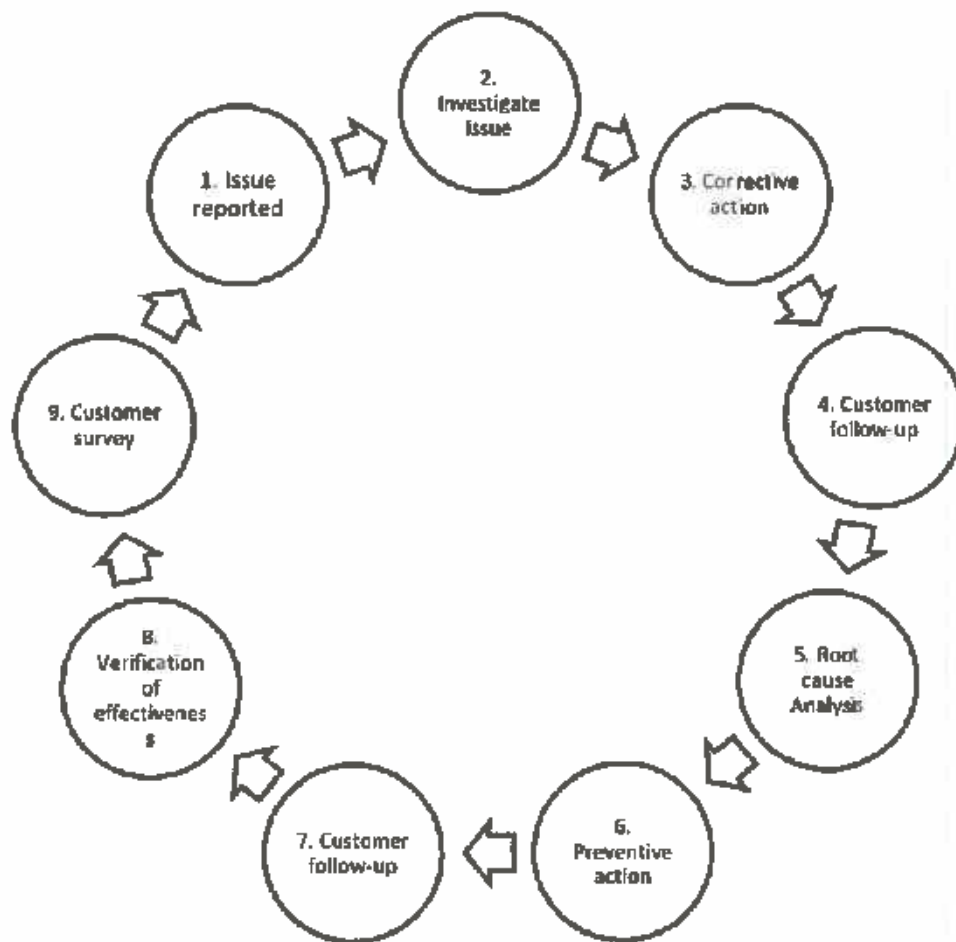
IMPROVEMENT:

Organizations should not assume they know what the customer wants. Instead, it is important to understand the voice of the customer, using tools such as customer surveys, focus groups, and polling. Using these tools, organizations can gain detailed insights as to what their customer want and better tailor their devices or products to meet or exceed customer expectations.

Ways to improve customer satisfaction

- 1) Ask them!
- 2) Conduct focus group
- 3) Study complaints and compliments
- 4) Set up a customer hotline
- 5) Hire a mystery shopper
- 6) Become a customer of your best competitors
- 7) Visit your customer's site
- 8) Go online to seek more feedback

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(Customer satisfaction process improvement)

2.8 WHAT CONSTITUTES, TOOLS AND SURVEYS OF CUSTOMER SATISFACTION:

❖ What constitutes satisfaction?

We cannot create customer satisfaction just by meeting customer's requirements fully because these have to be met in any case. However failing short is certain to create dissatisfaction. Major attributes of customer satisfaction in banking industry can be summarized as:

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- Product quality
- Premium outflow
- Return investment
- Services
- Responsiveness and ability to resolve complaints and reject report
- Overall communication, accessibility and attitude.

❖ What are the tools?

Customer expectations can be identified using various methods such as:

- Market research
- Telephonic interview
- Personal visits
- Warranty records
- Information discussions
- Satisfaction surveys

❖ Customer satisfaction surveys:

Formal survey has emerged as by far the best methods of periodically the customer satisfaction. The survey is not marketing tools but an information- gaining tool. Enough homework needs to be before embarking on the actual survey. This includes:

- Defining objectives of the survey
- Design survey approach
- Develop questionnaires and forms
- Administer survey (Email, Telephone or Post)
- Method of compiling data and analyzing the findings
- Format of the report to present the findings

There is no point in asking irrelevant questions on a customer satisfaction questionnaire. The basic purpose is to find out what we are doing right or wrong. Where is the scope for improvement, where do we stand vis-à-vis other suppliers. How we can serve the customer better?

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2.9 HOW TO MEASURE CUSTOMER SATISFACTION:

Customer satisfaction cannot be limited to a short concept and include different ideas: customer loyalty and customer delight and customer retention to name a few. Satisfaction is a word that summarizes the feelings of customer satisfaction is an essential part of every successful business, thus every company strives to increase the level of satisfaction and improve business, thus every company strives to increase the level of satisfaction and improve business performance.

How can banks know that they are succeeding in satisfying the customer if a company knows customer expectations and attitudes and meets the requirements they are more likely to make successful decisions and increase customer satisfaction. Consequently, perceptions of customer satisfaction should be accurately measured by models that have been proven effective.

There are many factors that affect customer satisfaction: helpful and knowledgeable employees, services quality, competitive pricing and billing clarity.



These are multiple business models and theories that allow measuring the factors and drawing a conclusion about performance concerning customer satisfaction. It is usually very expensive to measure customer satisfaction and collect the data that will help to

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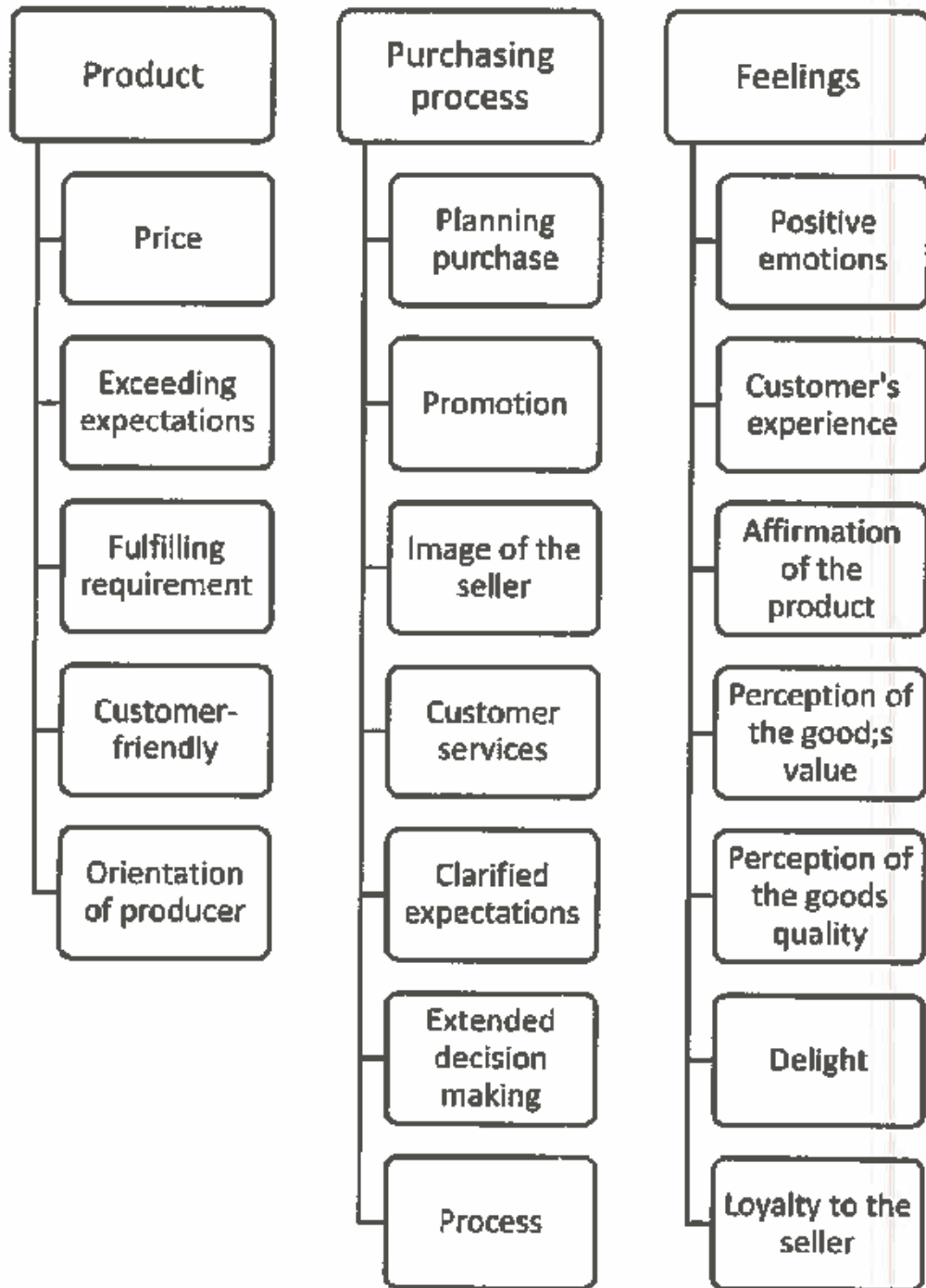
develop an efficient questionnaire. Bank should understand customer perceptions and then analyze it, thus this is one of the most important investment that companies should make even through payoffs will be seen only in the long run.

2.10 FACTORS OF CUSTOMER SATISFACTION:

Any organization in any industry has one common goal: to satisfy their customer. Customer satisfaction is a metric that measures how happy customer is with a business products, services, and capabilities. It's a reflection of how a customer feels when interacting with your brand: poor customer satisfaction leads to negative reviews, while satisfied customers will help you build your brand.

The high levels of customer satisfaction are very important to any organization because satisfaction customer is most likely to be loyal and to make repeat orders and to use a wide range of service offered by business. There are many factors which lead in high levels of customer satisfaction including Product and services which are customer focused and hence provide high levels for money. They vary important factors including those:

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CHAPTER – 3

BANK PROFILE

(Om urban co-operative credit society ltd. Nasalapur)

- 1.1 Bank profile
- 1.2 History of the co-operative
- 1.3 Board of directors
- 1.4 Organization structure
- 1.5 Vision and mission
- 1.6 Product and service profile
- 1.7 Objective of co-operative
- 1.8 Features of Om urban co-operative credit society
- 1.9 Aims and objectives of the Om urban co-operative credit society
- 1.10 Bank working hours and conduct of meeting
- 1.11 Requirement to open an account
- 1.12 SWOT Analysis

Om urban co-operative credit society ltd Nasalapur

BANK PROFILE

3.1 Bank Profile



Om urban co-operative credit society ltd Nasalapur

Company name	Om urban co-operative credit society ltd. Nasalapur
Established year	20/12/1990
Registration no	ARI1/AOG/17772/90-91
Location	A/p: Nasalapur Tq: Raibag Dist.: Belagavi
Founder	Bharatesh Banvane
Constitution	Co-operative
Facilities	Safety locker
Contact Number	9538146227
E-mail	nasalapururbansociety1962gmail.com
Number of member	15 committee member and 4 staff member total 19 members.
Share capital	29,86,330
Working capital	11,46,59,356
Deposits	8,41,10,863
Loan and advance	5,99,17,901
Net profit	27,17,395.61
Dividend	16%
Rate of interest for the loans given	16% (in the deposit 2% extra)
Branch	Only one branch of Nasalapur

(Table 3.1)

Om urban co-operative credit society ltd Nasalapur

3.2 HISTORY OF THE CO-OPERATIVE:

Om urban co-operative credit society ltd. Nasalapur was established on 12 December 1990 at Nasalapur, Raibag Taluka, and Belagavi Dist. It is a one of the private bank.

It is the good of the bank Om urban co-operative credit society ltd. Nasalapur has made repaid growth between the start periods of time from 1990 to 2021. The organization was progressed in share capital, deposits, investment, advances, and profit and loss account. These bank main objectives it was provide facilities to agriculture sectors.

The organization is providing more personalized services. The bank was established by people of social responsibility. The staff in this co organization very good they are communicating to customer freely and giving suggestions or guidance to the customer.

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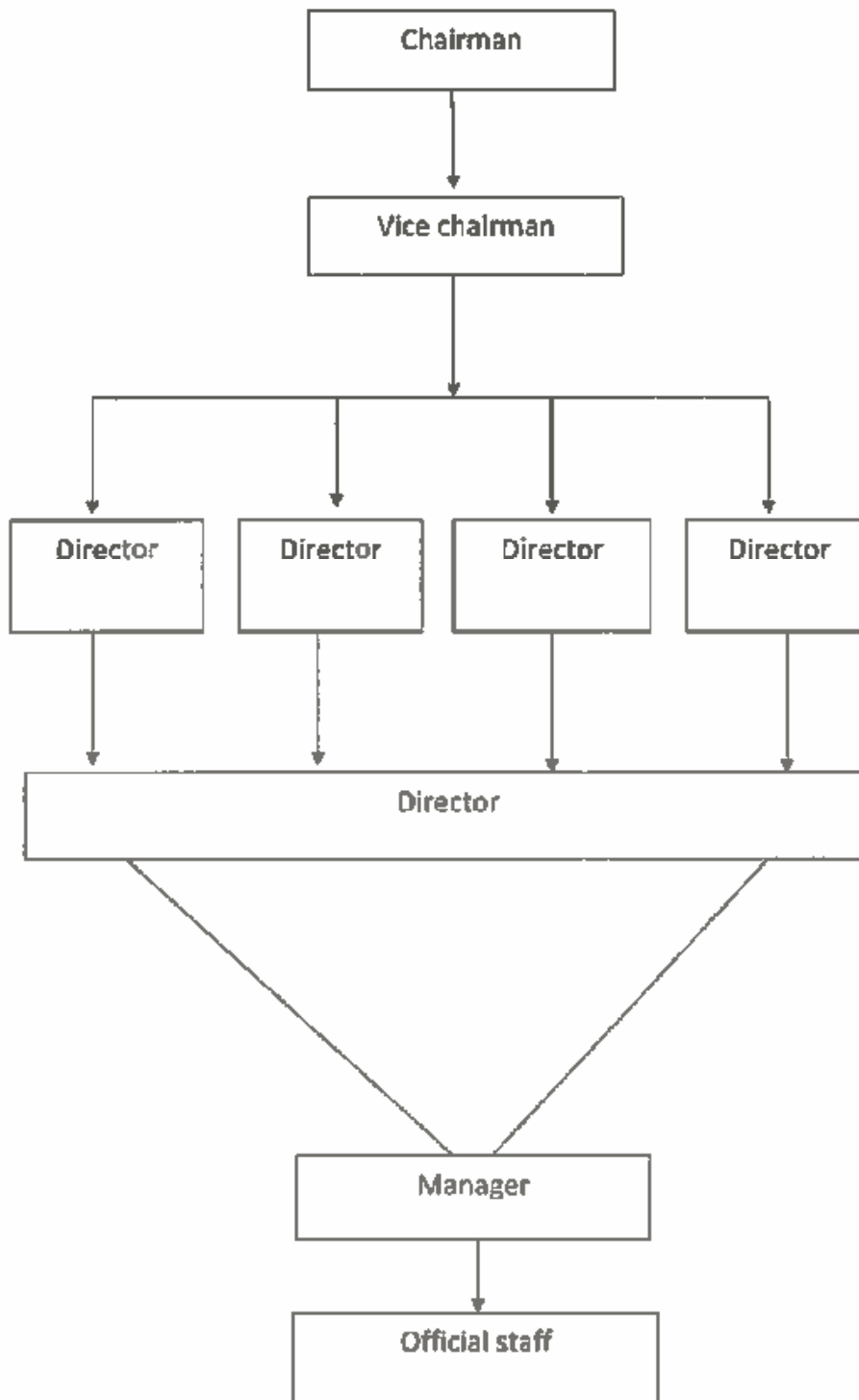
3.3 BOARD OF DIRECTORS:

SLNo	NAME	Designation
1	Mahaveer Laxman Parmaje	Chairman
2	Bharatesh Shantappa Banvane	Founder
3	Jaypal Annappa Banvane	Director
4	Ashok Shrimant samaje	Director
5	Chandrakant kumar kante	Director
6	Bahubali Bhupal Kagawade	Director
7	Raju Bheema Parmaje	Director
8	Surendra Narsappa Samaje	Director
9	Gulab Bagasata Taral	Director
10	Bahul Abdal Tambat	Director
11	Smt.jayashree B Patil	Director
12	Smt. Gangutai B Khanbare	Director
13	Appasaheb balappa Ratamane	Director
14	Annasheb H Patil	Manager

(Table 3.2)

Om urban co-operative credit society ltd Nasalapur

3.4 ORGANIZATION STRUCTURE



Om urban co-operative credit society ltd Nasalapur

3.4 VISION AND MISSION:

VISION:

“To be the most admired credit society in Karnataka state”

“Various branch open and give will service to customer”

MISSION:

- To provide excellent professional service and improve its position as a leader in financial and related services.
- Use latest technology aimed at customer satisfaction and act as an effective catalyst for socio economic development.
- Advance loan and earn deposit

3.5 PRODUCT AND SERVICE PROFILE:

Products:

- Gold loan
- Surety loan
- Pigmy loan
- Cash credit loan
- Vehicle loan
- Medium term loan

Deposits:

- Fixed deposits
- Saving deposits
- Recurring deposits
- Pigmy deposits

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Accounts:

- Saving account
- Current account: this account maintained only staff not for customer.
- Recurring account

Loan:

Name of loan	Rate of interest
Gold loan	12%
Surety loan	16%
Pigmy loan	12%
Vehicle loan	80%
Medium term loan(plaza loan)	18% on Deposit

3.6 OBJECTIVE OF CO-OPERATIVE:

Cooperative basically provides mutual benefit to the customer. The general objective therefore is to uplift the economic states of the community when there is economic crisis, but it also helps the people under the poverty margin to start up a new business by providing loan. Therefore the overall objective is to uplift the financial status at community level. According to the constitution of the cooperative, which was formulated during the time of its establishment, seven major objectives were decided by the founding members. The objectives were proposed to modify later in its first annual general meeting by few members. After an intensive discussion, it was decided not to make any modification the objectives in its very first year. Therefore, till date, the finalized objectives of Om urban co-operative credit society ltd are as follows:

To collaborate with the organization having similar objective and support each other through mutual cooperation. It can collaborate with other similar financial organizations having similar objectives. Through such activates it helps in financial support for huge investment yielding out more benefit.

Om urban co-operative credit society ltd Nasalapur

To make proper investment of the deposited amount by the customer and provide them attractive interest rate in their saving. It aims in security the deposit of its customer through proper investment and also provides attractive interest in return to its depositor.

To make contribution to uplift economic states of the member of the cooperative by providing them loan in low interest rate. The main aims of this cooperative is to provide loan to the needy customer so that they can uplift their economic condition and become an independent.

To continue to encourage the member to develop saving habit to its customer. It also aims in encouraging the customer developing saving habit continuously. (Om urban cooperative credit society ltd)

3.7 FEATURES OF OM URBAN CO-OPERATIVE CREDIT SOCIETY:

- 1) Good co-operating with customer
- 2) Good environment
- 3) Very helpful staff
- 4) Loan facilities
- 5) Locker facilities
- 6) Increase the interest 2% extra of deposit
- 7) Pay order facilities
- 8) Good service to customer
- 9) Credit on jewelries
- 10) Demand draft facilities at the discount rate

3.8 AIMS AND OBJECTIVES OF THE OM URBAN CO-OPERATIVE CREDIT SOCIETY:

- 1) To lend loan from this member on deposit of gold and silver ornaments.
- 2) To provide safe lockers facility and other concerned service to its member.
- 3) Providing loan to self help group.
- 4) Open from varies branch's

Om urban co-operative credit society ltd Nasalapur

- 5) Providing online facilities.
- 6) To receive deposit from charitable institution/ trusts and other public institutions.
- 7) According to the rules and regulation framed by the board of directors and approved by the registrar, to provide all grants and incentives to employees of their children and family member.
- 8) To arrange programs to give financial assistance for social and educational development of member and welfare of them.
- 9) Conducting programs for improvement of economic conditions of SC/ST and women member.
- 10) Providing financial assistance to members for higher education of their children and family member.

3.9 CO-OPERATIVE WORKING HOURS AND CONDUCT OF MEETING:

Co-operative working hours:

Working time	10AM to 5PM
Start time	10AM
Afternoon co-operative time	2PM to 3pm
Bank close time	5PM

Conduct of meeting:

- 1) Annual general meeting
- 2) Board of directors meeting
- 3) Staff based meeting

3.10 REQUIREMENT TO OPEN AN ACCOUNT:

- 1) Fill the from
- 2) Affix a passport size photo
- 3) Attached identify proof there is photo proof address proof etc

Om urban co-operative credit society ltd Nasalapur

3.11 SWOT Analysis:

(Strength Weakness Opportunities Threats)

Strength:

- Wide network
- Large number of customer
- Limited supply of capital
- Provide low interest rate of loan
- Growth in working capital

Weakness:

- Casual behavior
- Less number of staff member
- No ATM facilities for customer
- Slow decision making due to large hierarchy

Opportunities:

- Open membership
- Provide advance loan and earn deposit
- Providing new schemes facilities
- Make better use of its CRM(customer relationship management)
- Diversification towards other fields

Threats:

- Stiff competition from Om urban co-operative bank and other bank players
- Overdraft facilities to customer
- Unrecovered loan

CHAPTER – 4

DATA ANALYSIS AND INTERPRETATION

- Tables
- Graphs
- Interpretation

Data analysis and interpretation

Table No: 4.1 Shows Respondents basis of gender factor

Table No: 4.2 Show marital states respondents

Table No.4.3 Shows respondent's age group

Table No: 4.4 Shows respondent's educational qualification

Table No: 4.5 Shows occupation of respondents

Table No: 4.6 Shows monthly income of the customer

Table No: 4.7 Shows respondents have type of account in bank

Table No: 4.8 Shows respondents opened on bank account

Table No: 4.9 Shows satisfaction level of policy and schemes provided by cooperative

Table No: 4.10 Shows Satisfaction level management system of cooperative

Table No: 4.11 Shows Adherence to the cooperative till next upcoming year

Table No: 4.12 Shows regularity of annual general meeting

Table No: 4.13 Shows perception on opening hour of co-operative

Table No: 4.14 Shows complaints in officials on any matters during last 12 months

Table No: 4.15 Table showing confidence/belief up on co-operative

Table No: 4.16 Table shows recommend the cooperative to other people

Table No: 4.17 Table shows how much time taken to provide loan

Table No: 4.18 Table showing expect from society

Table No: 4.19 Table shows purpose of visiting cooperative

Table No: 4.20 Table shows respondent expect on co-operative

Table No: 4.21 Table shows satisfaction on overall service provided by cooperative

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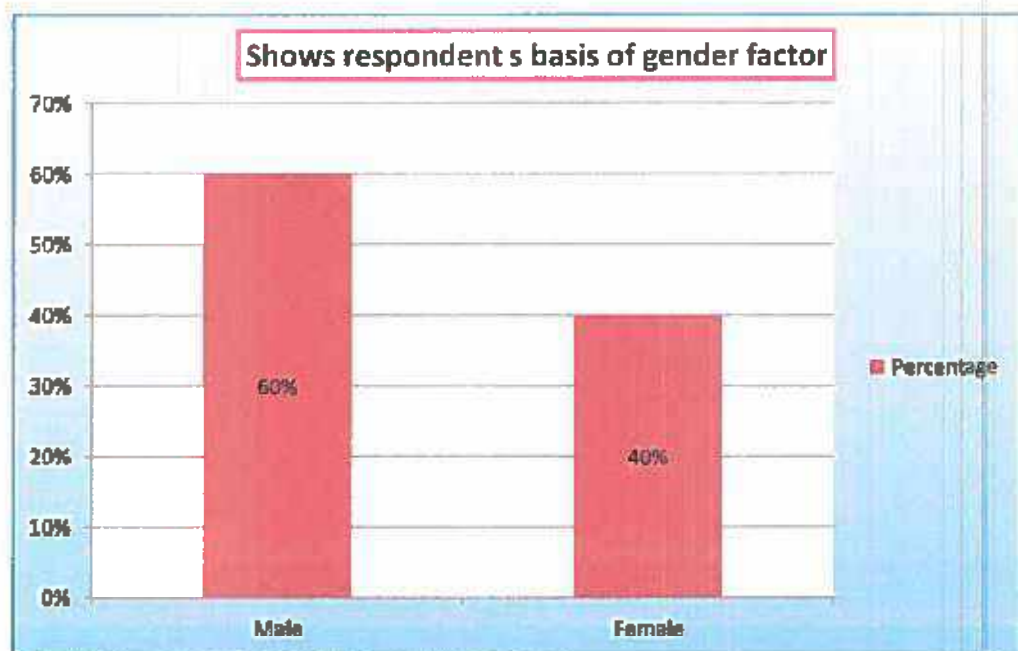
Data analysis and interpretation

Table No: 4.1 Shows Respondents basis of gender factor

Gender	No. of respondents	Percentage (%)
Male	15	60
Female	10	40
Total	25	100

Source: Primary data

Graph No: 4.1 Shows Respondents basis of gender factor



Interpretation:

It can be observed from above table that out of 25 Respondents 60% is Male and 40% is Female. Majority of Respondents that is 60% are Male.

Om urban co-operative credit society ltd Nasalapur

Table No: 4.2 Show marital states respondents

Marital states	No. of respondents	Percentage (%)
Married	20	80
unmarried	5	20
Total	25	100

Source: Primary data

Graph No: 4.2 Show marital states respondents



Interpretation:

It can be observed from above tables that out of 25 Respondents 80% of the customer are married and 20% customers are unmarried. Majority of the respondents that is 80% are married.

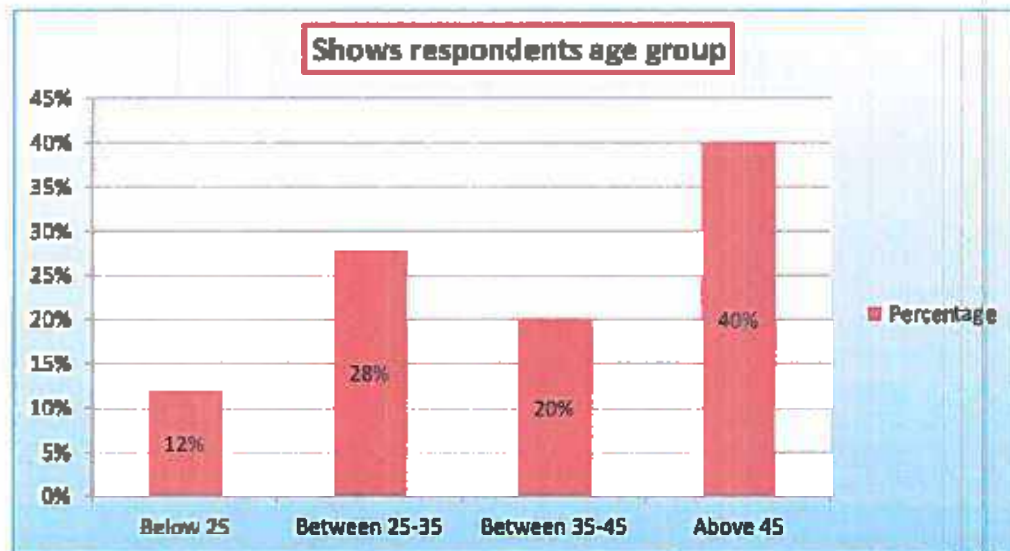
Om urban co-operative credit society ltd Nasalapur

Table No.4.3 Shows respondent's age group

Age group	No. of respondent	Percentage (%)
Below 25	3	12
Between 25-35	7	28
Between 35-45	5	20
Above 45	10	40
Total	25	100

Source: Field Survey

Graph No: 4.3 Shows respondent's age group



Interpretation:

It can be observed from above table that out of 25 respondents 12% of the customers are below age of 25 years, 28% of respondents belong to age group between 25-35, 20% of the respondents belong to age group 35-45, and 40% of the respondents belong to age group above 45 years. Majority of the respondents that is 40% are above age group of 45.

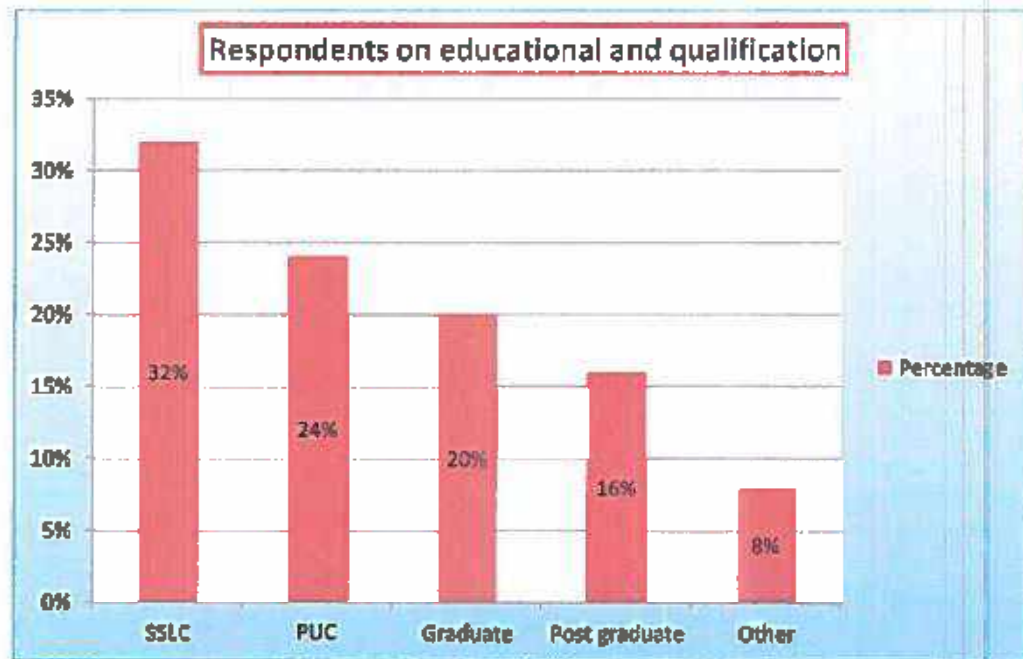
Om urban co-operative credit society ltd Nasalapur

Table No: 4.4 Shows respondent's educational qualification

Educational qualification	No. of respondents	Percentage
SSLC	8	32
PUC	6	24
Graduate	5	20
Post graduate	4	16
Other	2	8
Total	25	100

Source: Primary data

Graph No: 4.4 Shows respondent's educational qualification



Interpretation:

It can be observed from above table that out of 25 respondents 32% customer are educational qualifications are SSLC. 24% customers are PUC. 20% of the customers are Graduate. 16% of the customers are post graduate. And 8% customers are other educational qualification. Majority of the respondents that is 32% are qualified in SSLC.

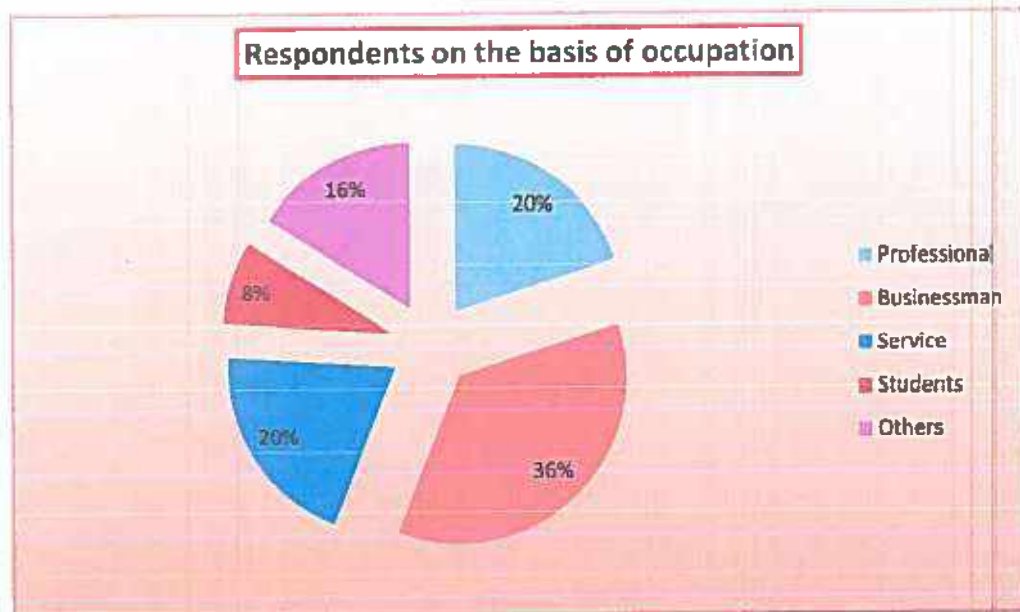
Om urban co-operative credit society ltd Nasalapur

Table No: 4.5 Shows occupation of respondents

Occupation	No. of respondents	Percentage
Professional	5	20
Businessman	9	36
Service	5	20
Students	2	8
Others	4	16
Total	25	100

Source: Field survey

Chart No: 4.5 Shows occupation of respondents



Interpretation:

It can be observed from above table that out of 25 respondents 20% customer are professional and 36% of customer are from businessmen and 20% customer are service and 8% customer are student and 16% of customer are other sector. Majority of the respondents that is 36% are businessmen.

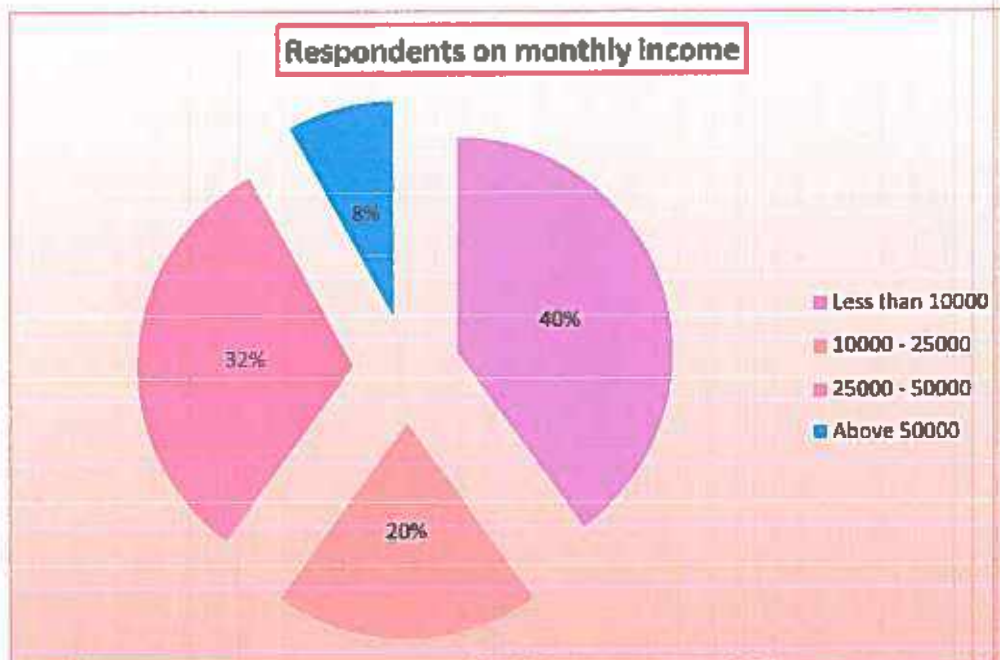
Om urban co-operative credit society ltd Nasalapur

Table No: 4.6 Shows monthly income of the customer

Monthly income	No. of Respondents	Percentage
Less than 10000	10	40
10000 – 25000	5	20
25000 – 50000	8	32
Above 50000	2	8
Total	25	100

Source: primary data

Chart No: 4.6 Shows monthly income of the customer



Interpretation:

It can be observed from above table that out of 25 respondents 40% of the customers are less than 10000 monthly incomes. 20% of the customers are 10000-25000 monthly income. 32% customers are 25000-50000 monthly income. 8% respondents are above 50000 monthly incomes. Majority of the respondents that is 40% are earning Rs less than 10000 of monthly income.

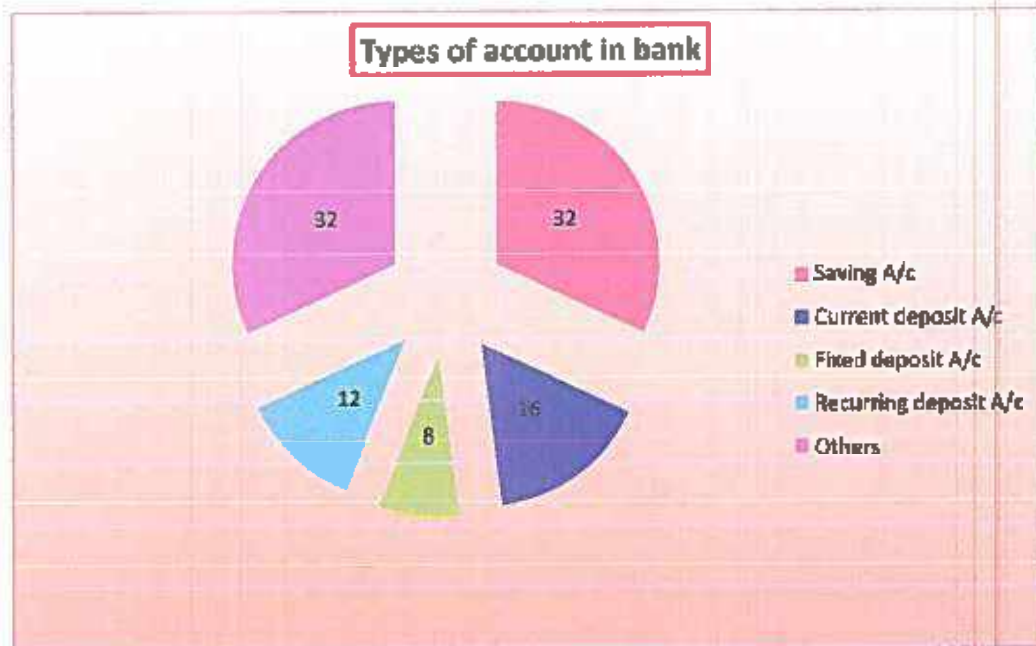
Om urban co-operative credit society ltd Nasalapur

Table No: 4.7 Shows respondents have type of account in bank

Particulars	No. of Respondent	Percentage
Saving account	8	32
Current deposit account	4	16
Fixed deposit account	2	8
Recurring deposit account	3	12
Others	8	32
Total	25	100

Source: Primary data

Chart No: 4.7 Shows respondents have type of account in bank



Interpretation:

It can be observed from above table that out of 25 respondents 32% of the customer have account in bank saving, 16% of the customer are current deposit account, 8% of the customer are fixed deposit account, 12% of the respondents are Recurring deposit account, 32% of the respondents are others account. Majority of the respondents that is 32 % both of saving account and others.

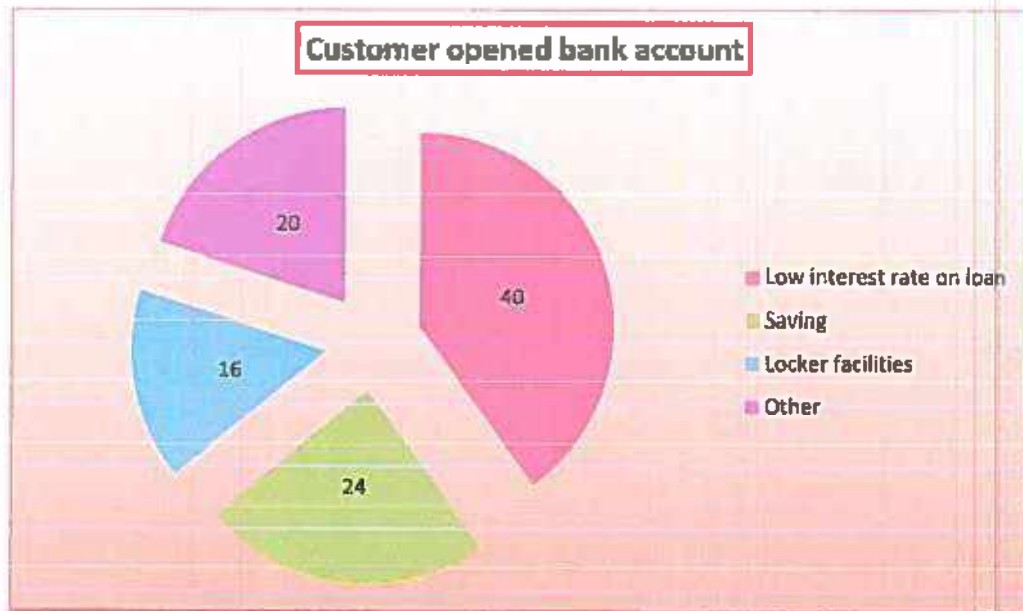
Om urban co-operative credit society ltd Nasalapur

Table No: 4.8 Shows respondents opened on bank account

Particulars	No. of Respondents	Percentage
Low interest rate on loan	10	40
Savings	6	24
Locker facilities	4	16
Other	5	20
Total	25	100

Source: primary data

Chart No: 4.8 Shows respondents opened on bank account



Interpretation:

It can be observed from above table that out of 25 respondents 40% of the customer have low interest rate of loan, 24% of the customer have Savings, 16% of the customer have Locker facilities, and 20% of the customer have others. Majority of the respondents that is 40% of the customers are open an account of low interest of the loan.

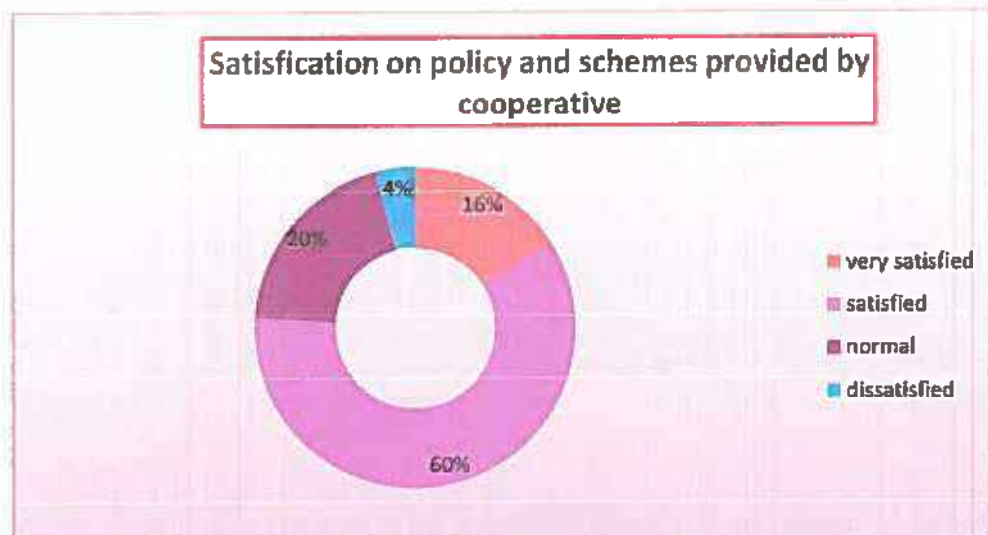
Om urban co-operative credit society ltd Nasalapur

Table No: 4.9 Shows satisfaction level of policy and schemes provided by cooperative

Particulars	No. of Respondents	Percentage
Very satisfied	4	16
Satisfied	15	60
Normal	5	20
Dissatisfied	1	4
Total	25	100

Source: Primary data

Chart No: 4.9 Shows satisfaction level of policy and schemes provided by cooperative



Interpretation:

It can be observed from above table that out of 25 respondents 16% customer response to very satisfied, 60% customer response are only satisfied, 20% customer response are normal and 4% of customer response are not satisfied. Majority of the respondents that is 60% of satisfied with policies and schemes provided by co-operative.

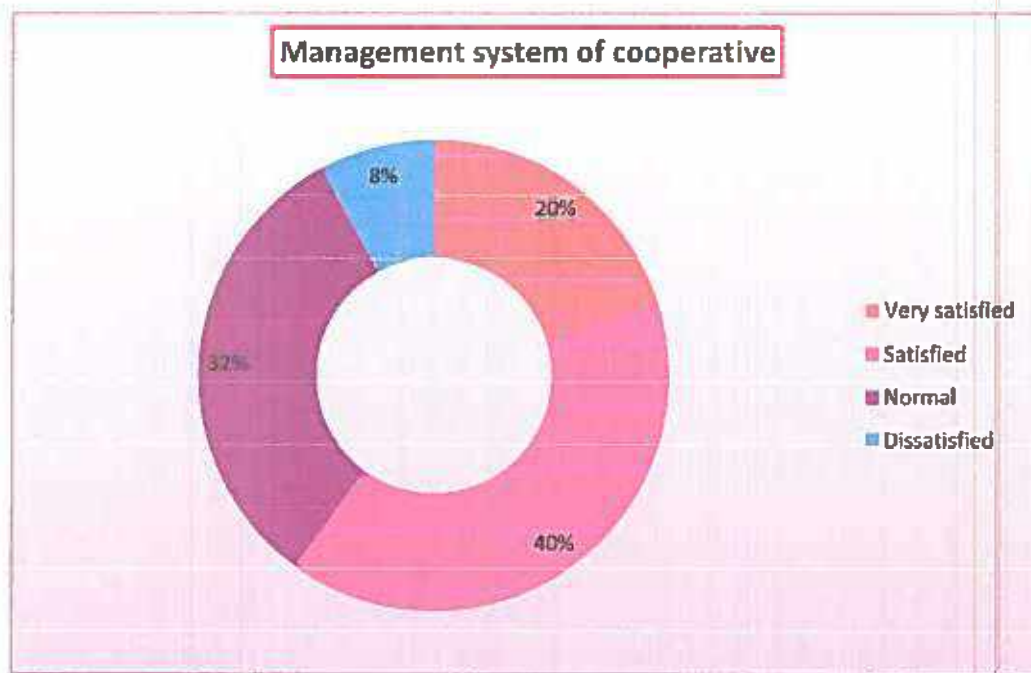
Om urban co-operative credit society ltd Nasalapur

Table No: 4.10 Shows Satisfaction level management system of cooperative

Particulars	No. of Respondents	Percentage
Very satisfied	5	20
Satisfied	10	40
Normal	8	32
Dissatisfied	2	8
Total	25	100

Source: primary data

Chart No: 4.10 Shows Satisfaction level management system of cooperative



Interpretation:

It can be observed from above table that out of 25 respondents 20% customer response to very satisfied and 40 % customer are satisfied and 32 % are normal satisfied and 8% customer are dissatisfied of management system of co-operative. Majority of the respondents that is 40% of satisfied of management system of co-operative.

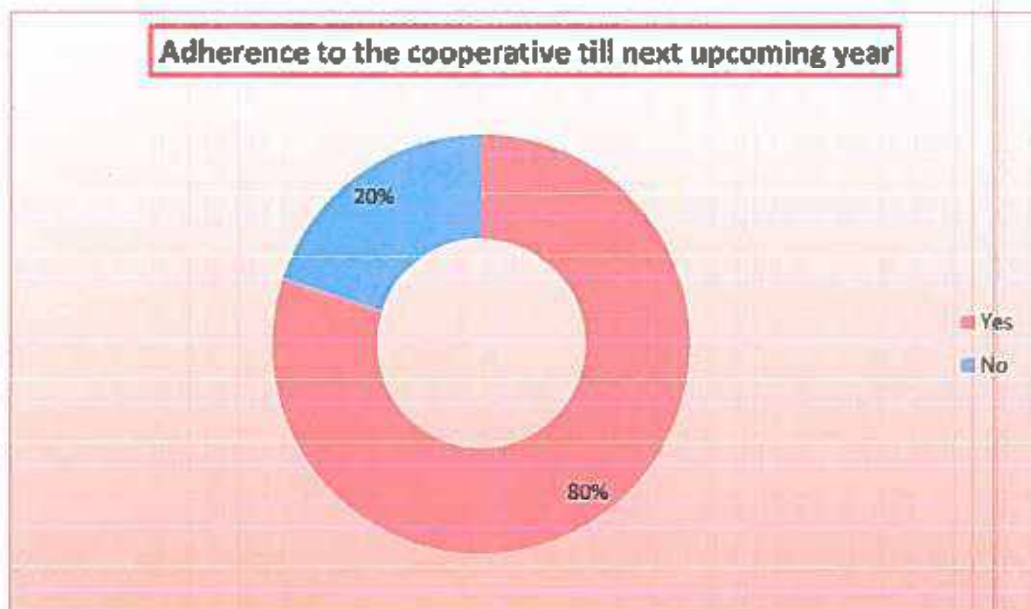
Om urban co-operative credit society ltd Nasalapur

Table No: 4.11 Shows Adherence to the cooperative till next upcoming year

Particulars	No. of Respondents	Percentage
Yes	20	80
No	5	20
Total	25	100

Source: primary data

Chart No: 4.11 Shows Adherence to the cooperative till next upcoming year



Interpretation:

It can be observed from above table that out of 25 respondents 80% of customer adherence to the cooperative till next upcoming year and 20% customer does not adherence to the cooperative till next upcoming year. Majority of the respondents that is 80% are adherence to the cooperative till next upcoming year in Om urban co-operative credit society.

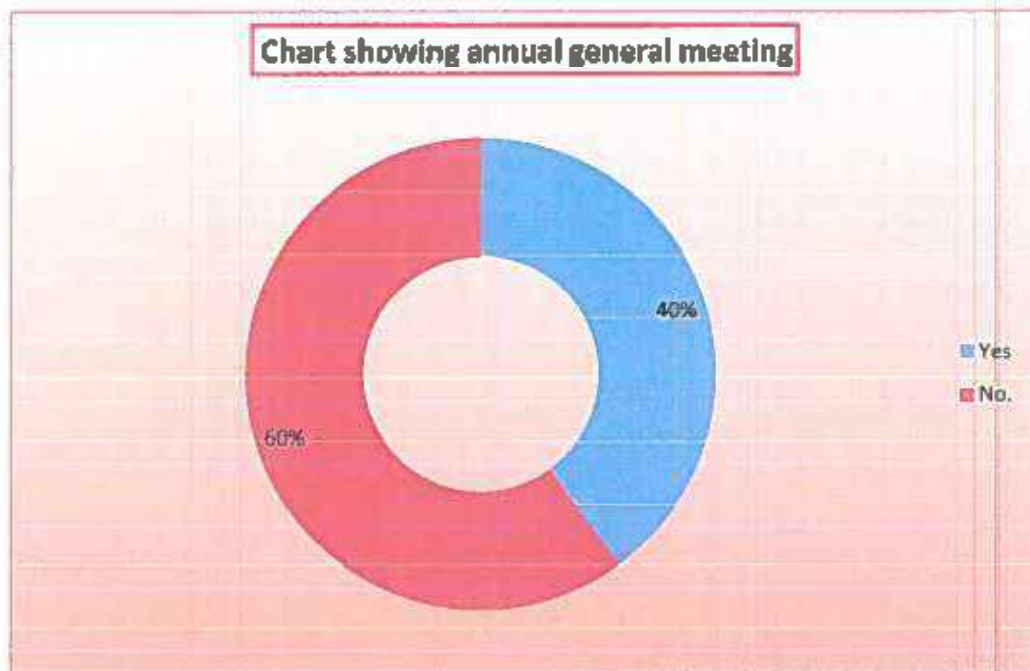
Om urban co-operative credit society ltd Nasalapur

Table No: 4.12 Shows regularity of annual general meeting

Particulars	No. of Respondents	Percentage
Yes	10	40
No	15	60
Total	25	100

Source: primary data

Chart No: 4.12 Shows regularity of annual general meeting



Interpretation:

It can be observed from the above table and graph that out of 25 Respondents that 40% respondent are told that cooperative as conducted at annual general meeting and 60% is response not conducted at annual general meeting.

Majority of respondent was tell the not conducted annual general meeting (60%)

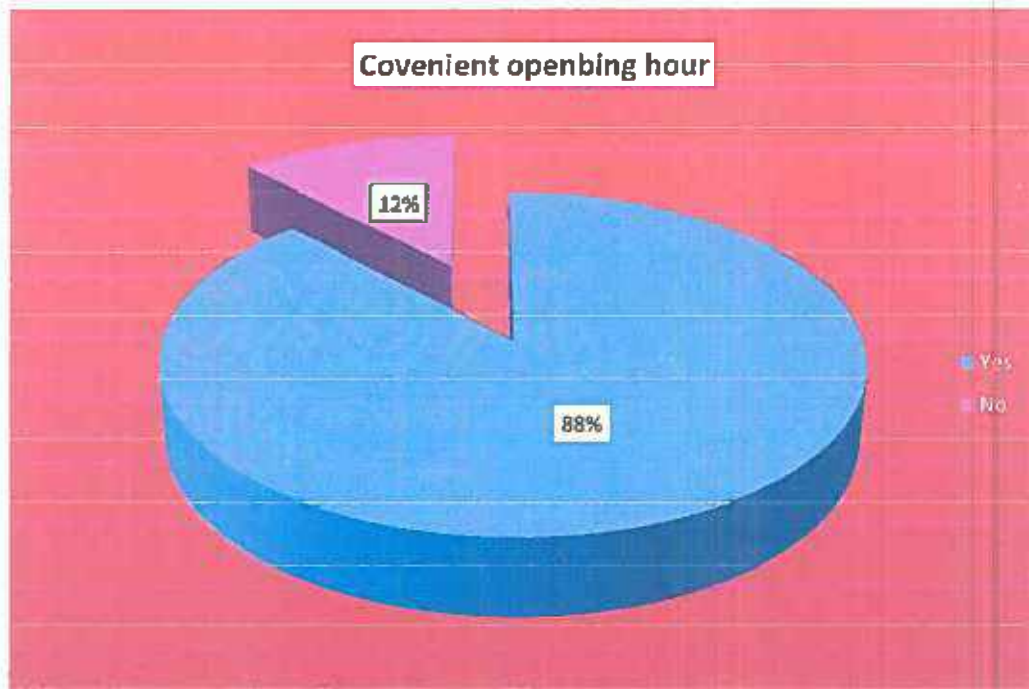
Om urban co-operative credit society ltd Nasalapur

Table No: 4.13 Shows perception on opening hour of co-operative

Particulars	No. of Respondents	Percentage
Yes	22	88
No	03	12
Total	25	100

Source: primary data

Chart No: 4.13 Shows perception on opening hour of co-operative



Interpretation:

The respondents were asked if the opening hour of the cooperative is convenient for the people. Majority of the respondents said that the opening hour is convenient for the people while 88 percentages of them shared that the opening hour is convenient for them. And 12 percentage people are not convenient.

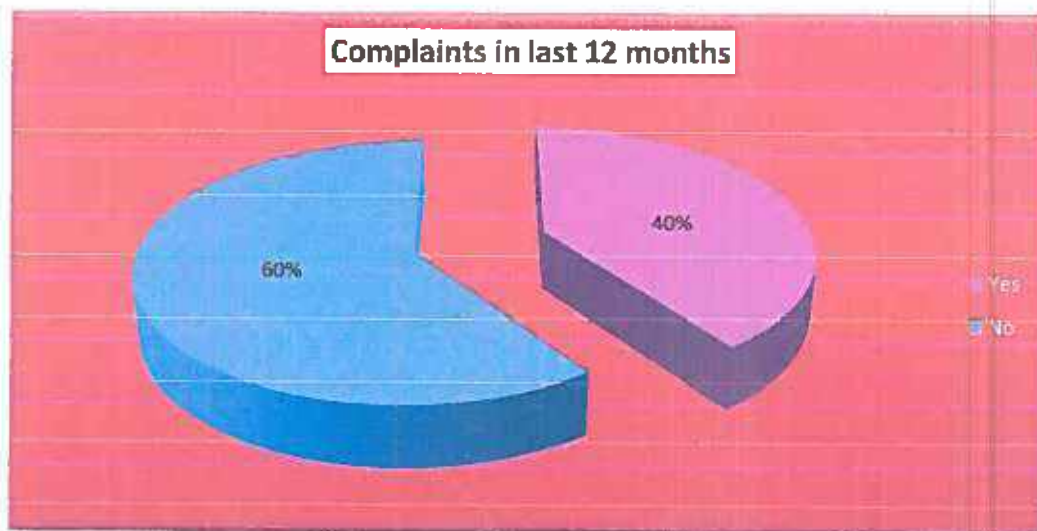
Om urban co-operative credit society ltd Nasalapur

Table No: 4.14 Shows complaints in officials on any matters during last 12 months

Particulars	No. of Respondents	Percentage
Yes	10	40
No	15	60
Total	25	100

Source: primary data

Chart No: 4.14 Shows complaints in officials on any matters during last 12 months



Interpretation:

The respondents were asked that if there was any situation to make complaint about the services or anything related to respondents. More than half of them (60%) said that they had not made any complaints in last one year. However, 40 percentages of them said that they had made complaint in last 12months. It is a thoughtful matter that slightly less than half of the sample customer stated that they had made complaints in last 12 months.

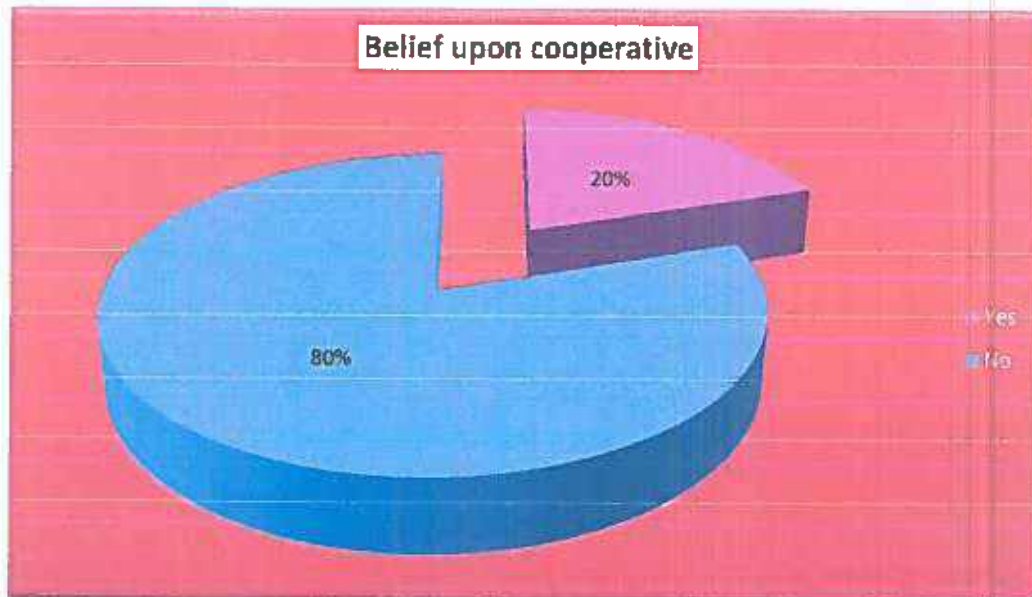
Om urban co-operative credit society ltd Nasalapur

Table No: 4.15 Table showing confidence/belief upon co-operative

Particulars	No. of Respondents	Percentage
Yes	05	20 %
No	20	80 %
Total	25	100 %

Source: primary data

Chart No: 4.15 Table showing confidence/belief upon co-operative



Interpretation:

The respondents were asked if any kind of act of fraud has affected their belief or confidence upon the cooperative located in the surroundings. Majority of the respondents there is 80 percent of them said that there has not been any act of frauds or any others suspicious act which affected the belief upon any kinds of cooperative. However, 20 percent of them said that there have been some incidents in other cooperatives which have affected belief.

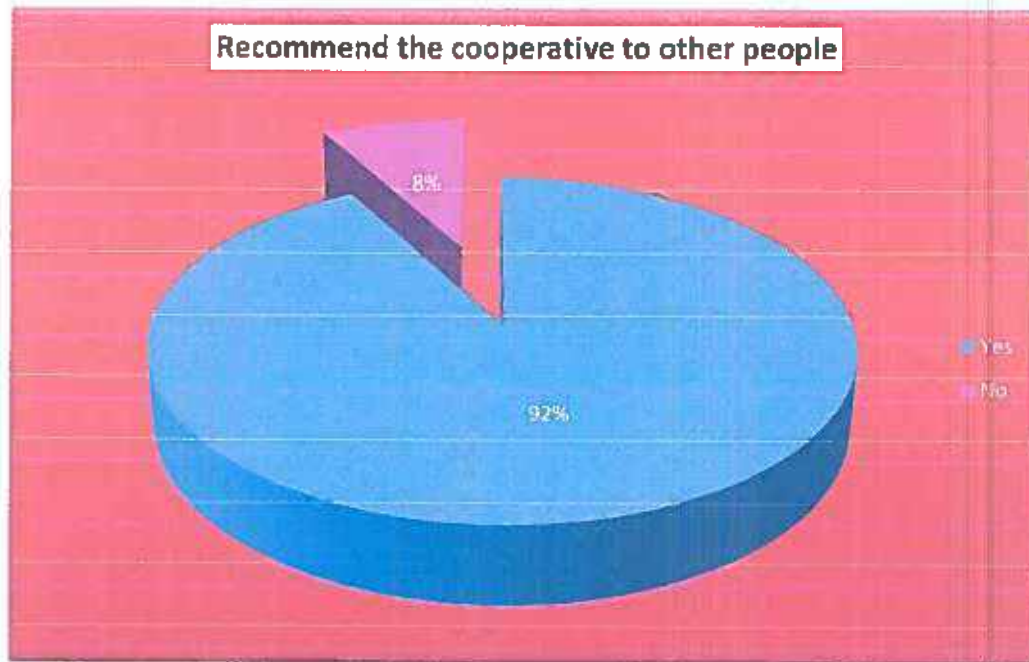
Om urban co-operative credit society ltd Nasalapur

Table No: 4.16 Table shows recommend the cooperative to other people

Particulars	No. of Respondents	Percentage
Yes	23	92
No	02	8
Total	25	100

Source: primary data

Chart No: 4.16 Table shows recommend the cooperative to other people



Interpretation:

The respondents were asked if they would recommend the cooperative to other people like family, friend or relatives. Upon this 92 percentage of them said that they will recommend the cooperative to other people as well while 8 percentage of them said that they would not recommend the cooperative to other people. Majority of respondent was told the 92 % respondents recommend the cooperative to other people.

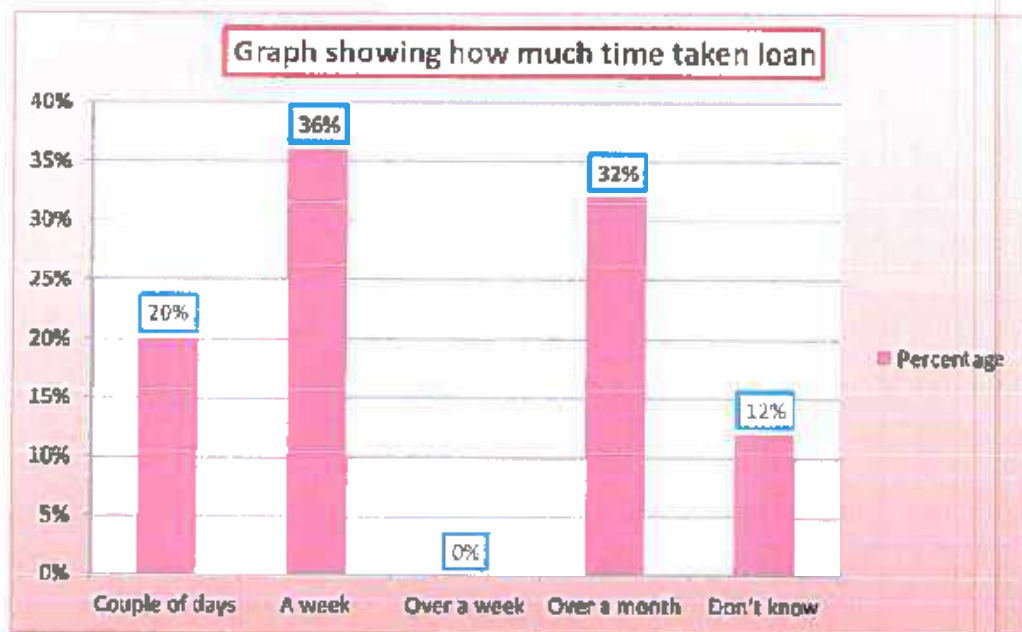
Om urban co-operative credit society ltd Nasalapur

Table No: 4.17 Table shows how much time taken to provide loan

Particulars	No. of Respondents	Percentage
Couple of days	5	20 %
A week	9	36 %
Over a week	0	0 %
Over a month	8	32 %
Don't know	3	12 %
Total	25	100 %

Source: primary data

Graph No: 4.17 Table shows how much time taken to provide loan



Interpretation:

It can be observed from the above table and that out of 25 Respondents those 12 percentages has no idea about the total time taken to process the loan. 20 percent of them said that it takes only couple of days to provide loan while 36 percentages of them said that it takes a week to provide loan by the people. Few participants there is 32 percent of them said that it takes over a month to complete the entire process of loan. Majority of respondent was told the 36% respondents taken loan from a week.

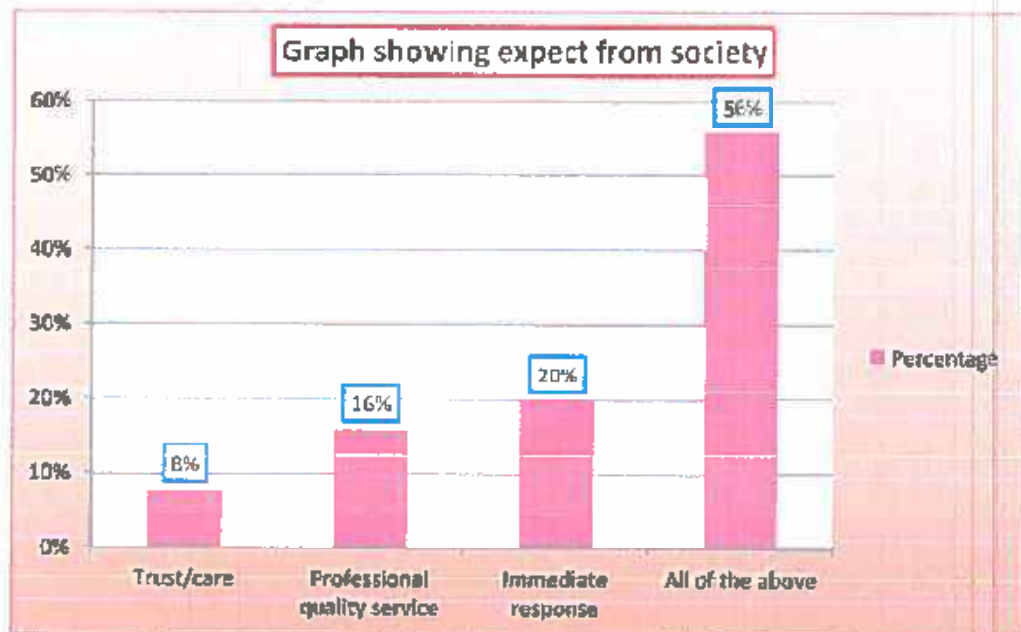
Om urban co-operative credit society ltd Nasalapur

Table No: 4.18 Table showing expect from society

Particulars	No. of Respondents	Percentage
Trust/care	2	8
Professional quality service	4	16
Immediate response	5	20
All of the above	14	56
Total	25	100

Source: primary data

Graph No: 4.18 Table showing expect from society



Interpretation:

It can be observed from the above table that out of 25 Respondents those 8 percent people expect trust and care, 16 percentage people can expect Professional quality service, 20 percent people can expect immediate response and 56 percentage people can expect all of the above. Majority of respondent was told the 56% all of the above.

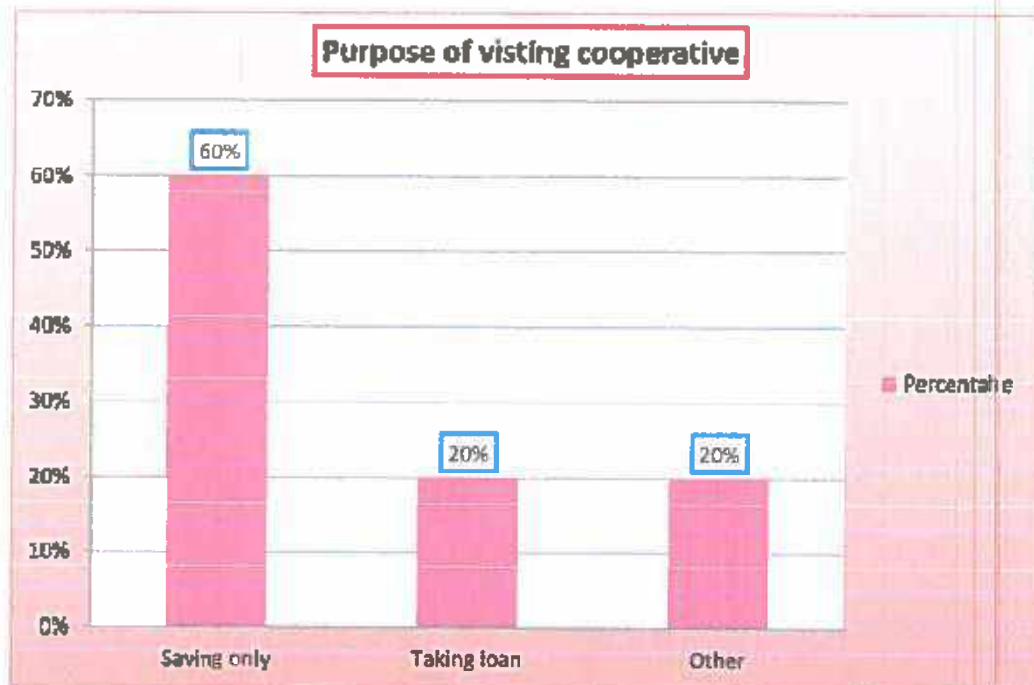
Om urban co-operative credit society ltd Nasalapur

Table No: 4.19 Table shows purpose of visiting cooperative

Particulars	No. of Respondents	Percentage
Saving only	15	60
Taking loan	5	20
Other	5	20
Total	25	100

Source: primary data

Graph No: 4.19 Table shows purpose of visiting cooperative



Interpretation:

It can be observed from the above table that out of 25 Respondents those 60 percent of them visit cooperative to deposit their saving or to collect their interest of saving, similarly 20 percent of them visited for loan purpose and 20 percent them visited to other purpose. Majority of respondent was told the 60% of saving only.

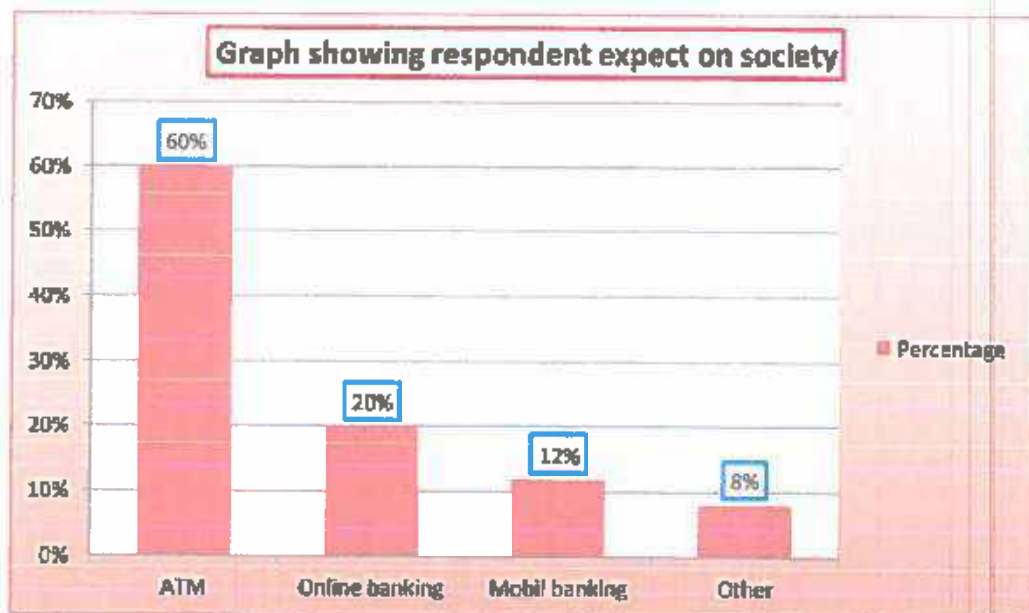
Om urban co-operative credit society ltd Nasalapur

Table No: 4.20 Table shows respondent expect on co-operative

Particulars	No. of Respondents	Percentage
ATM	15	60 %
Online banking	05	20 %
Mobil banking	03	12 %
Other	02	8 %
Total	25	100 %

Source: primary data

Graph No: 4.20 Table shows respondent expect on co-operative



Interpretation:

It can be observed from the above table that out of 25 respondents 60 % are expect in feature ATM(automatedteller macline) service. 20% respondent online banking service, 12 % respondent are Mobil banking service, and remaining 8% respondents are other service expect in cooperative. And majority of respondents there is 60 % are ATM services.

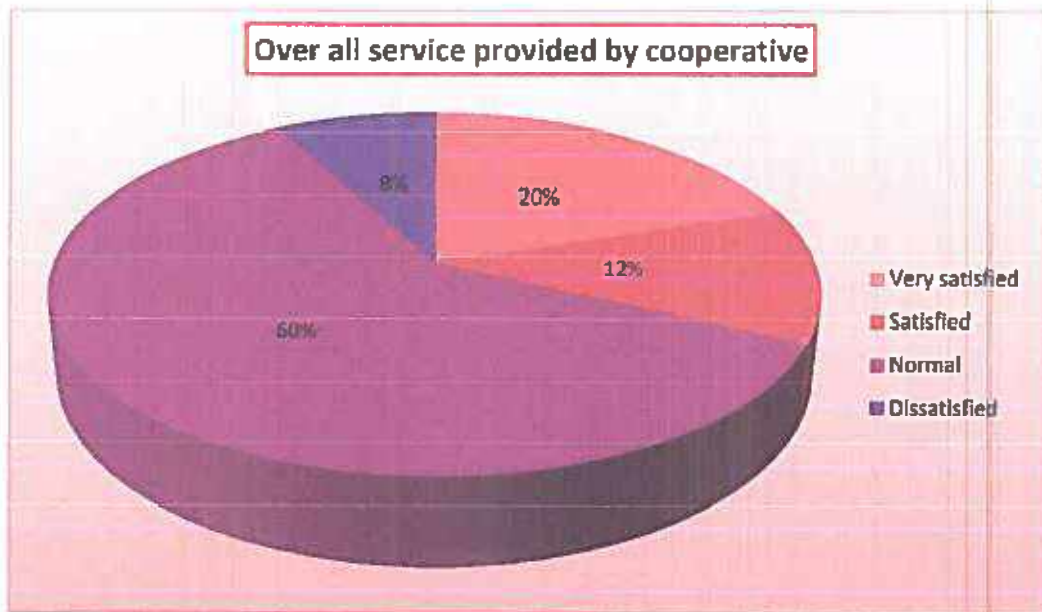
Om urban co-operative credit society ltd Nasalapur

Table No: 4.21 Table shows satisfaction on overall service provided by cooperative

Particulars	No. of Respondents	Percentage
Very satisfied	5	20 %
Satisfied	03	12 %
Normal	15	60 %
Dissatisfied	02	8 %
Total	25	100 %

Source: primary data

Graph No: 4.21 Table shows satisfaction on overall service provided by cooperative



Interpretation:

It can be observed from the above table that out of 25 respondents 60 % are normal satisfied about providing the cooperative service. 20% respondent very satisfied, 12 % respondents are only satisfied, and remaining 8% respondents are dissatisfied. And majority of respondents there is 60 % are Normal satisfied on cooperative service.

CHAPTER -5
FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 Findings

5.2 Suggestions

5.3 Conclusion

Om urban co-operative credit society ltd Nasalapur

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

- From the study we can see that out of 25 respondents majority of the respondents are male (60%)
- The study revealed that out of 25 respondents maximum 80% of respondents are married.
- The study shows that out of 25 respondents maximum 40% of respondents are belongs to the age group of above 45.
- The study shows that there maximum (32%) respondents are SSLC.
- The study shows that there maximum (30%) respondents are Businessmen.
- It can be observed that out of 25 respondents maximum 40% of respondents monthly income is Rs10000.
- From the study we can see that out of 25 respondent's majority of the respondents are 32% having saving bank account and others.
- The study shows that out of 25 respondents their maximum 40% respondents opened on account of low interest rate on loan.
- It can observed that out of 25 respondents maximum 60% respondents say to satisfied are happy with bank police and scheme.
- It can observed that out of 25 respondents maximum 40% respondents say to satisfied to happy with bank management system..
- It can be observed that out of 25 respondents maximum 80% respondents are continue with bank service for next upcoming year.
- It can be observed that out of 25 respondents maximum 60% respondents are says cooperative not conducted annual general meeting.
- The study shows that out of 25 respondents maximum 80% respondents are says to convenient for cooperative opening time.
- The study shows majority(60%) of the respondents are no complain to the officials on any mattes during last 12 months
- It can be observe 25 respondents majority(80%) of the respondents are no frauds in cooperative have affected your confidence or belief upon cooperative
- The study shows that maximum(92%)of the respondents are recommending this organization to others.

Om urban co-operative credit society ltd Nasalapur

- The study revealed that out of the 25 respondents maximum 36% respondents are taking loan a week.
- From the study we can see that out of 25 respondent's majority of the respondents are 56% expect from cooperative all services.
- A study shows that maximum(60%)of the respondents are coming cooperative society saving loan.
- The study revealed that out of the 25 respondents maximum 60% respondents are expecting from ATM facilities in features.
- Majority of the respondents are normal over service quality of the cooperative (60%) It can be observed 25 respondents majority (60%) of the respondents are says to normal over service provided by cooperative.

5.2 SUGGESTION:

The study has conducted on changing consumption pattern of customer of Om urban co-operative credit society ltd, Nasalapur. Based on the observation and personal discussion with customer and management of Om urban co-operative credit society as researcher I would like to give some suggestions for working for Om urban co-operative credit society ltd, Nasalapur.

- Proper training facilities have to be providing to the staff's so that they can give valid answer to the customer.
- Staffs have to update their knowledge for that bank has to take necessary actions
- To provide varies types services like ATM, Mobil banking, online banking, debit card, credit card etc
- Creating of customer awareness and education for cresting bank account is necessary in rural areas.
- We can suggest to cooperative conducted regularly annual general meeting.

Om urban co-operative credit society ltd Nasalapur

5.3 CONCLUSION

A cooperative is established to uplift the economics status of the local people by investing their money and seeking loans when needed. It helps to mobilize cash and earn interest from the deposited cash. The respondents, Om urban cooperative credit society limited had been established to serve the local people.

This research has examined the level of satisfaction and has also explored the customer needs. The liker scale used as a means of measuring the level of satisfaction has been proven effective as in other studies. A qualitative methods using focus group discussion or in depth interview is also an effective methods to identify the level of satisfaction among the customer. But such kind of research would require high amount of resources and time. Therefore, when carrying out the study like this with various limitations, quantitative methods will also give a satisfactory result. This kind of study will help a cooperative to formulate strategies through bottom of approach, such study can be used as a guideline by the future researchers.

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WEBSITES:

www.researchgate.net

www.slideshare.net

www.shodbranga.com

www.wikipedia.com

ANNEXURES

Questionnaires:

Dear sir/madam

It is matter of great pleasure to introduce myself miss. Yashodha T Rayamane studying m.com in KLE's Basavaprabhu Kore College Chikodi, as per the course requirement we need to undergo a major concurrent project entitled "A study report on customer satisfaction in bank special reference of Om urban co-operative credit society ltd, Nasalapur.

I am requesting you to please share your valuable time provide in information and opinion by filling this questionnaire. Your co-operation will be highly appreciated and also this will helpful to us to serve you better in future.

(Note): the information provided by you will be strictly kept confidential and for academic purpose only.

- 1) Gender:
 - a) Male
 - b) Female
- 2) Marital Status
 - a) Married
 - b) Unmarried
- 3) Age :
 - a) Below 25
 - b) Between 25-35
 - c) Between 35-45
 - d) Above 45
- 4) Educational qualification
 - a) Matriculation(SSLIC)
 - b) Pre university
 - c) Graduation
 - d) Post graduation
 - e) Other

- 5) Occupation of the customer.
 - a) Professional
 - b) Businessmen
 - c) Service
 - d) Student
 - e) Others
- 6) Monthly income of the consumer
 - a) Below 10000
 - b) 10000 to 25000
 - c) 25000 to 50000
 - d) Above 50000
- 7) Which type of the account do you have in Om urban co-operative credit society?
 - a) Saving a/c
 - b) Current deposit a/c
 - c) Fixed deposit a/c
 - d) Recurring deposit a/c
 - e) Others
- 8) Why you have opened on account in this bank.
 - a) Low interest rate on loan
 - b) Savings
 - c) Locker facilities
 - d) Others
- 9) Are you happy with bank policy and schemes
 - a) Very satisfied
 - b) Satisfied
 - c) Normal
 - d) Dissatisfied
- 10) Are you happy with bank management system
 - a) Very satisfied
 - b) Satisfied
 - c) Normal
 - d) Dissatisfied

- 11) Would you like to continue with bank service for next upcoming year?
 - a) Yes
 - b) No
- 12) Do this co-operative conduct annual general meeting (AGM) regularly?
 - a) Yes
 - b) No
- 13) Is the opening hour of this co-operative convenient for you?
 - a) Yes
 - b) No
- 14) Did you have to complain to the officials on any matters during last 12 months?
 - a) Yes
 - b) No
- 15) Do the frauds in co-operatives have affected your confidence/belief upon this co-operative?
 - a) Yes
 - b) No
- 16) Do you recommend this organization to others?
 - a) Yes
 - b) No
- 17) How much time do they take the loan?
 - a) Couple of days
 - b) A Week
 - c) Over a week
 - d) Over a month
 - e) Don't know
- 18) What do you expect from this society?
 - a) Trust/care
 - b) Professional quality service
 - c) Immediate response
 - d) All of the above
- 19) What is the main reason for coming to this co-operative society?
 - a) Saving only
 - b) Taking loan
 - c) Other(.....specify)

20) In future which facilities except from this society?

- a) ATM
- b) Online banking
- c) Mobil banking
- d) Other

21) Others Overall service quality of the urban co-operative credit society?

- a) Very satisfied
- b) Satisfied
- c) Normal
- d) Dissatisfied

Thank you for the time you have spared for the interview your suggestions will enable service providers to improve and enhance their service to suit their customer's requirement.

Place:

Signature

UNRAVELLING ALGAE OF GHATAPRABHA BIRD SANCTUARY



A PROJECT REPORT SUBMITTED TO
RANI CHANNAMMA UNIVERSITY BELAGAVI

FOR PARTIAL FULFILLMENT OF THE AWARD OF THE DEGREE OF

MASTER OF SCIENCE

IN

BOTANY

SUBMITTED BY

MISS. AISHWARYA C. PATIL
MISS. KAVERI HALLI

UNDER THE GUIDANCE OF

DR. RAHUL PATIL M.Sc., Ph.D.

DEPARTMENT OF POST GRADUATE STUDIES IN BOTANY
KLE SOCIETY'S, BASAVAPRABHU KORE ART'S, SCIENCE AND COMMERCE
COLLEGE, CHIKODI, BELAGAVI- 591 201

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2021

DECLARATION

We declare the work in this dissertation entitled “Unravelling Algae of Ghataprabha Bird Sanctuary” has been carried out by us in the P.G. Department of Botany, Basavaprabhu Kore College, Chikodi. The information derived from the literature has been duly acknowledged in the text and list of references provided. No part of this dissertation was previously presented for another degree or diploma at this or any other institution.

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Place: Chikodi

Date:

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Finally, we are grateful to all our well-wishers.

Miss. Aishwarya C. Patil


Miss. Kaveri Halli

RANI CHANNAMMA UNIVERSITY BELAGAVI





CERTIFICATE


This is to certify that, this project entitled "**Unravelling Algae of Ghataprabha Bird Sanctuary**" is being submitted herewith for the partial fulfillment of award of the Degree of Master of Science in Botany, **Rani Channamma University Belagavi**. The work reported in this dissertation is based upon the results of the original work carried out by **Miss. Aishwarya C. Patil** and **Miss. Kaveri Halli** under my supervision and guidance.


Dr. Rahul R. Patil
Research Supervisor

Place: Chikodi
Date: 3/9/2019


Co-ordinator
Department of Post Graduate Studies in Botany



25/9/21


25.9.2021



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Chapter-1

INTRODUCTION

1.1 General introduction

Algae represent a highly diverse consortium of ancient plants comprising different evolutionary lineages of mostly photoautotrophic organisms. The different groups of algae are of polyphyletic origin and epitomize the majority of existing divisions of plants. Algae are thallophytic; their vegetative body is not organized in roots and leafy stems like that of the cormophytes. Many algae are living in solitary cells, colonies, filaments, or primitive vegetation bodies and do not have a vascular system. In contrast to the phanerogams (plants producing seeds), the algae are cryptogams that propagate by 'concealed' or 'hidden' reproductive strategies. Following a conception of subdivision of living organisms into five kingdoms (Monera, Protoctista, Fungi, Animalia, and Plantae), the prokaryotic algae (blue-green algae, Cyanobacteria, Cyanoprokaryota) are placed in the Monera (Eubacteria) and the eukaryotic algae in the Protoctista. Hence, the algae do not belong to the kingdom of Plantae. Nevertheless, it is widely accepted (because of the photosynthesis as the mutual characteristic) to interpret algae as 'lower plants' in distinction to the vascular 'higher plants.' The eukaryotic algae possess membrane-bound organelles such as nuclei, mitochondria, and plastids. The prokaryotic Cyanobacteria do not exhibit such organelles; their DNA and photosynthetic thylakoids lie free in the cytoplasm. The combination of both eukaryotic algal groups and prokaryotic Cyanobacteria to the 'algae' demonstrates the heterogeneous and artificial character of this biological term. On the other side, the inclusion of Cyanobacteria in the group of algae is justified by several ecophysiological and evolutionary biological arguments. Like the eukaryotic

algae, Cyanobacteria are able to photosynthetic oxygen production, and the theory of endosymbiosis has given evidence for evolution of chloroplasts by incorporation of Cyanobacteria into eukaryotic host cells. Endosymbiosis is discovered as a major force in the evolution of diverse algal lineages. Algae exhibit a fascinating diversity of life-forms and strategies in response to the environment. Most algae possess chlorophyll a. As primary producers, they use the sunlight energy to convert inorganic substances into simple organic compounds, and, provide the principal basis of food webs on the Earth. Furthermore, they produce oxygen that is essential for heterotrophic organisms. Algae populate a wide range of habitats from soil to water, whether it is cold or warm, alkaline or acidic, hyper- or hyposaline and we could cite a range of extremes.

Chemical analyses of water provide a good indication of the chemical quality of the aquatic systems, but do not integrate ecological factors such as altered riparian vegetation or altered flow regime and therefore, do not necessarily reflect the ecological state of the system (Karr et al., 2000). Biological assessment is a useful alternative for assessing the ecological quality of aquatic ecosystems since biological communities integrate the environmental effects of water chemistry, in addition to the physical and geomorphological characteristics of Rivers and lakes (Stevenson and Pan, 1999). Phytoplankton encountered in the water body reflects the average ecological condition and therefore, they may be used as an indicator of water quality (Bhatt, et al., 1999; Saha et al., 2000).

Algae are frequently found in polluted and unpolluted water and due to this behaviour they are generally considered useful to determine the quality of water. These are very suitable organisms for the determination of the impact of toxic substances on the aquatic environment because any effect on the lower level of the

food chain will also have consequence on the higher level (Joubert, 1980). Algae are used for assessing the degree of pollution or as indicator of water pollution of different water bodies (Trivedy, 1986; Sudhaker et al., 1994; Dwivedi and Pandey, 2002).

Phycoremediation is use of micro- or macroalgae for removal or biotransformation of pollutants such as nutrients, heavy metals, xenobiotics, and waste gases generated from various anthropogenic activities. Algae constitutes a polyphyletic group of photosynthetic organisms that include both prokaryotic cyanobacteria and eukaryotic organisms with wide morphological and biochemical diversity. They account for more than 50% of global organic carbon fixation (Field et al., 1998). In simple words, they are green cell factories that convert light, CO₂, and nutrients (both organic and inorganic) into myriad molecules of high economic value (Chisti, 2007). The main industrial attractions of algae are their ability to grow with minimum freshwater inputs and utilize lands that are otherwise agriculturally non-productive (Wijffels and Barbosa, 2010). Further, algae have high solar conversion (photosynthetic) and carbon dioxide-capturing efficiency compared to terrestrial plants, leading to a higher surface area productivity in terms of biomass and metabolites (Larkum, 2010). Some of the algal strains that are industrially viable are extremophiles; that is, they thrive under extreme environmental conditions such as salt pans (high salinity; e.g. *Dunaliella* sp.; Ben-Amotz and Avron, 1990); polar regions (psychrotolerant; e.g. *Koliella Antarctica*; Fogliano et al., 2010), alkaline waters (*Spirulina* sp.), high-nutrient wastewaters (*Chlorella* sp., *Scenedesmus* sp., *Monoraphidium* sp.; Chanakya et al., 2012; Malla et al., 2014), etc. The ability to survive in polluted wastewaters containing high quantities of nutrients such as nitrogen, phosphorous, and heavy metals make algae a sustainable platform for

wastewater treatment (WWT). Further, the high tolerance of microalgae to some greenhouse gases like CO₂, SO_x, NO_x, etc. (Wang et al., 2008), makes them an ideal greenhouse gases mitigation tool.

The present investigation focuses to unravel the algal diversity of Ghataprabha Bird Sanctuary from Belgavi district of Karnataka and to check the pollution status of the ecosystem by keeping in view the sustainable utilization and development of the reservoir.

1.2 Objectives of the study:

1. To document the algal taxa ghataprabha bird sanctuary
2. To assess the ecological status of the reservoir using algal diversity

Chapter-2

REVIEW OF LITERATURE

All over the world extensive and appreciable work has been carried out on freshwater algal diversity, and limnology. An account on the status of algal diversity in World, India and Karnataka is given below.

2.1 International Status

It was in 1754, Linnaeus gave the name of Algae to a group of plants and Jussieu (1789) was the first person to delimit the algae as known today. After a long period of silence, Link (1820-1833) studied the algal flora of Germany and Agardh worked on Scandinavian algal flora (1817-1824). Agardh (1824) arranged algae in six well defined orders: Diatomaceae (including Desmids), Nostochineae, Confervoideae, Ulvaceae, Florideae and Fucoideae while describing a group of 20 genera. The work of Kuetzing (1843-1849) however, was most significant as he described a bit more number of algal genera than any other contemporary phycologists. Hassal (1842-1845) was another scientist who made an outstanding contribution towards the field of algology. Borger (1894-1936) carried out some work on algae in Sweden, Australia, Argentina, Bolivia and China. Berger (1898-1936) carried out extensive research on freshwater algae of Sweden and examined numerous samples sent to him from collectors of Australia, South Patagonia. Lagerheim (1883-1902) studied the algal flora of Sweden and collections from Equador, India and Abyssinia. Lemmerman (1891-1910) worked on the algal flora of Germany and collections received from China and Paraguay. Nordstedt (1873-1897) described few species of algae from Argentina, Patagonia, Cameroon, Newzealand and Australia. A specific study on Cyanophyta

was initiated by Borzi (1878 - 1894), De Toni (1888-1905).

British researchers were also among the pioneers of algal research. G.S. West (1899- 1916) and W. West (1889-1909) made an exclusive study on freshwater algae and discovered a number of new species and also examined specimens sent to them by collectors from Tanganyika, Victoria, Egypt, Southwest Africa, Madagascar, West Indies, Ceylon, Burma, Bengal and Madras. Another remarkable contribution was made by Fritsch and Rich (1907- 1937) on the freshwater algae of South Africa. Strom (1920-1926) described some new species of algae from Turkey, Norway and Iceland.

Interest in Diatoms increased manifold from the very day of its discovery. Their taxonomic position has still been unsettled. Being a pioneer worker, Agardh (1824) published his work on Diatoms including Desmids. Schutt (1896) divided diatoms into two groups Centricae and Pennatae. Islam and Haroon (1975) and Islam and Morshed (1985) worked out the taxonomy, systematic and other aspects of the group diatom. Krishnamurthy (1954) and Gandhi (1955) have worked on diatom flora of India.

Fritsch (1935 & 1945) studied algae in detail, describing their morphology and reproduction in two volumes of his works under the name of “The Structure and Reproduction of the Algae”, which was an incredible contribution to the field of algology and is considered as one of the most important treasure in the field of phycology. Thienemann (1954) studied the tropical freshwater plankton. Bold and Wynne (1978) also worked on the structure and reproduction of freshwater algae. John et al. (2002) in their book, provided the first modern account and identification guide to more than 2200 species of freshwater algae.

Coker (1954) studied the ecology of streams, lakes and ponds of United States. Lund (1965) studied the ecology of freshwater. Regarding the freshwater ecology of algae remarkable contributions had come from many renowned workers. Arnold (1969) studied the ecological status of Lake Erie. Bennett (1970) studied the ecology of lakes and ponds of New York.

Algae as indicator of environmental quality are one of the important topics in the contemporary world. Prescott (1962), after an extensive study in Michigan and Wisconsin reported that blue green algae are rare or absent in lakes with pH below 5. Presence of algae as disturbance indicator of biological equilibrium in tanks was studied by Fogg et al. (1973).

Ecology of some freshwater phytoplankton was also studied by Hutchinson (1957). While working on ecology of freshwater phytoplankton, Lund (1965) described algal productivity in lakes and its related factors.

Economic value of algae and algal products are uncountable. Algae are very useful as food either directly or as food products but still their use are limited. Tilden (1935), Johnston (1970, 1976), Dixon (1973) gave extensive account of algae used as food and food products. *Spirulina* has achieved the highest position in case of protein content, as it has 60- 70% of protein of its total biomass. Now a day's *Spirulina* is used for curing of anemia (Takeuchi, 1978), antiviral activity (Gustafson, 1989), treatment of nutritional deficiency (Belay et al., 1993). Moreover, it is rich in vitamins, minerals and β -carotene, thus truly declared as the best future food for mankind by UN at the world food conference in 1979.

2.2 National Status

Phycology in Indian context was started much later than that of world standard. Most of the pioneering works were done by British colonial workers. The works of Indian authors can be clearly grouped into three periods. During the first period *i.e.* from 1798 to 1854 some classical works like description of seaweed.

The second period extended from 1858 to 1907. In this period some classic and valuable works came from a group of professional workers. Lagerheim (1888) described 52 desmids from Bengal. Turner (1883) published an account of “The Freshwater Algae of East India” which included detailed contribution of algal flora recorded so far. He included 22 species of Myxophyceae, 542 of Desmids. Other contemporary phycologists of that period were Hobson (1863), Martens (1871), Dickie (1882) and many more.

It was from 1919 onwards, third phase of algal study started in India where Indian phycologists came forward and performed a great deal of appreciable works. Sengupta (1920-1954) worked a lot on Volvocales, Chaetophorales, Zygnematales and Blue green algae of India. Sengupta et al. (1940, 1941, 1944, 1981) studied morphological details of *Cylindrocapsa geminella*, *Polysiphonia platycarpa*, *Microdictyon tenuis*. Due to such an immense contribution, he is truly called as “Father of Modern Algology in India”. Bruhl and Biswas (1929) was the pioneer in studying algae in Eastern India. Bharadwaja (1928-1936) contributed towards the knowledge of BGA and he along with his followers established a base of algal research at Banaras Hindu University. Another outstanding contribution came from the great Indian algologist Randhawa, who published his works as research articles on species of Zygnematales, Oedogoniales and Vaucheriaceae. And his

monograph on Zygnemaceae is a valuable ethic. Prasad (1952) described some new forms of Nostocaceae from river of Baranasi. Krishnamurthi (1954) described for the first time the freshwater diatom flora of South India and reported a number of new forms. Gandhi (1959, 1960) presented a detail account of diatoms collected from Sagar and also the diatom flora of temporary ponds of India and reported many new taxa. Desikachary (1959) published his monograph "The Cyanophyta" which was an exclusive document for the workers till today. Vasistha (1960) working on Myxophyceae of India and reported two new species and one new variety. The morpho-taxonomic studies of Eastern Himalayan algal flora have contributed by Das (1961), Santra and Adhya (1973, 1976) and Alfred (1978).

Singh and Saha (1982) described 16 new species of pond diatoms from Bihar. Gurudeva et al. (1983) illustrated the systematic position of 72 taxa of desmids and eight out of them were new records from India. Hosmani and Bharati (1983) described 42 species of Euglenineae from Madgaon. Kou1 et al. (1983) described 44 species of algae from Dal Lake in Kashmir, of them eight species were new to India and one to world algal database (*Scenedesmus longus* var *naegelli* f. *srinagari*). Somashekar (1983) collected 50 desmids, 35 Chlorococcales and 104 blue greens from river Cauvery concluding that the polluted stations of river are mostly dominated by Cyanophyceae.

Hedge (1986a) reported five new taxa of desmids belonging to *Cosmarium corda*. Hedge (1986b) added 24 new freshwater pond dwelling desmids to the algal flora of Karnataka. Isaacs and Hedge (1989) collected 72 freshwater algae from permanent ponds of Kannada dist. of Karnataka. Regarding the contribution to the North Indian algal flora the noteworthy literatures have been made by Kant and

Anand (1978), Habib (1996, 1997), Kant and Gupta (1998), Singh and Gupta (2000), Suseela and Dwivedi (2001), and Mishra et al. (2002, 2005).

Other than these general topics on algae, many authors contributed a lot on algal cytology, physiology, taxonomy, ecology, evolution, productivity, response to toxicity, response to environmental changes, role in economy etc. Munawar (1970) during his extensive limnological studies on freshwater ponds of Hyderabad described the biocenose, distribution and seasonal abundance of unicellular and colonial phytoplankton in polluted and unpolluted environment. Zutshi and Vaas (1978) studied the limnological studies in Dal Lake. Kiran et al. (1998) carried out a comparative water quality assessment of Yedyur and Bannerghatta lakes of Bangalore.

Bharati and Hedge (1982) studied the freshwater algae from 52 different ponds of Karnataka and Goa and recorded 47 desmids. Chadha and Pandey (1982) explored the algal taxa growing in exposed walls of buildings and recorded 24 taxa and also noted some peculiar variations on their distributional patterns on different kinds of walls.

Bongale (1987a) studied the distribution of algae in acidic paddy field soils of Karnataka and reported 63 species of Cyanophyceae, 17 Chlorophyceae and 26 Bacillariophyceae which includes seven new taxa of Chroococcales. Patel and Jawale (1985) studied the morphological and cytological features of *Lychnothamnus barbatus* (Meyen.) Leonh. Saha (1986) reported 280 algal taxa from freshwater ponds of Bhagalpur. Studies on phytoplankton diversity in response to abiotic factors in Veeranam Lake in the Cuddalore district of Tamil Nadu was studied by Senthilkumar and Sivakumar (2008). Seasonal variation of phytoplankton in a

freshwater tank of Maharashtra was studied by Milind and Hujare (2008).

Many more workers and researchers made contributions to the Indian phycology. Prominent contributors were Mishra (1937), Allen (1925, 1928, 1961), Kundu (1929, 1934), Dixit (1937), Venkataramana (1953-1957), Desikachary (1939-1949), Vaidya (1963 & 1968), Kodhari (1967), Ramanathan (1964, 1968), Prasad and Godward (1963), Prasad and Mehrotra (1970), Prasad and Jain (1973), Kant (1971), Patel and Isabella (1974), Verma (1981), Prasad and Srivastava (1992), Singh et al. (1982), Trivedy (1982), Patel and Patel (1982), Jha and Kaushal (1983), Mehrotra and Jaitly (1983), Maity and Santra (1985), Pal and Santra (1985 & 1987), Prasad and Jaitly (1985), Jha et al. (1986), Prasad and Chowdhury (1986), Shukla et al. (1988), Vohra (1991), Rawla and Rattan (1989), Bharati (1990), Nirmala et al. (1990) Kant and Vohra (1991), Srivastava and Odhwani (1992), Kant and Gupta (1998), Gandhi (1999), Subha and Chandra (2005), Muthukumar *et al.* (2007), Arulmurugan et al. (2010).

The variations of algal variety in pure and polluted water bodies were studied in India by Seenaya (1972), Rama Rao et al. 1978), Mishra and Saksena (1993) have offered the noteworthy contributions towards this field of algae related to aquatic pollution. Verma and Dalela (1975) during their study in Kalindi River designated *Oscillatoria*, *Spirogyra* and *Stigeoclonium* as pollution marker. Similar results were also obtained by other workers during their own study in different aquatic systems (Patrick, 1948 & 1965, Rama Rao et al., 1978, Jeeji Bai and Rajendran, 1980). Zutshi et al. (1980) made a comprehensive limnological study on nine lakes of Jammu and Kashmir and concluded that the tropic evolution of lakes occurred due to human interference.

Mishra and Saksena (1993) during their studies in Moras river in Madhya Pradesh stated that *Anabaena*, *Scenedesmus*, *Closteriun*, *Navicula*, *Euglena gracilis*, *Phacus* were pollution indicator algae. Achae et al. (1995) studied the phytoplankton species diversity in Deeghali beel and recorded 60 genera. Ragothaman and Patil (1995) made a study in Narmada Estuary and counted the algal number as 60 units/ml to 18000 units/ml which may be due to seasonal variation in the extent of agricultural runoff.

Indian contributions towards the ecology and productivity of freshwater bodies started from Roy (1955) who studied the phytoplankton ecology of river Hoogly and observed that some species of algae are tolerant to pollution and some are very much sensitive. Zafar (1968) studied the ecology of algae in some fish ponds of Hyderabad and their physicochemical complex.

Kumar and Singh (1974) observed that Cyanophyceae and Euglenoid flagellates were mostly associated with organically rich water bodies with having low oxygen content. Research regarding the ecology of blue green algae was done by a number of Indian authors. Munawar (1974) performed limnological studies on fresh water ponds of Hyderabad. Kaur et al. (1996) studied the biotic components of a fresh water pond in Patiala and confirmed its eutrophic condition.

2.3 Status in Karnataka

Hosmani and Bharathi (1982) worked on the waterbodies (Yemekeri pond, Keigeri lake and Naggikeri lake) of Dharwad of Karnataka and reported *Euglena*, *Phacus*, *Scenedesmus*, *Closterium*, *Pediastrum* and *Navicula* as the most frequent genera. Somashekar (1983) recorded 21 genera and 32 species of algae in the river Cauvery of Karnataka. Hegde and Bharathi (1986) reported 61 taxa of fresh water

algae belonging to 26 genera from Bijapur district, Karnataka. Bharathi and Hosmani (1975, 1977, 1982) extensively worked on the limnological aspects of ponds and lakes in Karnataka. Considerable work has been done on the use of algae as bioindicators of the ecosystem by Hosmani (1973-2014). Giryappanavar and Patil (2013) used algal diversity to assess the state of the lake ecosystem in Karnataka. Patil et al. (2021) suggested the use of algal assemblages and multimetric indices and functional grouping of algae to assess the health of aquatic ecosystem.

Chapter-3

MATERIALS AND METHODS

3.1 General Topography of the study site:

Ghataprabha bird sanctuary is situated in Gokak Taluk of Belagavi district. The sanctuary area situated between 16° 10' 00" N 16° 14' 46" E. It is a small bird sanctuary comprising a section of Ghataprabha river and over 20 islands in it. The area covered by sanctuary is 29.78 hectares. A weir and dam constructed during 1883 near Dhupdal have created a reservoir upstream. The Gokak falls located in the eastern part of the sanctuary is the major tourist attraction. Dhupdal reservoir is swampy and has good endemic birds like cormorant, Egret, Ibis, Kingfisher, Storks, Snake birds Heron etc. the area is noted for having attracted migratory birds like Demoiselle cranes and European white storks which have been sighted normally from November to March. *Acacia arabica* and *Imperate cylindrica* are considered of special interest as they are good for nesting.

3.2 Collection and Processing of Sample:

Composite surface water sampling method from 4 different sites of reservoir was followed to reduce variations in qualitative estimates of algal attributes, due to spatial variations in habitat conditions (Stevenson and Smol, 2003). The collection of sample was done between 7 am to 9 am on first week after every 2 months during the course of the study period (September to March). Black plastic carbuoys of one litre capacity were used for collecting the samples. For transportation of samples to laboratory, dark coloured bag was used in order to avoid the exposure of samples to sunlight, variations in temperature.

Benthic diatom samples were collected from the surface of the rocks, boulders by scraping the sample with brush in a plastic tray and stored in glass vials.

3.2.1 Processing and Preservation of Phytoplanktons:

Planktonic samples were brought to the laboratory soon after collection and preserved by adding Lugol's Iodine into Glass Column in dark for 48 hours as described by Welch (1948) to sediment the Phytoplanktons. The sample was concentrated to 30 to 50ml with the help of centrifuge. Finally, the planktonic samples were preserved in 50ml plastic reagent bottles.

3.2.2 Processing and Preservation of Benthic Diatoms:

Benthic diatom samples were processed to remove the dirt and clear the diatom frustules by hot HCl and KMnO_4 method described by Hasle (1978) and adapted by Round et al. (1990). Following are the steps followed during processing:

- ✓ 10ml of sample was taken in a heat-resistant beaker.
- ✓ The beaker was marked clearly with the sample number in several places.
- ✓ Then 10ml of potassium permanganate (KMnO_4) solution was added, mixed well and was left for 48 hours.
- ✓ Later 10ml of concentrated HCl (32%) was added, taking care by not to inhale the gases released. Then covered the beaker with a watch glass and was heated on a hot plate at 90 degrees for 1 hour. Later the solution was turned to yellow in colour. Proper care was taken to avoid cross contamination of samples during violent bubbling while heating with acid.
- ✓ After the oxidation of organic materials, carefully 1ml of hydrogen peroxide was added to check if the oxidation process is complete.

- ✓ Then this sample was allowed to cool and was transferred to 10ml centrifuge tube. The beakers were vigorously swirled, to re-suspend the diatoms and the stone and sand particles were settled down.
- ✓ Then sample was rinsed by centrifuging with distilled water at 1000rpm for 20mins.
- ✓ Then the supernatant was poured off in a single movement, while not to lose any diatom material.
- ✓ Finally, supernatant was decanted and centrifugation was repeated and further observation was done.

3.3 Identification of Algae:

For the identification of both the plankton as well as benthic diatoms concentrated sample was used. For identification, one drop of sample was taken with the help of dropper on a clean glass slide. A clean cover slip was placed over the glass slide so that the sample remains intact and free from other particles like dust particles, and the slide was observed under the microscope of different magnifications like 10X, 40X and 100X. Photomicrographs of the Algae observed were taken. Algal identification was done by referring the standard monographs. Desikachary (1959), Phillipose (1967), Prescott (1982), Scott and Prescott (1961), Sarode and Kamath (1984), Karthick et al. (2013), John et al. (2011), Ramanathan (1964), Iyengar and Desikachary (1981), Randhawa (1959), Krishnamurthy (2000).

Chapter-4**RESULTS AND DISCUSSION**

Aquatic biological assemblages are useful indicators for environmental monitoring of lakes and rivers because they integrate the effects of natural variation and anthropogenic stressors. Algal indicators have some advantages over other biotic assemblage indicators of water quality. Unlike fish and macro-invertebrates, algal communities are usually present before disturbance and generally persist in some form after most disturbances. Algal assemblages are generally more sensitive to nutrients than other assemblages (Whitton and Kelly, 1995). Taxonomic composition, community structure and metabolic characteristics of algae have long been used to monitor and identify human impacts on aquatic ecosystems (McCormick and Cairns, 1994) and application of algal indicators to lakes and rivers is increasing (Whitton et al., 1991; Whitton and Rott, 1996; Prygiel et al., 1999).

Phytoplankton and its seasonal successions can be a better predictor of long-term environmental changes in the aquatic systems than the more usual descriptors of biomass and productivity indices (Moline and Prezelin, 1996). Studies on polluted systems with reference to various pollutants have thrown light on the effectiveness of plankton as bio-indicators. Water pollution causes not only changes in physical and chemical variables, and also in algal species composition (Mercado, 2003). Algae are sensitive to pollution or other events and are therefore commonly used for monitoring environmental contamination. Moreover, algal growth in tropical inland water constitutes one of the principal causes in deteriorating the potability of water and hence a study of it is significant to assess the quality of freshwater. Algae serve as bio-indicator of water quality and pollution analysis.

A total of 64 species of algae belonging to Bacillariophyceae, Chlorophyceae, Dinophyceae, Cynophyceae and Euglenophyceae were recorded during the present investigation. The list of the recorded algal taxa is represented in the Table 4.1 and percent contribution of each class of algae from the study site is represented in figure 4.1. Microphotographs of selected algal taxa are represented in Plate 4.1 and 4.2.

Fig 4.1: Percent contribution of algae in Ghataprabha Bird Sanctuary

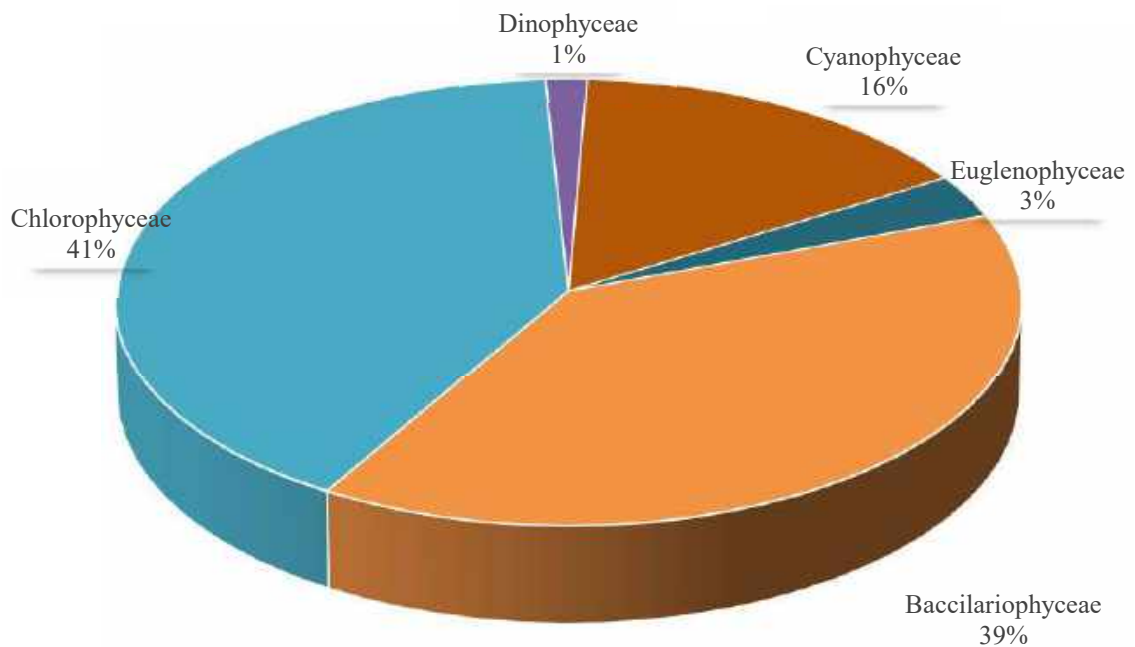


Table 4.1: List of Algae recorded during present investigation from Ghataprabha Bird Sanctuary

Sl. No.	Algal taxa
Class-BACCILAROPHYCEAE	
1	<i>Achnanthes lanceolata</i> (Breb.) Grun.
2	<i>Amphora ovalis</i> Kutz.
3	<i>Aulacoseira granulate</i> (Ehrenberg) Simonsen
4	<i>Cocconeis placentula</i> v. <i>lineate</i> (Ehrenberg) Van Heurck
5	<i>Cyclotella meneghiniana</i> Kutzing
6	<i>Cymbella tumida</i> (Brebisson) Van Heurack
7	<i>Diatoma vulgare</i> Bory
8	<i>Fragilaria tenera</i> (WM Smith) Lange- Bertalot
9	<i>Gomphonema angustatum</i> (Kutzing) Rabenhorst
10	<i>Gomphonema lagenula</i> Kutzing
11	<i>Gyrosigma acuminatum</i> (Kutzing) Rabenhorst
12	<i>Gomphoneis herculeana</i> var. <i>lowei</i> Kociolek and Stoermer
13	<i>Hantzschia</i> spp.
14	<i>Melosira granulata</i> (Ehrenberg) Ralfs
15	<i>Meridion circulare</i> (Greville) C.A. Agardh
16	<i>Nitzschia umbonata</i> (Ehrenberg) Lange- Bertalot
17	<i>Neidium cf. affine</i> (Ehrenberg) Pfitzer
18	<i>Pleurosigma lange-bertalotii</i> Karthik & Kociolek
19	<i>Pinnularia viridis</i> (Nitzsch) Ehrenberg
20	<i>Rhoicosphenia abbreviata</i> (C. Agardh) Langebertalot

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- 21 *Stauroneis amphicephala* Kutzing
 22 *Surirella capronioides* Gandhi
 23 *Tryblionella constricta* Gregory
 24 *Tryblionella hungarica* (Grunow) DG Mann
 25 *Ulnaria ulna* (Nitzsch) Compere

Class-CHLOROPHYCEAE

Order- Zygnematales

- 26 *Spirogyra collinsii* (Lewis) Printz 1927
 27 *Spirogyra micropunctata* Transeau 1915

Sub order- Desmidiaceae

- 28 *Cosmarium contractum* Kirchn. var. West & West
 29 *Cosmarium margaritatum* (P.Lunbell) J. Roy et Bisset Forster
 30 *Cosmerium psedopyramidatum* P.Lundell var . Krieger & Gerloff
 31 *Desmidium aptogonum* Brebisson ex Kutzing
 32 *Euastrum dudium* Nägeli var. Ruzica
 33 *Euastrum sinuosum* Lenorm. In Ralfs (1848) var. *capitatum*
 34 *Mougeotia* spp.
 35 *Mougeotia abnormis* Kisselwe
 36 *Pleurotaenium trabecula* (Ehrenberg) Nageli
 37 *Staurastrum multispiniceps* Meyen
 38 *Staurastrum spinipendens* Meyen
 39 *Staurastrum sexangulare* (Bulnheim) P.Lundell
 40 *Stauroidesmus convergens* (Ralfs) S. Lill. West & west

Order- Volvocales

- 41 *Eudorina elegans* Ehrenberg
-

Order- Chlorococcales

- 42 *Chlorella vulgaris* Beyerinck
 43 *Dictyosphaerium pulchellum* H.C.Wood
 44 *Pediastrum simplex* (Mayen) Lemmermann
 45 *Pediastrum tetras* (Ehrenberg) Ralfs
 46 *Pediastrum Boryanum* (Turpin) Meneghini
 47 *Scenedesmus dimorphus* (Turpin) Kutzing
 48 *Scenedesmus quadricauda* (Turpin) Brebisson
 49 *Selenastrum gracile* Reinsch

Order-Chaetophorales

- 50 *Cylindrocapsa geminella* Wolle

Order- Oedogonales

- 51 *Oedogonium* spp.

Class-DINOPHYCEAE

- 52 *Ceratium hirundinella* (O.F.Muller) Dujardin

Class-CYNOPHYCEAE**Order- Chroococcales**

- 53 *Aphanocapsa elachista* West et G.S.West
 54 *Aphanocapsa pulchara* (Kutz.) Rabenh.
 55 *Chroococcus dispersus* var. *minor* G.M.Smith
 56 *Chroococcus limneticus* Lemmermann
 57 *Chroococcus turgidus* (Kutzing)Nageli
 58 *Merismopedia glauca* (Ehrenberg) Nageli
 59 *Microcystis aeruginosa* Lutz. emend. Elenkin
 60 *Synechocystis endophytica* (G.M. Smith) comb. Nov.
-

Order- Nostocales

61 *Nostoc rivulare* Kutzing ex Born. et Flah.

62 *Anabaena aequalis* Borge

CLASS-EUGLENOPHYCEAE

Order-Euglenales

63 *Phacus orbicularis* K. Hubner

64 *Trachelomonas caudate* (Erenberg) F. Stein

Descriptions of the taxa:

Class- BACCILAROPHYCEAE.

***Achnanthes lanceolata* (Breb.) Grun.**

Is a common species which occurs on stalks, epiphytizing filamentous algae. These frustules are symmetrical in valve view but not when seen from the side. They are, in general, elliptic or fusiform in valve view, undulate- rectangular and bent in girdle view. The epivalve shows a pseudoraphe, the hypophyllum valve raphe. There may be a distinctive lateral, horseshoe- shaped clear area in the mid region of the valve which has the pseudo raphe. The cells may be free, or more commonly attached by gelatinous stalk to various substrates, sometimes forming packets or filaments.

***Amphora ovalis* Kutz. (In girdle view)**

Frustules in this genus are crescent -shaped in valve view but broadly elliptic with truncate poles in girdle view. The raphe present two curved lines near the central margin of the valve, the two curves meeting over the central nodule which lies next to the central margin of the cell. The cells usually are found lying with the concave surface of the hypovalve upper most when viewed under the microscope, but in nature occurs with the concave face against the substrate (often filamentous algae) H-shaped chloroplast with central bridge, flanked by two conspicuous droplets, one towards each cell apex.

***Aulacoseira granulata* (Ehrenberg) Simonsen**

Frustules adjoined end to end by elongated linking spines to form long filaments. Smaller spines may be also present around the margin of valve. Valves mostly viewed in girdle view. Valves with coarse areolae. The valve face has areolae distributed randomly, but in many specimens the areolae are concentrated or almost exclusively restricted to the margin.

Found in benthos and plankton of eutrophic water bodies.

***Cocconies placentula v. lineata* (Ehrenberg) Van Heurck**

Valves relatively flat, elliptical to linear-elliptical in outline. Raphe valve with hyaline rim marginally placed, bordered towards the centre of the valve by striae that are interrupted near the margin. Axial area vary narrow, with a small, rounded central area formed in the centre of the valve. The raphe is straight, filiform, and the external proximal raphe ends are dilated slightly. Striae are punctate, composed of dash-like areolae and radiate. Occurs in meso-to eutrophic flowing and standing waters. Found in abundance on plants, wood and stone.

***Cyclotella meneghiniana* Kutzing**

Frustules are drum shaped with tangential undulations or flat valve face. Marginal zone with strongly radial striae, broader at the margin and tapering towards centre. Central region with 1-5 valve face fultoportulae. The fascicles are not clearly visible in LM, but separated by interfascicular costae ecology. This taxon has a cosmopolitan distribution and occurs as benthos and plankton of eutrophic, electrolyte rich rivers, streams and lake.

***Cymbella tumida* (Brebisson) Van heurck**

Valves strongly dorsiventral dorsal margin strongly convex, ventral margin convex, always with characteristic swollen or tumid mid-region. Apices protracted, rostrate. Axial area narrow, with linear margins. Central area distinct, rounded to rhombic in shape. Raphe lateral, proximal endings distinct and ventrally deflected.

A cosmopolitan species found in oligo to mesotrophic waters with moderate electrolyte content. Found attached to epiphytes.

***Diatoma vulgaris* Bory**

Valves linear in outline, apices rounded. Costae robust. This taxon is characterized by thickened transverse costae. Central sternum straight, distinct. A labiate process is present near one apex of the valve. This cosmopolitan taxon is found in mesotrophic to eutrophic waters with average electrolyte content. The cells are joined at the corners forming zig-zag colonies. Specimens presented here are from sample collected from lower Himalayas. It appears that this taxon occurs mostly in cold water streams.

***Fragilaria tenera* (WM Smith) Lange- Bertalot**

Valves are needle shaped with narrow rounded apices. A well-defined hyaline area is present at the centre of the cell in which ghost striae may be visible. Cosmopolitan species found in benthos. Mostly found in mesotrophic to eutrophic waters.

***Gomphonema angustatum* (Kutzing) Rabenhorst**

Valves weakly heteropolar, narrow lanceolate to rhombic-lanceolate. Apices bluntly to sharply rounded. Axial area formed by shortening of the central striae. Raphe weakly lateral, proximal endings barely enlarged. A single stigma is present on one side of the central area.

Cosmopolitan species, but only common in oligotrophic waters. Found over a range of pH and electrolyte concentrations, including calcium rich waters.

***Gomphonema lagenula* Kutzing**

Valves broadly elliptical, weakly heteropolar club shaped, lanceolate to elliptical to oval. Apices strongly protracted with capitates, rostrate ends. Central area is narrow with short striae on one side and stigma present. A poorly delineated form, with little information on ecology but widely reported in moderate to high eutrophic conditions.

***Gomphoneis herculeana* var. *lowei* Kociolek and stoermer 1988**

Valves are broadly trullate, with broadly rounded apices. Initial valves are unknown. The axial area is narrow, straight, forming are relatively small, irregularly rounded central area. A single stigma is present in the central area. The raphe is lateral, weakly undulate and with small external proximal ends. The raphe has highly recurved internal proximal ends. Striae are distinctly biseriate, with the areolae arranged alternately. From the central nodule to the head-pole striae are radiate. From the

central nodule to the foot pole striae are radiate, become parallel and near the footpole become strongly radiate. Longitudinal lines are positioned approximately one –half the way between the axial area and margin. The apical pore fields are distinctly bilobed but reduced in size.

***Gyrosigma acuminatum* (Kutzing) Rabenhorst**

Valves linear-lanceolate at centre, sigmoidly deflected into broad, bluntly rounded apices. Raphe slit central, central fissures deflected in opposite directions. Terminal fissures curved over valve apices. Transverse striae more or less parallel, crossed by longitudinal striae that follow curvature of the raphe. This species prefers slow flowing or stagnant water and capable of tolerating high levels of pollution.

***Hantzschia* spp.**

Valves dorsoventral, margins linear, ventral margin concave in the middle. Apices protracted, rostrate. Striae slightly radial. The short, irregularly shaped fibulae are interrupted at the middle. A cosmopolitan species favouring periodically dry habitats, including soils and rock crevices. Widespread in a range of rivers, but probably introduced from soils.

Melosira granulata

Barrel-shaped frustules are heavily silicified. The valve faces are flat and joined together to form long, filamentous colonies. In girdle view, the Mantles are unevenly thickened internally creating an undulating appearance. A ring of evenly-spaced rimoportulae encircles the mantle, near the valve edge. Several rimoportulae are also present on the surface of the valve face are dichotomously branched and radiate from a hyaline central area. Areolae number 13-19 in 10µm.

***Meridion circulare* (Greville) C.A. Agardh**

Cells attached closely by their valve faces to form straight or fan-shaped colonies. Heteropolar taxa cuneate in valve and girdle views; some taxa isopolar, more or less linear in valve view, rectangular in girdle view. Prominent ribs across the valves visible in both valve and girdle view. Plastids numerous (+8-12), rather irregularly discoid, lying along the valve face.

Other abundant in calcareous springs and streams, particularly in the springs in cool water.

***Nitzschia umbonata* (Ehrenberg) Lange- Bertalot**

Valves linear, with weak concave central region. Poles apiculate, apices protracted or slightly capitate. Raphe marginal, supported by irregularly spaced fibulae and interrupted in the middle of the valve. Striae undulating, clearly visible in LM.

This taxa occurs in polluted water and is tolerant of extreme pollution.

***Neidium cf. affine* (Ehrenberg) Pfitzer**

Valves linear to linear elliptical, with broadly rostrate apices. Raphe ends fork – shaped, deflected in opposite direction at the centre. Central areas expanded, transversely elliptical. Striae punctate, parallel but slightly oblique, interrupted by longitudinal hyaline lines.

***Pleurosigma lange-bertalotii* Karthik & Kociolek**

Valves large, sigmod-lanceolate, apices narrow, rounded, curved in opposite directions. Axial area narrow, thickened, and forming a weak “S”. Central area elliptical with a thick central nodule. Raphe filiform, curved, with internal proximal fissures straight. Striae straight, parallel through, other orientations not notable in light microscopy.

This species occurs in circumneutral streams, at low conductivity conditions in pristine streams.

***Pinnularia viridis* (nitzsch) Ehrenberg**

Valves linear-elliptical to linear with parallel margins and broadly rounded apices. Axial area narrow, forming a relatively small, linear to elliptical central area. Raphe lateral undulate. External proximal raphe ends dilated, and curved to one side. Longitudinal lines present at about half the way between the axial area and the margins, running the length of the valve. Costate striae radiate at the centre of the valve, becoming parallel towards the pole.

Cosmopolitan. Occurs in abundant in circumneutral, oligo to mesotrophic waters with low conductivity.

***Rhoicosphenia abbreviata* (C. Agardh) Langebertalot 1980**

Several populations of this species have been observed during the study, but only two populations are depicted here. In girdle view, frustules have a bent wedge shape. Valves are heteropolar, linear to narrowly clavate with a narrowly rounded head pole and attenuated base pole. Valve length varies from 14 to 52 μm , and the valve width is 5-7 μm . The concave R-valve has a fully developed raphe with large central pores, while the convex D-valve has a reduced raphe system with short raphe slits line close to poles. Striae on both valves are parallel to weakly radiate throughout the valve length, and distantly spaced, 9-12 in 10 μm .

***Stauroneis amhicephala* Kutzing**

Valves linear-elliptic lanceolate with abruptly protracted, rostrate to sub capitate apices. Axial area is narrow, linear, widening near the central area. The central area is shaped like bow tie and is wider near the valve margins. Shortened striae are occasionally present in central area. Striae are radiate throughout.

Cosmopolitan species, prefer neutral to slightly alkaline waters.

***Surirella capronioides* Gandhi**

Valves heteropolar, obovoid with rounded head pole and narrowly rounded foot pole. Wing projection vertical and away from valve face. Alar canals and fenestrae distinct. Siliceous plaques across valve surface distinguishable in LM. Median area narrowly lanceolate terminating well before apices. Striae indistinct in LM. The median ridge forms a fin-spine at head pole terminus. The taxa is endemic to the Western ghats in oligotrophic to slightly mesotrophic streams.

***Tryblionella constricta* Gregory**

Valves linear, very concave in the middle. Apices cuneate, weakly protracted, narrow rostrate. Striae punctuate, visible in LM. Broad fibula interrupted in the centre. A cosmopolitan species commonly found electrolyte rich waters. Favours standing waters.

***Tryblionella hungarica* (Grunow) DG Mann**

Valves linear, becoming cuneate at the poles, only very slightly concave in the middle. Apices weakly protracted, rostrate. Striae interrupted by a longitudinal, internal central hyaline region. Fibulae are interrupted at the mid- region.

A cosmopolitan species found in high electrolyte content to brakish waters. Tolerant of strongly polluted conditions.

***Ulnaria ulna* (Nitzsch) Compere**

Valves linear, with margins parallel, tapering to protracted to rostrate apices. Central sternum narrow, straight. Central area transversely expanded rectangular area, nearly square in shape. There may be short or “ghost” striae present at the margins of the central area. Striae parallel. A single labiates process is located near the apex of one end of the valve.

Cells linked cell-to-cell to form a stellate colony. This taxon has a wide geographic distribution and often in mesotrophic to eutrophic, alkaline waters.

Class- CHLOROPHYCEAE

Order – Zygnematales

***Spirogyra collinsii* (Lewis) Printz 1927**

Filaments of rather slender cells, 15-21 μ in diameter, and about 5 times as long as broad, with plane end walls; chloroplast solitary. Conjugation scalariform and lateral, the tube formed by the male gametangium only; sporangia inflated slightly on both sides to contain the spore; the male gametangium formed by a partitioning off of one end of a vegetative cell. Zygospores ellipsoid; median wall coarsely punctuate; 35 μ in diameter, 60 μ long.

***Spirogyra micropunctata* Transeau 1915**

Filaments of fairly stout cells, 30-33-(36) μ long, with plane end walls; chloroplast solitary, making 2 to 4 turns. Conjugation scalariform by tubes from the male gametangium only; fertile cells becoming slightly inflated. Zygospores ellipsoid, the poles broadly rounded; median spore wall finely and densely punctuate; 37-42 μ in diameter, 57-70-(100) μ long.

Sub.Order- Desmidine***Cosmarium contractum* Kirchn. var. *West & West* 1905**

Cells longer than broad with a very deep, widely open sinus. Semicells entire, in outline broadly elliptic or oval, in epical view broadly elliptic. Cell wall smooth. Cell length 30-56 μm , breadth 17-40 μm .

Occurrence: acidophilous, oligo-mesotrophic. Rare in moorland pools.

***Cosmarium margaritatum* (P. Lunbell) J. Roy et Bisset Forster 1982,**

Cells longer than broad, in outline rectangular with broadly rounded angles. Sinus deep, linear and closed for the greater part. Cell wall beset with granules arranged in longitudinal and (irregularly) decussate rows. Apical view elliptic with broadly rounded poles. Cell length 60-80(-105) μm , breadth 50-65(-82) μm .

Mesotrophic. Rare in moorland pools and quaking fen hollows.

***Cosmerium psedopyramidatum* P. Lundell var. *Krieger & Gerloff* 1965**

Cells longer than broad with a deep, linear sinus, closed for the greater part. Semicells entire, in outline high –pyramidal with broadly rounded angles and convex to straight sides, in apical view ellipsoid. Cell wall smooth. Chloroplast with the single pyrenoid. Cell length 40-50(-60) μm , breadth 23-33(-40) μm .

Occurrence: Acidophilous, oligotrophic. Occasionally in bogs and moorland pools.

***Desmidium aptogonium* Brebisson ex Kutzing 1849**

Cells 21-31 μm wide, 13-19 μm long, moderately constricted with an acute, open sinus; 15-24.5 μm wide; semicells transversely oblong with small inflation on each side of isthmus beyond with lateral margins are slightly concave then converging to apex, 21-24 μm wide; apices concave in mid-region but at each angle form moderately long connecting processes producing a distinct cavity between adjacent cells; in vertical view mostly 3(-4)-angular.

***Euastrum dudium* Nageli var. *Ruzica* 1981**

Semicells in rough outline trapezoid. Lobes mutually separated by wide incurvations. Apices truncate with a rather wide, rather shallow, but sharply bounded median incision. Apical angles usually provided with a minute denticulation. Lateral lobes rounded to truncate, basal lobes rounded, truncate or slightly incurved. Semi cells with a slight central inflation, either without any sculpture or furnished with to elongate verrucae next to each other. On to lobes some additional granules or verrucae. Cell length (22-)25-35(-40) μm , breadth (17-)19-22(-24) μm . L/Br (1,3-) 1.45-1.65(-1.7).

Occurrence: meso-oligotrophic Rare in poor land pools.

Euastrum sinuosum* Lenorm. In Ralfs (1848) var. *capitatum

Similar in size and shape to var. *Dideltoides* Krieg., but with the polar lobe greatly dilated, and with only five facial swellings instead of six. This plant exhibits some variation in shape in the different collections,

***Mougeotia* spp.**

Filaments simple and unattached; cells cylindrical, 5-20 or more times longer than broad, with plane end walls; chloroplast a flat or sometimes slightly twisted plate, mostly 1 per cell, rarely to occupying most of cell length, with pyrenoids in one (or more) linear row(s), occasionally scattered; when only one chloroplast present per cell the nucleus lies against cellwall, when 2 per cell, nucleus lies between chloroplasts; conjugation mostly ladder like, occasionally solely lateral isogamous (anisogamous in only 3 species); zygospores fuse within swollen conjugation tube, gametangia cut-off by 2-4 walls; zygospores range from spherical, compressed- spherical, ovoid, ellipsoidal to quadrate ellipsoidal with flattened or truncate angles; parthenospores and aplanospores production are reported for several species.

***Mougeotia abnormis* Kisselwe 1931**

Cells 10-12(-20) μm wide, 50-250 μm long; chloroplast filling length of cell, with 5-8 pyrenoids; conjugation ladder- like; zygospores in a triangular or quadrangular tube, spherical to triangular-ovoid with concave walls, 24-28(-40) μm wide, 26-36(-148) μm long, median wall smooth; parthenospores cylindrical or ellipsoidal.

***Pleurotaenium trabecula* (Ehrenberg) Nageli 1849**

Cells sub cylindrical, 24-46 μm broad, 350-600 μm long; semi cells with one or two basal inflations above which lateral margins are slightly convex, then tapering gradually to smooth subtruncate apices, 16-32 μm broad, perforated by several terminal pores; walls colourless, smooth with scattered spores; chloroplasts parietal ribbons with numerous pyrenoids along length.

Staurastrum multispiniceps

Cells of median size, length with processes about two-thirds the width with processes; slightly constricted, sinus small and widely open. In front view semicells cyathiform with a slightly inflated base, upper part expanded into three long slender processes with serrate ventral and dentate dorsal margins, and four terminal teeth; apex convex and bearing several small conical spines. In vertical view a triangular body with straight sides and angles produced into long slender processes with faintly undulate margins, a central row of minute teeth four terminal spines; apical area with three intra marginal rows each of six small conical spines.

Staurastrum spinipendens

Cells rather small, length without processes about 4/10 of width with processes, slightly constricted, sinus small and widely open. In front view semicells cyathiform, the upper part widely expanded into three long, slender, almost horizontal processes bearing three terminal teeth; ventral margins of processes undulate, dorsal margin serrate on the distal half, the proximal half bearing about five bifid verrucae of graduated sizes; apex convex and smooth; subapically on each side of the vertical centerline two trispinate verrucae, each with two short and one very long spine, the latter curved outwardly and hanging down below the upper lateral margin of the semicell. In vertical view a triangular body with biundulate margins from which project on each side two rounded trispinate verrucae each with two short and one very long and slightly curved spines; angles of body extended into long and slender processes with three terminal teeth, on distal half of the processes two marginal rows of minute teeth, and on the proximal half about five bifid verrucae; apical surface smooth.

***Staurastrum sexangulare* (Bulnheim) P.Lundell 1871**

Cells 5-7- radiate, 42-54 μm wide without processes, 74-100 μm with processes, 44-60 μm long without processes, 70-100 μm with processes, constriction shallow, sinus U shaped, isthmus 13-22 μm wide; semicells broad basin shaped, basal margins

diverging in to angles each bifurcating to form one divergent and one convergent serrated process ending in three blunt spines; apices and body without ornamentation.

***Staurodesmus convergens* (Ralfs) S.Lill. West & West 1912**

Cells 2-radiate, exclusive of spines broader than long. Sinus deep, from its apex initially (almost) closed, then widely open. Semicells ellipsoid in outline, at the poles with a shorter or longer, downwards projected spine. Cells length 33-54 μm , breadth without spines 40-64 μm . Length of spines up to 15 μm . Zygospores about globular, smooth-walled.

Occurrence: oligo-mesotrophic.

Order- Volvocales

***Eudorina elegans* Ehrenberg 1832**

Colony spherical or ovate with 16-32 ovoid cells evenly disposed within a gelatinous envelope, or arranged in transverse series, the cells usually lying near the periphery of the envelope but sometimes crowded toward the interior. Cells 10-20 μ in diameter; colonies upto 200 μ in diameter. This species shows a great deal of variation in the size and shape of the colony. In liquid-preserved material the envelope shows the form of *E. unicocca* G.M.Smith, with posterior mammillate projections.

Common in euplankton of hard water lakes.

Order- Chlorococcales

***Chlorella vulgaris* Beerinck 1890**

Cells spherical, scattered among other algae or sometimes occur ring in almost pure growths; chloroplast a parietal cup, sometimes without a pyrenoid; cells 5-8.5-(10) μ in diameter. In small lakes and pools, especially where there is a concentration of organic matter.

***Dictyosphaerium pulchellum* H.C. Wood 1872**

Colonies 80-100 μm wide, 4-, 8-, 16-, 32- or 64- celled or more, spherical, ovoid or of indefinite shape; cells (4-)5-8(-10) μm wide, young cells obovoid, ellipsoidal to spindle-shaped, older cells spherical, walls thin and smooth, attached to tetrachtomously branched, threads which are often in contact with one another

(depends on colony age); chloroplast basal and cup shaped, fills half to two-thirds of cell, lateral in young cells; autospores 2 or 4 in each sporangium, (2.8-) 4-6 (-7) × (2.5-)4-5.5(-6.5) μm and similar in shape to vegetative cells, released by gelatinization of mother cell wall.

***Pediastrum simplex* (Meyen) Lemmermann 1897**

Colony entire, composed of 16-32-64 smooth-walled cells; inner cells 5 or 6 sided; peripheral cells with the outer free wall extended to form a single tapering, horn like process with concave margins; cells 12-18μ in diameter. Common in the plankton of a number of lakes.

***Pediastrum tetras* (Ehrenb.) Relfs 1844**

Colony entire; inner cells (frequently none) with 4-6 straight sides but with one margins deeply incised; peripheral cells crenate, with deep incision in the outer free margin, their lateral margins adjoined along 2/3 of their length; cells 8-12-(16) μ in diameter.

Common and generally distributed in both eu and tychoplankton.

***Pediastrum Boryanum* (Turp.) Meneghini 1840**

Colony entire; cells 5-6 sided with smooth or granular walls; peripheral cells with outer margins extended into 2 blunt tipped processes; cells up to 14μ in diameter, 21μ long; 36-celled colony 85-90μ wide.

Common in the Eu-and tychoplankton of many lakes and swamps; generally distributed.

***Scenedesmus dimorphus* (Turpin) Kutzing 1833**

Coenobia of 2, 4 or 8 linearly or distinctly alternatively arranged cells in 1 or 2 rows; cells 2-9.4(-14) μm wide, (5-)6-25(-27) μm long, broadly spindle shaped, tapering, marginal cells slightly outwardly curved but only in subapical part.

Scenedesmus quadricauda

Coenobia of 4 linearly arranged or sometimes slightly alternately arranged, tightly packed cells; cells 35.4μm wide 7.8-12.3μm long, long-ellipsoidal to ovoid -

cylindrical, with rounded spines and a diagonally symmetrical spine on one apex of each marginal cell, walls smooth and without ornamentation. Sometimes a small tooth may be present at cell apex.

***Selenastrum gracile* Reinsch 1867**

The chloroplasts is laminate and parietal, covering most of the wall gracefully curved cells occur in clusters of from 4 to 32, with a tendency to have the convex or 'outer' and 'inner' walls of the crescent are more nearly equal than in the somewhat similarly shaped cells of *Kirchneriella*, a genus which has cells irregularly arranged within a gelatinous envelope. Five species are commonly found in the United States, mostly differentiated by size of cell and degree of curvature. Mixtures of algae from shallow water often include *Selenastrum*, but they may occur in the euplankton.

Order-Chaetophorales

***Cylindrocapsa geminella* Wolle 1887**

Filaments long composed of ovate or oblong cells that are up to twice their diameter in length; in copious lamellate mucilage. Chloroplast massive and usually obscured by starch grains. Cells 12-18 in diameter, 18-30 long; sometimes multiseriate and pseudoparenchymatous. oogonia globose or pyriform-globose, as much as 50 in diameter [including gelatinous sheath] usually in a series 3-9. This species is usually found entangled among other filamentous algae; especially abundant in desmid habitat, such as acid swamps.

Order- Oedogoniales

***Oedogonium* spp.**

Filaments unbranched, composed of cylindrical, capitellate or occasionally almost hexagonal cells, terminal cell rounded but sometimes acute or drawn out into a long hair; chloroplast parietal and net-like network, usually with several pyrenoids; sexual reproduction oogamous; oogonia arise by division of supporting, sometimes inflated, suffultory cell, occasionally bearing projections such as ribs or warts, spermatozooids enter the oogonium through either a simple pore or cleft- like opening (rimiform), or a split in the wall that forms a lid-like operculum, opening positioned in middle of oogonium (median), above middle (supermedian), below middle (inframedian) or high up on oogonium (superior), occasionally opening at very top and immediately

below a following cell (supreme); spermatozoids in macrandrous species, 1 or 2 in each antheridium, formed by a horizontal or vertical division; dwarf males in nannandrous species vary in size, shape of the stipe and number of cells; oospores often different in shape from the oogonia and not always completely filling them, smooth-walled or having ribs, pores or another type of wall ornamentation.

Class- DINOPHYCEAE

***Ceratium hirundinella* (O.F.Muller) Dujardin 1841**

Cells broadly or narrow spindle shaped depending on degree of horn divergence, strongly dorsiventrally flattened, 28-55µm wide, 40-450µm long, one apical and 2 or 3 antapical horns; epitheca with distinct shoulders just above cingulum and tapering to a long horn; hypotheca broad and short, divided into 2-3 posterior horns; cingulum horns; plates smooth and with net-like ornamentation on cell body, coarsening on horns; chloroplasts numerous, parietal, oval and yellow-brown; red corpuscular bodies often seen; hypnozygotes, smooth, triangular and with one horn at each corner.

Class- CYNOPHACEAE.

Order- Chroococcales

***Aphanocapsa elachista* West et G.S.West 1914**

Colony spherical or ellipsoidal, up to 100µm in the largest dimension, through typically smaller, with outer layer of the colourless mucilage weakly defined or even becoming diffluent. Cells 1.5-3 µm, single or in pairs, well-spaced in the mucilage.

***Aphanocapsa pulchra* (Kutz.) Rabenh.**

Thallus gelatinous, homogeneous, blue-green algae, tuberculate, attached or free; cells spherical, 3.5- 4.5(4.8) µm diam., loosely arranged, single or in twos, pale blue-green; individual sheaths of cells indistinct.

***Chroococcus dispersus* var. *minor* G.M.Smith**

Colony, small, floating, typically 4-32 cells. Cells sub-spherical or elliptical, 3-4.5(-5) µm, occasionally with a narrow indistinct sheath, but otherwise embedded in colourless, homogeneous mucilage, with an outer layer ranging from distinct to diffluent.

***Chroococcus limneticus* Lemmermann 1898**

Colony, free-floating, ovoid or irregular, with up to about 40 cells, but usually fewer; these cells occur within the homogeneous mucilage in groups of 2s or 4s and with these mini-groups spaced from each other; outer margin of the colony usually distinct, but sometimes very diffluent; mucilage colourless. Cells typically hemispherical, 6-12(-20) μm ; gas vacuoles absent. This species shows considerable variation.

Planktonic in a range of lakes and ponds, though probably most characteristic of mesotrophic waters present throughout the year, but usually forming only a minor component of the phytoplankton.

***Chroococcus turgidus* (Kutzing) Nageli 1849**

Colony microscopic, usually 2-8 cells, though occasionally up to 32 and very rarely solitary cells, with the outer most sheath layer forming the margin of the colony, which is usually very distinct. Cells spherical, subspherical, ovoid or hemispherical (after division), (6-)8-32(-45) μm Sheath layers fairly distinct, usually developed each time the cell divides, though occasionally with more lamellations.

***Merismopedia glauca* (Ehrenberg) Nageli 1845**

Colony up to 64 cells, regularly and quite densely packed. Margin of mucilage distinct, extending slightly beyond outer cells. Cells spherical, widely ellipsoidal or (after division) hemispherical, (2.8-) 3-6 μm diameter; cells often rather pale and sometimes pinkish.

Wide range of fresh and brackish waters, on the surface of silt, among submerged macrophytes or occasionally washed into the plankton, typically mesotrophic conditions.

***Microcystis aeruginosa* Lutz. emend. Elenkin**

The marble like cells of this genus are closely compacted and irregularly arranged in definitely shaped, but mostly irregular colonies, enclosed in mucilage. The mucilage is often not clearly seen in preserved material. *M. aeruginosa* Kutz. Colonies are highly irregular and clathrate when mature. Some species contain pseudovacuoles and float high in the water.

***Synechocystis endophytica* (G.M.Smith) comb. Nov.**

Endogloeic species, found in the peripheral parts of the mucilage of *Microcystis* species. Cells solitary or in small groups or only in pairs after division. Cells blue-green, without aeropotes, initially spherical, oval to short cylindrical before division, 1.7-2.5 × 1.7-2.2µm in population studied so far. Daughter cells round off to spherical shape before division is completed.

Order- Nostocales***Nostoc rivulare* Kutzing ex Born.et Flah.**

Thallus at first globose, size variable, up to 2-3mm diameter., later bulbose tuberculate, hollow irregularly torn and perforate, lobed, fragile, young ones light pale green, older ones yellowish or variously coloured, filaments loosely entangled, flexuous; sheath distinct at the periphery of the thallus, yellowish at the surface, inside hyaline and diffluent; trichome 4-4.2µ broad; cells spherical to oblong, longer than broad; heterocysts oblong, 5-6µ broad; spores oblong or barrel shaped, 6-8µ broad, 7-10µ long, contiguous when mature, epispore smooth hyaline or brownish.

***Anabaena aequalis* Borge 1906**

Trichomes often aggregated to form a blue-green colony. Trichomes straight, without an obvious layer of mucilage. Cells short barrel- shaped, 4.5-5.5µ wide, end cell rounded. Heterocyst 4.5-5.5µ wide, 6.5-10.5µ long; mature heterocyst almost always more elongated than vegetative cell. Akinete cylindrical, single or in pairs, distant from the heterocyst, 5-7µ wide, 21-41µ long, wall smooth, colourless.

Fresh waters, among submerged plants.

CLASS-EUGLENOPHYCEAE**Order-Euglenales*****Phacus orbicularis* K. Hubner 1886**

Cells 39-46, wide, 50-80 long, orbicular to broad ovoid in outline; anterior end slightly narrowly rounded; posterior end broadly ended with the short curved tail – piece; apical groove nearly full length of cell; pellicle longitudinally and roughly striated, short transverse striae present; paramylon of 1-2 disc –or circular plate- like bodies; flagellum same length as cell.

Probably cosmopolitan stagnant mineralized, mildly polluted and humic waters in ponds, swamps, ditches and lakes, also in brackish water; indicator of clean and mildly polluted water.

***Trachelomonas caudate* (Erenberg) F. Stein 1878**

Lorica 17-23 μ m wide, 29-53 μ m long, oval, narrowing slightly posteriorly and terminating in a short, straight or slightly bent, acute conical spine; walls covered dense, short, straight spines (5 μ m long); apical pore surrounded by a long cylindrical collar with a toothed rim (widening and with 5-6 teeth).

Probably cosmopolitan; wide spread in fish ponds, ditches, puddles, small rivers and swamps, indicator of moderately polluted water.

Chapter-5

CONCLUSION

The present investigation to explore algal diversity of Ghataprabha Bird Sanctuary, Karnataka was conducted to assess its present ecological status.

Belgaum district provides an excellent topography with a large number of lakes and ponds, both natural and man-made, throughout its extension. Each of these habitats differ in size and shape, usage pattern and support exclusive aquatic vegetation. To justify the hypothesis, Planktonic as well as Benthic algae were collected from the study site over a period of 6 months. Appropriate methods were used for the collection, preservation, identification and enumeration of the algae.

Phytoplankton form the life communities and play a significant role in lake ecosystems. Members of the Chlorophyceae contributed (41%). The distribution of algae enables us to learn peculiarities of sensitive communities to the environment. Long term studies on plankton component in relation to fluctuations of water quality parameters is useful in developing and evaluating significant ecological indices. The present study recorded 64 algal taxa. Bacillariophyceae and Chlorophyceae showed a marked appearance whereas Cyanophyceae, Dinophyceae, and Euglenophyceae were poorly represented by the habitat.

The levels of degradation of the aquatic habitat was found to be moderate. Algal genera *Gyrosigma*, *Amphora*, *Scenedesmus* are the common indicators of organic pollution. Diatoms serve as excellent tools when conservation strategies are to be

developed. Presence of Desmids in the present investigation indicates the acidic and less disturbed nature of the habitat.

The outcome of the study on Reservoir at Ghataprabha Bird Sanctuary, Karnataka clearly depicts enormous diversity of algae representing the moderate level of pollution. Further longterm monitoring using algal assemblage data is required to plan the conservation strategies for the lake.

Chapter-6

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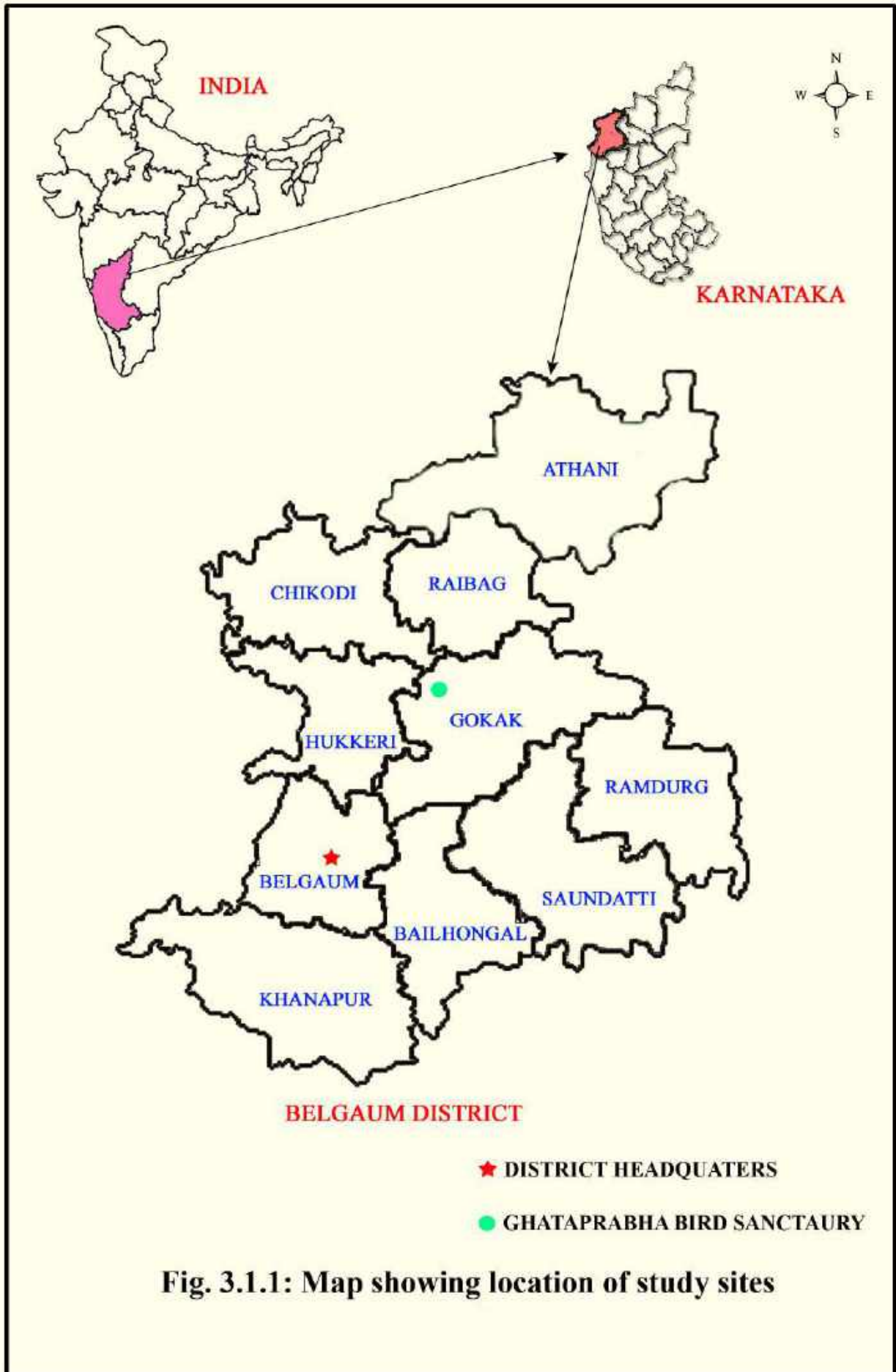




Fig 3.2: Panoramic view of reservoir at Ghataprabha Bird Sanctuary

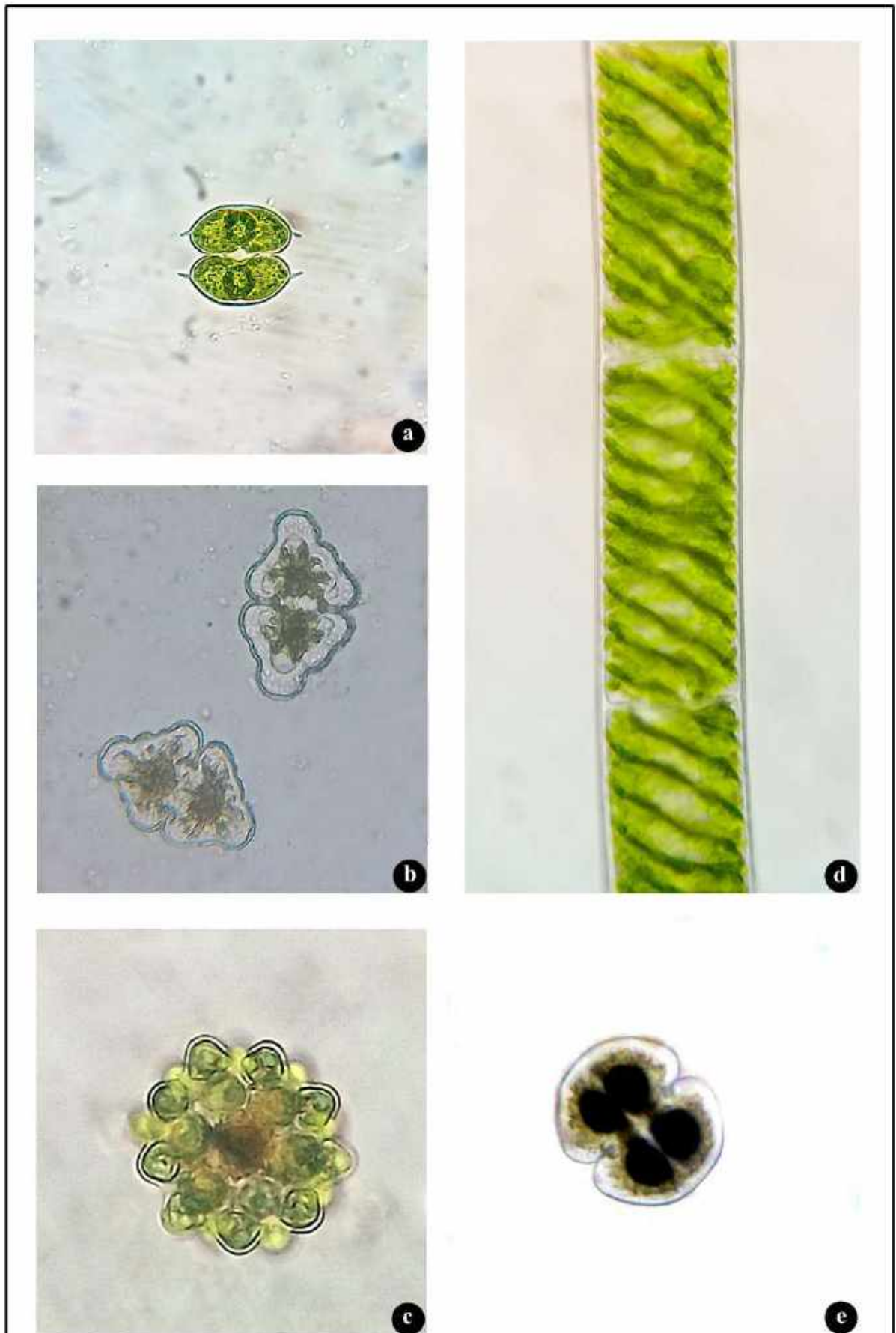


Plate 4.1: Members of CHLOROPHYCEAE from Ghataprabha Bird Sanctuary reservoir
 a. *Staurodesmus convergens* b. *Euastrum sinuosum* c. *Eudorina elegans* d. *Spirogyra collinsii*
 e. *Cosmarium margaritatum*

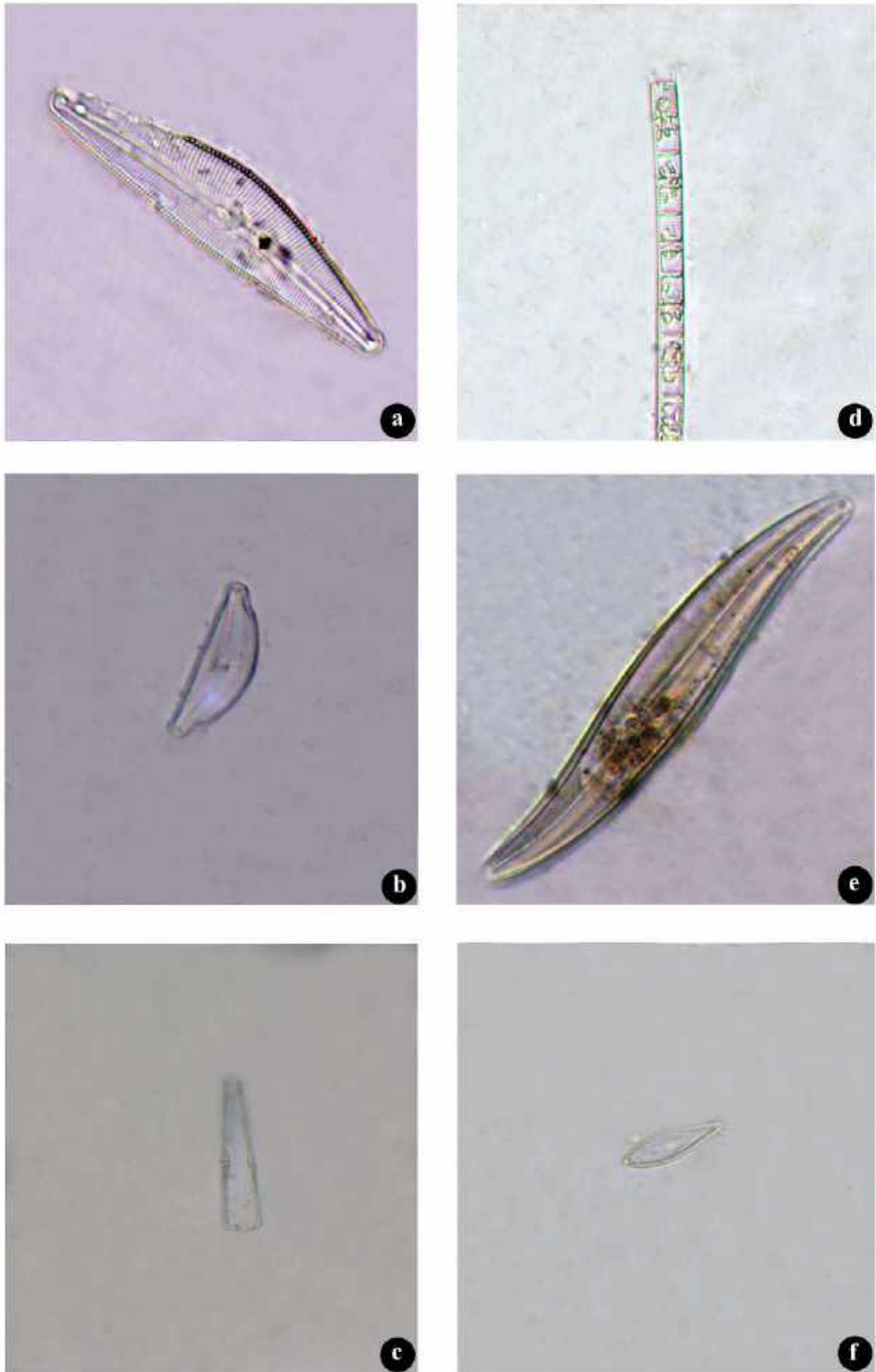


Plate 4.2: Members of BACILLARIOPHYCEAE recorded from Ghataprabha Bird Sanctuary reservoir a. *Achnanthes lanceolata* b. *Cymbella tumida* c. *Rhoicosphenia abbreviata* d. *Melosira granulata* e. *Gyrosigma acuminatum* f. *Gomphoneis herculeana*

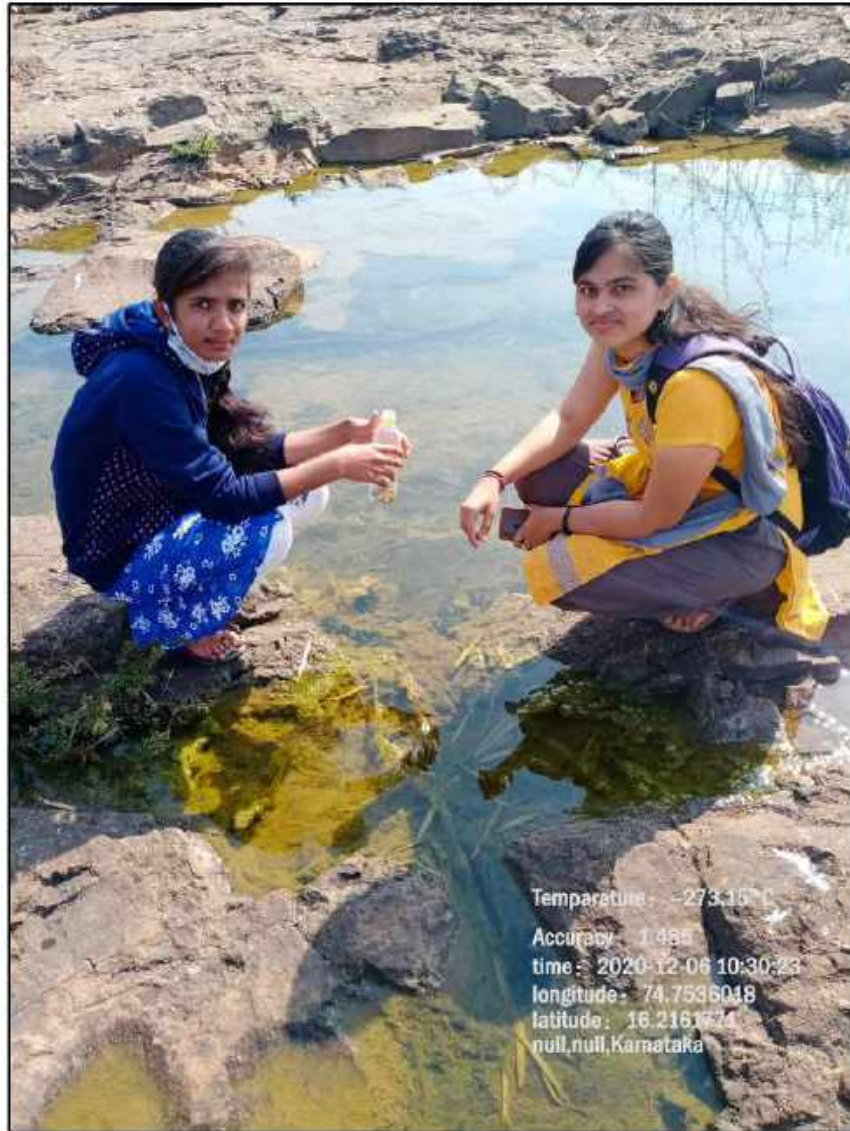


Fig 3.3: Collection of Phytoplanktonic sample from Ghataprabha Bird Sanctuary

ALGAE OF MARKANDEYA RIVER AT YOGIKOLLA



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UNDER THE GUIDANCE OF

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2021

DECLARATION

We declare the work in this dissertation entitled “Algae of Markandeya River at Yogikolla” has been carried out by us in the P.G. Department of Botany, Basavaprabhu Kore College, Chikodi. The information derived from the literature has been duly acknowledged in the text and list of references provided. No part of this dissertation was previously presented for another degree or diploma at this or any other institution.

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CERTIFICATE

This is to certify that; this project entitled "Algae of Markandeya River at Yogikolla, Gokak, Belagavi" is being submitted herewith for the partial fulfillment of award of the Degree of Master of Science in Botany, Rani Channamma University Belagavi. The work reported in this dissertation is based upon the results of the original work carried out by Miss. Shreya V. Gaikwad and Miss. Vidyashree Ugrani under my supervision and guidance.

Place: Chikodi

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Chapter-1

INTRODUCTION

1.1 General introduction

Biodiversity means the variability among living organisms from all sources and the ecological complexes of which they are part and include diversity within species or between species and of eco-systems (UNEP 1992). India is one of the twelve mega bio diversity countries in the world. In aquatic biodiversity, the density and diversity of organisms depend on availability and quality of water. As water is an essence and elixir of life on the earth and that water totally dominates the chemical composition of all organisms, it is obvious that the quality of water affects the species composition, abundance, productivity and physiological conditions especially, the indigenous population of aquatic organisms. Therefore, the nature and health of any aquatic community is an expression of quality of the water (Reynolds, 1996). The aquatic microphytes play a significant ecological role and are being extensively used as an indicator of water pollution as they are natural inhabitants of aquatic ecosystem that harbours a variety of communities which constitutes the characteristics and functioning of the ecosystem in terms of maintaining the production of food chain. The density and diversity of phytoplankton and their association as biological indicators is very crucial for the assessment of water quality. Algae constitute a major part of primary producers in a aquatic ecosystems and are ubiquitous components of the biosphere (Kavitha et al., 2005). They are cosmopolitan in distribution. Algae along with the other higher plants are the primary source of energy in the biosphere and form the basic of all life on land, fresh and marine water environment. These organisms along with the other aquatic as well as terrestrial plants make up the

biodiversity and also sustain life by providing food, shelter, oxygen and play a fundamental role in regulating global climate (Dwivedi et al., 2005). Algal diversity and species composition respond to change of water quality in all perennial water bodies. The composition of algal diversity serves as an important tool to analyse the water quality

(Jena et al., 2008). Phytoplankton plays an important role in the biosynthesis of organic matter (primary production) in aquatic systems, which directly or indirectly serve all the living organisms of a water body as food (Kumar and Dutta, 1991), (Verma and Mohanty, 1995). Generally, the different planktonic species can tolerate different ranges of temperature as well as light and nutrient limitations. These tolerance levels determine the dominance of species at different localities and seasons. In a multi species algal community, the growth of different species is likely to be limited by the resources, including different nutrients

(Wetzel, 2001). The structure of aquatic communities is important in monitoring the water quality. Planktons also strongly influence certain non-biological aspects of water quality such as pH, colour, taste and odour. Benthic algae are critical components in most stream food webs (Stevenson, 1996; Wehr and Sheath, 2003). These organisms help stabilize substrata and provide food and habitat for many other organisms, especially invertebrates. Because benthic algal assemblages are attached to substrata, they serve as “micro environmental-loggers” for physical, chemical, and biological disturbances that occur in stream reaches during the time in which the assemblages develop. Diatoms are especially good indicators of the environmental integrity of lotic ecosystems because they are common in most streams and provide the primary food source for many invertebrates and some juvenile fishes that reside in these systems (Dixit et al., 1992; Lowe and Pan, 1996; Stevenson and Pan, 1999). In

addition, diatoms are useful monitors of change because: 1) they are readily dispersed and can invade a variety of habitats; 2) they are relatively easy to sample and create minimal impact to resident biota during collections; 3) their response time (generation time) lies between bacteria (hourly) and macro invertebrates (triannual); and 4) diatoms are sensitive to subtle changes in environmental conditions and/or disturbances that may not visibly affect other communities, or may only affect other communities at greater levels of disturbance (Bahls, 1993; Stevenson and Pan, 1999 ; Stevenson and Bahls, 1999). In addition, the identification of diatoms is based on morphological features of their rigid walls (frustules) made of silicon dioxide (glass). This provides an opportunity to prepare permanent reference slides of diatom assemblages under different environmental regimes for use in assessing water conditions. Many investigators have used various diatom metrics to determine environmental conditions in streams including discharge and hydraulic fluctuations (Duncan and Blinn, 1989; Biggs and Hicky, 1994; Benenati et al., 1998), light (Hardwick et al., 1992), temperature (Squires et al., 1979; Blinn et al., 1989), salinity (Blinn and Bailey, 2001), nutrients (Patrick, 1977; Bahls et al., 1992; van Dam et al., 1994, Hill et al., 2000, Blinn and Bailey, 2001), and herbivory (Colletti et al., 1987, Steinman et al., 1987).

1.2 Objectives of the study:

1. To document the algal taxa, present in the habitat
2. To assess the pollution status based on algal diversity

Chapter-2

REVIEW OF LITERATURE

All over the world extensive and appreciable work has been carried out on freshwater algal diversity, and limnology. An account on the status of algal diversity in World, India and Karnataka is given below.

2.1 International Status

It was in 1754, Linnaeus gave the name of Algae to a group of plants and Jussieu (1789) was the first person to delimit the algae as known today. After a long period of silence, Link (1820-1833) studied the algal flora of Germany and Agardh worked on Scandinavian algal flora (1817-1824). Agardh (1824) arranged algae in six well defined orders: Diatomaceae (including Desmids), Nostochineae, Confervoideae, Ulvaceae, Florideae and Fucoideae while describing a group of 20 genera. The work of Kuetzing (1843-1849) however, was most significant as he described a bit more number of algal genera than any other contemporary phycologists. Hassal (1842-1845) was another scientist who made an outstanding contribution towards the field of algology. Berger (1894-1936) carried out some work on algae in Sweden, Australia, Argentina, Bolivia and China. Berger (1898-1936) carried out extensive research on freshwater algae of Sweden and examined numerous samples sent to him from collectors of Australia, South Patagonia. Lagerheim (1883-1902) studied the algal flora of Sweden and collections from Equador, India and Abyssinia. Lemmerman (1891-1910) worked on the algal flora of Germany and collections received from China and Paraguay. Nordstedt (1873-1897) described few species of algae from Argentina, Patagonia, Cameroon, Newzealand and Australia. A specific study on Cyanophyta

was initiated by Borzi (1878 - 1894), De Toni (1888-1905).

British researchers were also among the pioneers of algal research. G.S. West (1899- 1916) and W. West (1889-1909) made an exclusive study on freshwater algae and discovered a number of new species and also examined specimens sent to them by collectors from Tanganyika, Victoria, Egypt, Southwest Africa, Madagascar, West Indies, Ceylon, Burma, Bengal and Madras. Another remarkable contribution was made by Fritsch and Rich (1907- 1937) on the freshwater algae of South Africa. Strom (1920-1926) described some new species of algae from Turkey, Norway and Iceland.

Interest in Diatoms increased manifold from the very day of its discovery. Their taxonomic position has still been unsettled. Being a pioneer worker, Agardh (1824) published his work on Diatoms including Desmids. Schutt (1896) divided diatoms into two groups Centricae and Pennatae. Islam and Haroon (1975) and Islam and Morshed (1985) worked out the taxonomy, systematic and other aspects of the group diatom. Krishnamurthy (1954) and Gandhi (1955) have worked on diatom flora of India.

Fritsch (1935 & 1945) studied algae in detail, describing their morphology and reproduction in two volumes of his works under the name of “The Structure and Reproduction of the Algae”, which was an incredible contribution to the field of algology and is considered as one of the most important treasure in the field of phycology. Thienemann (1954) studied the tropical freshwater plankton. Bold and Wynne (1978) also worked on the structure and reproduction of freshwater algae. John et al. (2002) in their book, provided the first modern account and identification guide to more than 2200 species of freshwater algae.

Coker (1954) studied the ecology of streams, lakes and ponds of United States. Lund (1965) studied the ecology of freshwater. Regarding the freshwater ecology of algae remarkable contributions had come from many renowned workers. Arnold (1969) studied the ecological status of Lake Erie. Bennett (1970) studied the ecology of lakes and ponds of New York.

Algae as indicator of environmental quality are one of the important topics in the contemporary world. Prescott (1962), after an extensive study in Michigan and Wisconsin reported that blue green algae are rare or absent in lakes with pH below 5. Presence of algae as disturbance indicator of biological equilibrium in tanks was studied by Fogg et al. (1973).

Ecology of some freshwater phytoplankton was also studied by Hutchinson (1957). While working on ecology of freshwater phytoplankton, Lund (1965) described algal productivity in lakes and its related factors.

Economic value of algae and algal products are uncountable. Algae are very useful as food either directly or as food products but still their use are limited. Tilden (1935), Johnston (1970, 1976), Dixon (1973) gave extensive account of algae used as food and food products. *Spirulina* has achieved the highest position in case of protein content, as it has 60- 70% of protein of its total biomass. Now a day's *Spirulina* is used for curing of anemia (Takeuchi, 1978), antiviral activity (Gustafson, 1989), treatment of nutritional deficiency (Belay et al., 1993). Moreover, it is rich in vitamins, minerals and β -carotene, thus truly declared as the best future food for mankind by UN at the world food conference in 1979.

2.2 National Status

Phycology in Indian context was started much later than that of world standard. Most of the pioneering works were done by British colonial workers. The works of Indian authors can be clearly grouped into three periods. During the first period *i.e.* from 1798 to 1854 some classical works like description of seaweed.

The second period extended from 1858 to 1907. In this period some classic and valuable works came from a group of professional workers. Lagerheim (1888) described 52 desmids from Bengal. Turner (1883) published an account of “The Freshwater Algae of East India” which included detailed contribution of algal flora recorded so far. He included 22 species of Myxophyceae, 542 of Desmids. Other contemporary phycologists of that period were Hobson (1863), Martens (1871), Dickie (1882) and many more.

It was from 1919 onwards, third phase of algal study started in India where Indian phycologists came forward and performed a great deal of appreciable works. Sengupta (1920-1954) worked a lot on Volvocales, Chaetophorales, Zygnematales and Blue green algae of India. Sengupta et al. (1940, 1941, 1944, 1981) studied morphological details of *Cylindrocapsa geminella*, *Polysiphonia platycarpa*, *Microdictyon tenuis*. Due to such an immense contribution, he is truly called as “Father of Modern Algology in India”. Bruhl and Biswas (1929) was the pioneer in studying algae in Eastern India. Bharadwaja (1928-1936) contributed towards the knowledge of BGA and he along with his followers established a base of algal research at Banaras Hindu University. Another outstanding contribution came from the great Indian algologist Randhawa, who published his works as research articles on species of Zygnematales, Oedogoniales and Vaucheriaceae. And his

monograph on Zygnemaceae is a valuable ethic. Prasad (1952) described some new forms of Nostocaceae from river of Baranasi. Krishnamurthi (1954) described for the first time the freshwater diatom flora of South India and reported a number of new forms. Gandhi (1959, 1960) presented a detail account of diatoms collected from Sagar and also the diatom flora of temporary ponds of India and reported many new taxa. Desikachary (1959) published his monograph "The Cyanophyta" which was an exclusive document for the workers till today. Vasistha (1960) working on Myxophyceae of India and reported two new species and one new variety. The morpho-taxonomic studies of Eastern Himalayan algal flora have contributed by Das (1961), Santra and Adhya (1973, 1976) and Alfred (1978).

Singh and Saha (1982) described 16 new species of pond diatoms from Bihar. Gurudeva et al. (1983) illustrated the systematic position of 72 taxa of desmids and eight out of them were new records from India. Hosmani and Bharati (1983) described 42 species of Euglenineae from Madgaon. Kou1 et al. (1983) described 44 species of algae from Dal Lake in Kashmir, of them eight species were new to India and one to world algal database (*Scenedesmus longus* var *naegelli* f. *srinagari*). Somashekar (1983) collected 50 desmids, 35 Chlorococcales and 104 blue greens from river Cauvery concluding that the polluted stations of river are mostly dominated by Cyanophyceae.

Hedge (1986a) reported five new taxa of desmids belonging to *Cosmarium corda*. Hedge (1986b) added 24 new freshwater pond dwelling desmids to the algal flora of Karnataka. Isaacs and Hedge (1989) collected 72 freshwater algae from permanent ponds of Kannada dist. of Karnataka. Regarding the contribution to the North Indian algal flora the noteworthy literatures have been made by Kant and

Anand (1978), Habib (1996, 1997), Kant and Gupta (1998), Singh and Gupta (2000), Suseela and Dwivedi (2001), and Mishra et al. (2002, 2005).

Other than these general topics on algae, many authors contributed a lot on algal cytology, physiology, taxonomy, ecology, evolution, productivity, response to toxicity, response to environmental changes, role in economy etc. Munawar (1970) during his extensive limnological studies on freshwater ponds of Hyderabad described the biocenose, distribution and seasonal abundance of unicellular and colonial phytoplankton in polluted and unpolluted environment. Zutshi and Vaas (1978) studied the limnological studies in Dal Lake. Kiran et al. (1998) carried out a comparative water quality assessment of Yedyur and Bannerghatta lakes of Bangalore.

Bharati and Hedge (1982) studied the freshwater algae from 52 different ponds of Karnataka and Goa and recorded 47 desmids. Chadha and Pandey (1982) explored the algal taxa growing in exposed walls of buildings and recorded 24 taxa and also noted some peculiar variations on their distributional patterns on different kinds of walls.

Bongale (1987a) studied the distribution of algae in acidic paddy field soils of Karnataka and reported 63 species of Cyanophyceae, 17 Chlorophyceae and 26 Bacillariophyceae which includes seven new taxa of Chroococcales. Patel and Jawale (1985) studied the morphological and cytological features of *Lychnothamnus barbatus* (Meyen.) Leonh. Saha (1986) reported 280 algal taxa from freshwater ponds of Bhagalpur. Studies on phytoplankton diversity in response to abiotic factors in Veeranam Lake in the Cuddalore district of Tamil Nadu was studied by Senthilkumar and Sivakumar (2008). Seasonal variation of phytoplankton in a

freshwater tank of Maharashtra was studied by Milind and Hujare (2008).

Many more workers and researchers made contributions to the Indian phycology. Prominent contributors were Mishra (1937), Allen (1925, 1928, 1961), Kundu (1929, 1934), Dixit (1937), Venkataramana (1953-1957), Desikachary (1939-1949), Vaidya (1963 & 1968), Kodhari (1967), Ramanathan (1964, 1968), Prasad and Godward (1963), Prasad and Mehrotra (1970), Prasad and Jain (1973), Kant (1971), Patel and Isabella (1974), Verma (1981), Prasad and Srivastava (1992), Singh et al. (1982), Trivedy (1982), Patel and Patel (1982), Jha and Kaushal (1983), Mehrotra and Jaitly (1983), Maity and Santra (1985), Pal and Santra (1985 & 1987), Prasad and Jaitly (1985), Jha et al. (1986), Prasad and Chowdhury (1986), Shukla et al. (1988), Vohra (1991), Rawla and Rattan (1989), Bharati (1990), Nirmala et al. (1990) Kant and Vohra (1991), Srivastava and Odhwani (1992), Kant and Gupta (1998), Gandhi (1999), Subha and Chandra (2005), Muthukumar *et al.* (2007), Arulmurugan et al. (2010).

The variations of algal variety in pure and polluted water bodies were studied in India by Seenaya (1972), Rama Rao et al. 1978), Mishra and Saksena (1993) have offered the noteworthy contributions towards this field of algae related to aquatic pollution. Verma and Dalela (1975) during their study in Kalindi River designated *Oscillatoria*, *Spirogyra* and *Stigeoclonium* as pollution marker. Similar results were also obtained by other workers during their own study in different aquatic systems (Patrick, 1948 & 1965, Rama Rao et al., 1978, Jeeji Bai and Rajendran, 1980). Zutshi et al. (1980) made a comprehensive limnological study on nine lakes of Jammu and Kashmir and concluded that the tropic evolution of lakes occurred due to human interference.

Mishra and Saksena (1993) during their studies in Moras river in Madhya Pradesh stated that *Anabaena*, *Scenedesmus*, *Closteriun*, *Navicula*, *Euglena gracilis*, *Phacus* were pollution indicator algae. Achae et al. (1995) studied the phytoplankton species diversity in Deeghali beel and recorded 60 genera. Ragothaman and Patil (1995) made a study in Narmada Estuary and counted the algal number as 60 units/ml to 18000 units/ml which may be due to seasonal variation in the extent of agricultural runoff.

Indian contributions towards the ecology and productivity of freshwater bodies started from Roy (1955) who studied the phytoplankton ecology of river Hoogly and observed that some species of algae are tolerant to pollution and some are very much sensitive. Zafar (1968) studied the ecology of algae in some fish ponds of Hyderabad and their physicochemical complex.

Kumar and Singh (1974) observed that Cyanophyceae and Euglenoid flagellates were mostly associated with organically rich water bodies with having low oxygen content. Research regarding the ecology of blue green algae was done by a number of Indian authors. Munawar (1974) performed limnological studies on fresh water ponds of Hyderabad. Kaur et al. (1996) studied the biotic components of a fresh water pond in Patiala and confirmed its eutrophic condition.

2.3 Status in Karnataka

Hosmani and Bharathi (1982) worked on the waterbodies (Yemekeri pond, Keigeri lake and Naggikeri lake) of Dharwad of Karnataka and reported *Euglena*, *Phacus*, *Scenedesmus*, *Closterium*, *Pediastrum* and *Navicula* as the most frequent genera. Somashekar (1983) recorded 21 genera and 32 species of algae in the river Cauvery of Karnataka. Hegde and Bharathi (1986) reported 61 taxa of fresh water

algae belonging to 26 genera from Bijapur district, Karnataka. Bharathi and Hosmani (1975, 1977, 1982) extensively worked on the limnological aspects of ponds and lakes in Karnataka. Considerable work has been done on the use of algae as bioindicators of the ecosystem by Hosmani (1973-2014). Giriyappanavar and Patil (2013) used algal diversity to assess the state of the lake ecosystem in Karnataka. Patil et al. (2021) suggested the use of algal assemblages and multimetric indices and functional grouping of algae to assess the health of aquatic ecosystem.

Chapter-3

MATERIALS AND METHODS

3.1 General Topography of the study site:

Yogikolla is a small village in Gokak taluk of Belgavi district of Karnataka State, India. It is located 51km towards North from district headquarters Belgavi., 5km from Gokak. The place derives its name from a valley, which is between horse-shoe shaped rocky hill.

3.2 Collection and Processing of Sample:

Composite surface water sampling method was followed to reduce variations in qualitative estimates of algal attributes, due to spatial variations in habitat conditions (Stevenson and Smol, 2003). The collection of sample was done between 7 am to 9 am on first week after every 2 months during the course of the study period (September to March). Black plastic carbuoys of one litre capacity were used for collecting the samples. For transportation of samples to laboratory, dark coloured bag was used in order to avoid the exposure of samples to sunlight, variations in temperature.

Benthic diatom samples were collected from the surface of the rocks, boulders by scraping the sample with brush in a plastic tray and stored in glass vials.

3.2.1 Processing and Preservation of Phytoplanktons:

Planktonic samples were brought to the laboratory soon after collection and preserved by adding Lugol's Iodine into Glass Column in dark for 48 hours as described by Welch (1948) to sediment the Phytoplanktons. The sample was

concentrated to 30 to 50ml with the help of centrifuge. Finally, the planktonic samples were preserved in 50ml plastic reagent bottles.

3.2.2 Processing and Preservation of Benthic Diatoms:

Benthic diatom samples were processed to remove the dirt and clear the diatom frustules by hot HCl and KMnO_4 method described by Hasle (1978) and adapted by Round et al. (1990). Following are the steps followed during processing:

- ✓ 10ml of sample was taken in a heat-resistant beaker.
- ✓ The beaker was marked clearly with the sample number in several places.
- ✓ Then 10ml of potassium permanganate (KMnO_4) solution was added, mixed well and was left for 48 hours.
- ✓ Later 10ml of concentrated HCl (32%) was added, taking care by not to inhale the gases released. Then covered the beaker with a watch glass and was heated on a hot plate at 90 degrees for 1 hour. Later the solution was turned to yellow in colour. Proper care was taken to avoid cross contamination of samples during violent bubbling while heating with acid.
- ✓ After the oxidation of organic materials, carefully 1ml of hydrogen peroxide was added to check if the oxidation process is complete.
- ✓ Then this sample was allowed to cool and was transferred to 10ml centrifuge tube. The beakers were vigorously swirled, to re-suspend the diatoms and the stone and sand particles were settled down.
- ✓ Then sample was rinsed by centrifuging with distilled water at 1000rpm for 20mins.
- ✓ Then the supernatant was poured off in a single movement, while not to lose any diatom material.

- ✓ Finally, supernatant was decanted and centrifugation was repeated and further observation was done.

3.3 Identification of Algae:

For the identification of both the plankton as well as benthic diatoms concentrated sample was used. For identification, one drop of sample was taken with the help of dropper on a clean glass slide. A clean cover slip was placed over the glass slide so that the sample remains intact and free from other particles like dust particles, and the slide was observed under the microscope of different magnifications like 10X, 40X and 100X. Photomicrographs of the Algae observed were taken. Algal identification was done by referring the standard monographs. Desikachary (1959), Phillipose (1967), Prescott (1982), Scott and Prescott (1961), Sarode and Kamath (1984), Karthick et al. (2013), John et al. (2011), Ramanathan (1964), Iyengar and Desikachary (1981), Randhawa (1959), Krishnamurthy (2000).

Chapter-4

RESULTS AND DISCUSSION

Aquatic biological assemblages are useful indicators for environmental monitoring of lakes and rivers because they integrate the effects of natural variation and anthropogenic stressors. Algal indicators have some advantages over other biotic assemblage indicators of water quality. Unlike fish and macro-invertebrates, algal communities are usually present before disturbance and generally persist in some form after most disturbances. Algal assemblages are generally more sensitive to nutrients than other assemblages (Whitton and Kelly, 1995). Taxonomic composition, community structure and metabolic characteristics of algae have long been used to monitor and identify human impacts on aquatic ecosystems (McCormick and Cairns, 1994) and application of algal indicators to lakes and rivers is increasing (Whitton et al., 1991; Whitton and Rott, 1996; Prygiel et al., 1999).

Phytoplankton and its seasonal successions can be a better predictor of long-term environmental changes in the aquatic systems than the more usual descriptors of biomass and productivity indices (Moline and Prezelin, 1996). Studies on polluted system with reference to various pollutants have thrown light on the effectiveness of plankton as bio-indicators. Water pollution causes not only changes in physical and chemical variables, and also in algal species composition (Mercado, 2003). Algae are sensitive to pollution or other events and are therefore commonly used for monitoring environmental contamination. Moreover, algal growth in tropical inland water constitutes one of the principal causes in deteriorating the potability of water and hence a study of it is significant to assess the quality of freshwater. Algae serve as bio-indicator of water quality and pollution analysis.

A total of 42 species of algae belonging to Bacillariophyceae, Chlorophyceae, Dinophyceae, Cynophyceae and Euglenophyceae were recorded during the present investigation. The list of the recorded algal taxa is represented in the Table 4.1 and percent contribution of each class of algae from the study site is represented in figure 4.1. Microphotographs of selected algal taxa are represented in Plate 4.1 and 4.2.

Fig 4.1: Percent contribution of algal groups form Markandeya River at Yogikolla

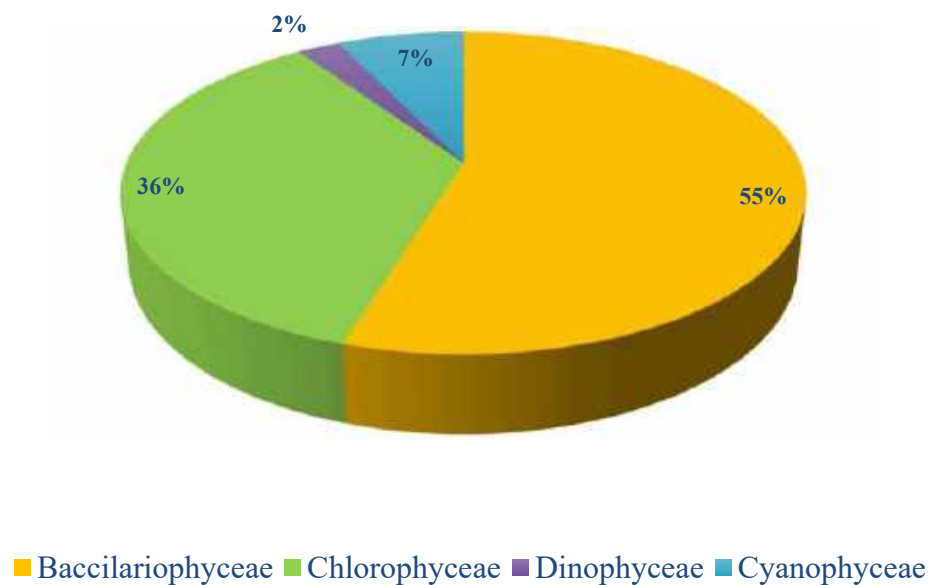


Table 4.1: List of Algae found in Markandeya River at Yogikolla

Sl. NO	Algal taxa
Class-BACCILAROPHYCEAE	
1.	<i>Achnanthes lanceolata</i> (Breb.) Grun.
2.	<i>Amphora ovalis</i> Kutz.
3.	<i>Aulacoseria granulate</i> (Ehrenberg) Simonsen
4.	<i>Cocconies placentula v.lineate</i> (Ehrenberg) Van Heurck
5.	<i>Cyclotella meneghiniana</i> Kutzing
6.	<i>Cymbella tumida</i> (Brebisson)
7.	<i>Diatoma vulgare</i> Bory
8.	<i>Fragilaria tenera</i> (WM Smith) Lange- Bertalot
9.	<i>Gomphonema lagenula</i> Kutzing
10.	<i>Gomphoneis herculeana</i> var. <i>loweii</i>
11.	<i>Gyrosigma acuminatum</i> (Kutzing) Rabenhorst
12.	<i>Hantzschia</i> spp.
13.	<i>Melosira granulate</i> (Ehrenberg) Ralfs
14.	<i>Meridion circulare</i> (Greville) C.A. Agardh
15.	<i>Navicula cryptocephala</i> Kutzing
16.	<i>Nitzschia amphibia</i> Grunow
17.	<i>Nitzschia umbonata</i> (Ehrenberg) Lange-Bertalot
18.	<i>Pleurosigma lange-bertalotii</i> Karthik & Kociolek
19.	<i>Rhoicosphenia abbreviata</i> (C.agardh) langebertalot
20.	<i>Sellaphora stroemii</i> (Hust.)
21.	<i>Stauroneis anceps</i> Ehrenberg

22. *Surirella capronioides* Gandhi

23. *Ulnaria ulna* (Nitzsch) Compere

Class-CHLOROPHYCEAE

Order- Zygnematales

24. *Mougeotiopsis calospora* Palla

25. *Spirogyra stictica* (Engl. Bot) Willa

Sub order- Desmidiinae

26. *Cosmarium* spp

27. *Desmidium aptogonium* Brebisson ex Kutzing

28. *Pleurotenium trabecula* (Ehrenberg) Nageli

29. *Staurastrum anceps* Meyen

Order- Oedogoniales

30. *Oedogonium* spp.

Order- Volvocales

31. *Eudorina elegans* Ehrenberg

Order- Chlorococcales

32. *Actinastrum hantzschii* Lagerheim

33. *Chlorella vulgaris* Beyerinck

34. *Crucigenia tetrapedia* (Kirchner) West et G.S. West

35. *Pediastrum duplex* Meyen

36. *Scenedesmus quadricauda* (Turpin) Brebisson

37. *Schroederia setigera* (Schroed.) Lemmermann

38. *Selenastrum gracile* Reinsch

Class-DINOPHYCEAE

39. *Ceratium hirundinella* (O.F.Muller) Dujardin

CYNOPHYCEAE
Order- Chroococcales

40. *Aphanocapsa elachista* West et G.S. West
 41. *Merismopedia glauca* (Ehrenberg) Kutzing

Order- Nostocales

42. *Spirulina platensis* (Nordst.) Gomont
-

Descriptions of the taxa:**Class- BACCILAROPHYCEAE.*****Achnanthes lanceolata* (Breb.) Grun.**

Is a common species which occurs on stalks, epiphytizing filamentous algae. These frustules are symmetrical in valve view but not when seen from the side. They are, in general, elliptic or fusiform in valve view, undulate- rectangular and bent in girdle view. The epivalve shows a pseudoraphe, the hypovalve raphae. There may be a distinctive lateral, horseshoe- shaped clear area in the mid region of the valve which has the pseudo raphe. The cells may be free, or more commonly attached by gelatinous stalk to various substates, sometimes forming packets or filaments. There are over 30 species which have been reported from the UNITED STATES.

***Amphora ovalis* Kutz.**

Frustules in this genus are crescent -shaped in valve view but broadly elliptic with truncate poles in girdle view. The raphae present two curved lines near the central margin of the valve, the two curves meeting over the central nodule which lies next to the central margin of the cell. The cells usually are found lying with the concave surface of the hypovalve upper most when viewed under the microscope, but in nature occurs with the concave face against the substrate (often filamentous algae) H-shaped chloroplast with central bridge, flanked by two conscious droplets, one towards each cell apex.

***Aulacoseira granulate* (Ehrenberg) Simonest**

Frustules adjoined end to end by elongated linking spines to form long filaments. Smaller spines may be also present around the margin of valve. Valves mostly viewed in girdle view. Valves with coarse areole. The valve face has areolae distributed

randomly, but in many specimens the areolae are concentrated or almost exclusively restricted to the margin. Found in benthos and plankton of eutrophic waterbodies.

***Cocconies placentula v. lineata* (Ehrenberg) Van Heurck**

Valves relatively flat, elliptical to linear-elliptical in outline. Raphe valve with hyaline rim marginally placed, bordered towards the centre of the valve by striae that are interrupted near the margin. Axial area vary narrow, with a small, rounded central area formed in the centre of the valve. The raphe is straight, filiform, and the external proximal raphe ends are dilated slightly. Striae are punctuate, composed of dash-like areolae and radiate. Occurs in meso- to eutrophic flowing and standing waters. Found in abundance on plants, wood and stone.

***Cyclotella meneghiniana* Kutzing**

Frustules are drum-shaped with tangential undulations or flat valve face. Marginal zone with strongly radial striae, broader at the margin and tapering towards the center. Central region with 1-5 valve face fulcra. The fascicles are not clearly visible in LM, but separated by interfascicular costae. This taxon has a cosmopolitan distribution and occurs as benthos and plankton of eutrophic, electrolyte rich rivers, streams and lakes.

***Cymbella tumida* (Brebisson)**

Valves strongly dorsiventral, dorsal margin strongly convex, ventral margin convex, always with characteristic swollen or tumid mid-region. Apices protracted, rostrate. Axial area narrow, with linear margins. Central area distinct, rounded to rhombic in shape. Raphe lateral, proximal endings distinct and ventrally deflected.

A cosmopolitan species found in oligo- to mesotrophic waters with moderate electrolyte content. Found to epiphytes.

***Diatoma vulgare* Bory**

Valves linear in outline, apices rounded. Costae robust. This taxon is characterized by thickened transverse costae. Central sternum straight, distinct. A labiate process is present near one apex of the valve. This cosmopolitan taxon is found in mesotrophic to eutrophic waters with average electrolyte content. The cells are joined at the corners forming zig-zag colonies. Specimens presented here are from sample collected from lower Himalayas. It appears that this taxon occurs mostly in cold water streams.

***Fragilaria tenera* (WM Smith) Lange- Bertalot**

Valves are needle shaped with narrow rounded apices. A well defined hyaline area is present at the centre of the cell in which ghost striae may be visible. Cosmopolitan species found in benthos. Mostly found in mesotrophic to eutrophic waters.

***Gomphonema lagenula* Kutzing**

Valves broadly elliptical, weakly heteropolar club shaped, lanceolate to elliptical to oval. Apices strongly protracted with capitates, rostrate ends. Central area is narrow with short striae on one side and stigma present. A poorly delineated form, with little information on ecology but widely reported in moderate to high eutrophic conditions.

Gomphoneis herculeana* var. *loweii

Valves are broadly trullate, with broadly rounded apices. Initial valves are unknown. The axial area is narrow, straight, forming relatively small, irregularly rounded central area. A single stigma is present in the central area. The raphe is lateral, weakly undulate and with a small external proximal ends. Striae are distinctly biseriate, with the areolae arranged alternately. From the central nodule to the head-pole striae are radiate. From the central nodule to the foot pole striae are radiate, become parallel and near the footpole become strongly radiate. Longitudinal lines are positioned approximately one-half the way between the axial area and margin. The apical pore fields are distinctly bi-lobed but reduced in size.

***Gyrosigma acuminatum* (Kutzing) Rabenhorst**

Valves linear-lanceolate at centre, sigmoidly deflected into broad, bluntly rounded apices. Raphe slit central, central fissures deflected in opposite directions. Terminal fissures curved over valve apices. Transverse striae more or less parallel, crossed by longitudinal striae that follow curvature of the raphe. This species prefers slow flowing or stagnant water and capable of tolerating high levels of pollution.

***Hantzschia* spp.**

Valves dorsiventral, margins linear, ventral margin concave in the middle. Apices protracted, rostrate. Striae slightly radial. The short, irregularly shaped fibulae are interrupted at the middle. A cosmopolitan species favouring periodically dry habitats, including soils and rock crevices. Widespread in a range of rivers, but probably introduced from soils.

***Melosira granulata* (Ehrenberg) Ralfs 1861**

Barrel-shaped frustules are heavily silicified. The valve faces are flat and joined together to form long, filamentous colonies. In girdle view, the mantles are unevenly thickened internally, creating an undulating appearance. A ring of evenly-spaced rimoportulae encircles the mantle, near the valve edge. Several rimoportulae are also present on the surface of the valve. Striae on the valve face are dichotomously branched and radiate from a hyaline central area. Areolae number 13-19 in 10µm.

***Meridion circulare* (Greville) C.A. Agardh**

Cells attached closely by their valve faces to form straight or fan-shaped colonies. Heteropolar taxa cuneate in valve and girdle views; some taxa isopolar, more or less linear in valve view, rectangular in girdle view. Prominent ribs across the valves visible in both valve and girdle view. Plastids numerous (+8-12), rather irregularly discoid, lying along the valve face. Other abundant in calcareous springs and streams, particularly in the springs in cool water.

***Navicula cryptocephala* Kutzing**

Valves lanceolate to narrowly lanceolate, poles gradually narrowing, apices weakly rostrate, subcapitate or obtusely rounded. Central area is large and circular, rounded to transversely elliptical, a little asymmetrical. Raphe filiform, axial area narrow, with drop-like expanded proximal ends. Striae strongly radiate to weakly convergent at the poles. The areolae are sometimes visible under LM.

***Nitzschia amphibia* Grunow**

Frustules isopolar, bilaterally symmetrical. Valves linear to lanceolate with sharply rounded apices. The central part of the valve sometimes has very slightly concave margins. Fibulae forked and aligned with the striae. Central pair of fibulae (not always) are more widely spaced. Stria are punctuate in LM. Cosmopolitan taxa found in a wide range of waters from electrolytic poor to electrolytic rich waters.

***Nitzschia umbonata* (Ehrenberg) Lange- Bertalot**

Valves linear, with weak concave central region. Poles apiculate, apices protracted or slightly capitate. Raphe marginal, supported by irregularly spaced fibulae and interrupted in the middle of the valve. Stria undulating, clearly visible in LM. This taxa occurs in polluted water and is tolerant of extreme pollution.

***Pleurosigma lange-bertalotii* Karthik & Kociolek**

Valves large, sigmoid-lanceolate, apices narrow, rounded, curved in opposite directions. Axial area narrow, thickened, and forming a weak “S”. Central area elliptical with a thick central nodule. Raphe filiform, curved, with internal proximal fissures straight. Striae straight, parallel throughout, other orientation not notable in light microscopy.

This species occurs in circumneutral streams, at low conductivity conditions in pristine streams.

***Rhoicosphenia abbreviata* (C. Agardh) Langebertalot 1980**

Several populations of this species have been observed during the study, but only two populations are depicted here. In girdle view, frustules have a bent wedge shaped. Valves are heteropolar, linear to narrowly clavate with a narrowly rounded head pole and attenuated base pole. Valve length varies from 14 to 52µm, and the valve width is 5-7µm. The concave R-valve has a fully developed raphe with large central pores, while the convex D-valve has a reduced raphe system with short raphe slits line close to poles. Striae on both valves are parallel to weakly radiate throughout the valve length, and distantly spaced, 9-12 in 10µm.

***Sellaphora stroemii* (Hust.) H. Kobayasi in Mayama et al. 2002**

Basionym: *Navicula stroemii* Hust

Valves linear with rounded ends, sometimes slightly subcapitate in the bigger forms. Length (8)10-18µm, width 4-5 µm. Raphe filiform, straight, with the external ends bent towards the primary side of the valve. The raphe sternum is flanked by parallel furrows, continuous or interrupted at the level of central area, often visible under LM as longitudinal lines. Narrow axial area often expanded in the middle giving a bow-tie-shaped central area. Striae often visible in LM, radiate, 24-29 in 10µm, becoming sparser and sometimes alternating irregularly, shorter and longer in the central area.

***Stauroneis anceps* Ehrenberg**

Chloroplasts with approximately four pyrenoids each, nucleus often slightly off-centre with a conspicuous nucleolus; valves lanceolate with rostrate apices, 40-60 µm long, 6-10 µm wide.

***Surirella capronioides* Gandhi**

Valves heteropolar, obovoid with rounded head pole and narrowly rounded foot pole. Wing projection vertical and away from valve face. Alar canals and fenestrae distinct. Siliceous plaques across valve surface distinguishable in LM. Median area

narrowly lanceolate terminating well before apices. Striae indistinct in LM. The median ridge forms a fin-spine at head pole terminus. The taxa is endemic to the Western ghats in oligotrophic to slightly mesotrophic streams.

***Ulnaria ulna* (Nitzsch) Compere**

Valves linear, with margins parallel, tapering to protracted to rostrate apices. Central sternum narrow, straight. Central area transversely expanded rectangular area, nearly square in shape. There may be short or “ghost” striae present at the margins of the central area. Striae parallel. A single labiate process is located near the apex of one end of the valve.

Cells linked cell-to-cell form a stellate colony. This taxa has a wide geographic distribution and often in mesotrophic to eutrophic, alkaline waters.

Class- CHLOROPHYCEAE

Order – Zygnematales

***Mougeotiopsis calospora* Palla 1894**

Filaments light green, long and loosely entangled. Cells short cylindrical, sometimes quadrate in the vegetative state, becoming elongate in conjugation, 12-14 μ in diameter, 14-18 μ long. Chloroplast a broad, folded axial plate, almost as long as the cell. Zygospores formed in the connecting tube by scalariform conjugation, and extending into the gametangia; oblong or rectangular-oblong; outer spore wall smooth, middle wall with deep pits; 22-25 μ in diameter, 33-38 μ long (rarely longer). This species was once described as *Mesogerron fluitans* Brand and included in the Ulothrixaceae because of its Ulothrix-like chloroplast. Our specimens were found only in the vegetative condition, but this plant is so distinctive that it can be assigned to *M. calospora*. Rare in several lakes and sphagnum bogs. The plants seem to be confined to soft water habitats.

***Spirogyra stictica* (Engl. Bot) Willa 1884,**

Filaments of short or long cells, 38-56 μ in diameter, 80-300 μ long, with plane end walls; chloroplast 2-6, straight or making $\frac{1}{2}$ turn, conjugating by geniculate bending of filaments; . connecting tubes not formed; the fertile cells becoming slightly swollen. Zygospores; ellipsoid; median spore wall smooth; 41-64 μ in diameter, 75-118 μ long.

In shallow water of the lake margins, and in swamps.

Sub. Order- Desmidine

Cosmarium spp.

Margin of cell without spines, smooth, or granular, the granules sometimes sharp or conical. *Cosmarium* includes thousands of species, more than any other genus in the chlorophyta. There is accordingly considerable variation in shape, size and wall ornamentation. Whatever the shape of the semicell in face view usually is compressed, oval or elliptic when seen in vertical view. The sinus may be deep or only a slight invagination. Like all members of the conjugates, the chloroplasts are few, large and showy, 1 or 2(4) in the semicell and each with a paranooids.

Desmidium aptogonium Brebisson ex Kutzing 1849

Cells 21-31 μm wide, 13-19 μm long, moderately constricted with an acute, open sinus; 15-24.5 μm wide; semicells transversely oblong with small inflation on each side of isthmus beyond with lateral margins are slightly concave then converging to apex, 21-24 μm wide; apices concave in mid-region but at each angle form moderately long connecting processes producing a distinct cavity between adjacent cells; in vertical view mostly 3(-4)-angular.

Pleurotaenium trabecula (Ehrenberg) Nageli 1849

Cells sub cylindrical, 24-46 μm broad, 350-600 μm long; semicells with one or two basal inflations above which lateral margins are slightly convex, then tapering gradually to smooth subtruncate apices, 16-32 μm broad, perforated by several terminal pores; walls colourless, smooth with scattered spores; chloroplasts parietal ribbons with numerous pyrenoids along length.

Staurastrum anceps

Semi cells with 2 extended arms at their apices as seen in front view, narrowly elliptic or fusiform when seen from the top. The species illustration is an example of those members of the genus *Staurastrum* which have arms of the semicell directed in 1 plane. Most species are eu plank tonic in soft-water lakes.

Order- Oedogoniales

Oedogonium spp.

Filaments unbranched, composed of cylindrical, capitellate or occasionally almost hexagonal cells, terminal cell rounded but sometimes acute or drawn out into a long hair; chloroplast parietal and net-like network, usually with several pyrenoids; sexual reproduction oogamous; oogonia arise by division of supporting, sometimes inflated, suffultory cell, occasionally bearing projections such as ribs or warts, spermatozoids

enter the oogonium through either a simple pore or cleft-like opening (rimiform), or a split in the wall that forms a lid-like operculum, opening positioned in middle of oogonium (median), above middle (supermedian), below middle (inframedian) or high up on oogonium (superior), occasionally opening at very top and immediately below a following cell (supreme); spermatozoids in macrandrous species, 1 or 2 in each antheridium, formed by a horizontal or vertical division; dwarf males in nannandrous species vary in size, shape of the stipe and number of cells; oospores often different in shape from the oogonia and not always completely filling them, smooth-walled or having ribs, pores or another type of wall ornamentation.

Order – Volvocales

Eudorina elegans Ehrenberg 1832b

Colony spherical or ovate with 16-32 ovoid cells evenly disposed within a gelatinous envelope, or arranged in transverse series, the cells usually lying near the periphery of the envelope but sometimes crowded toward the interior. Cells 10-20 μ in diameter, colonies upto 200 μ m in diameter.

This species shows a great deal of variation in the size and shape of the colony. In liquid-preserved material the envelope shows the form of *E. unicocca* G.M. Smith, with posterior mammillate projections. Common in euplankton of hard water lakes.

Order- Chlorococcales

Actinastrum hantzschii Lagerheim 1882

Coenobia 4- or 8- celled; cells (1.5)2-6 μ m wide,(7-)10-25 μ m long, spindle-shaped, club-shaped or cylindrical towards base and tapering to a rounded or bluntly pointed apex; chloroplast with a single pyrenoid, often not reaching extremities of cell. Probably cosmopolitan; usually occurs throughout the year in the plankton of rivers, ditches, ponds.

Chlorella vulgaris Beyerinck 1890

Cells spherical, scattered among other algae or sometimes occur in almost pure growths; chloroplast a parietal cup, sometimes without a pyrenoid; cells 5-8.5-(10) μ in diameter. In small lakes and pools, especially where there is a concentration of organic matter.

***Crucigenia tetrapedia* (Kirchner) West et G.S.West 1902**

Coenobia regularly quadrate, about (8-)10.5-15.5 μm across, with internal space minute, often forming colonies (syncoenobia) of 16 or more cells; cells (2.5-)4-9.5(-12) μm , tightly packed, triangular, with straight or slightly concave sides and rounded ends.

***Pediastrum duplex* Meyen 1829**

Colony 8-128 celled, the walls smooth, with lens-shaped spaces between the inner cells, which are quadrate, the outer margin concave; peripheral cells quadrate, the outer margin extended into 2 tapering, blunt-tipped processes, distance between processes of one cell about one-half the the distance between processes of adjacent cells; cells 15.6 μm in diameter; 36-celled colony 105 μm in diameter. Common in the eu- and tychoplankton of many lakes and swamps.

***Scenedesmus quadricauda* (Turpin) Brebisson**

Coenobia of 4 linearly arranged or sometimes slightly alternately arranged, tightly packed cells; cells 35.4 μm wide 7.8-12.3 μm long, long-ellipsoidal to ovoid-cylindrical, with rounded spines and a diagonally symmetrical spine on one apex of each marginal cell, walls smooth and without ornamentation. Sometimes a small tooth may be present at cell apex.

***Schroederia setigera* (Schroed.) Lemmermann 1898**

Cells fusiform, mostly acicular, the poles extended into long, fine setae, one of which is bifurcate near the tip, forming recurved bristles; chloroplast plate-like, covering most of the cell wall, usually with 1 pyrenoid; cells 3-6 μm in diameter, 60-85 μm long, including the setae, which are 13-17 μm long.

***Selenastrum gracile* Reinsch 1867**

The chloroplasts is laminate and parietal, covering most of the wall gracefully curved cells occur in clusters of from 4 to 32, with a tendency to have the convex or 'outer' and 'inner' walls of the crescent are more nearly equal than in the somewhat similarly shaped cells of Kirchneriell, a genus which has cells irregularly arranged within a gelatinous envelope. Five species are commonly found in the United States, mostly differentiated by size of cell and degree of curvature. Mixtures of algae from shallow water often include Selenastrum, but they may occur in the euplankton.

Class- DINOPHYCEAE

***Ceratium hirundinella* (O.F.Muller) Dujardin 1841**

Cells broadly or narrow spindle shaped depending on degree of horn divergence, strongly dorsiventrally flattened, 28-55µm wide, 40-450µm long, one apical and 2 or 3 antapical horns; epitheca with distinct shoulders just above cingulum and tapering to a long horn; hypotheca broad and short, divided into 2-3 posterior horns; cingulum horns; plates smooth and with net-like ornamentation on cell body, coarsening on horns; plate formula: chloroplasts numerous, parietal, oval and yellow-brown; red corpuscular bodies often seen; hypnozygotes, smooth, triangular and with one horn at each corner.

Class- CYANOPHACEAE**Order- Chroococcales*****Aphanocapsa elachista* West et G.S. West 1914**

Colony spherical or ellipsoidal, up to 100µm in the largest dimension, though typically smaller, with outer layer of the colourless mucilage weakly defined or even becoming diffused. Cells 1.5-3 µm, single or in pairs, well spaced in the mucilage.

***Merismopedia glauca* (Ehrenberg) Kutzing**

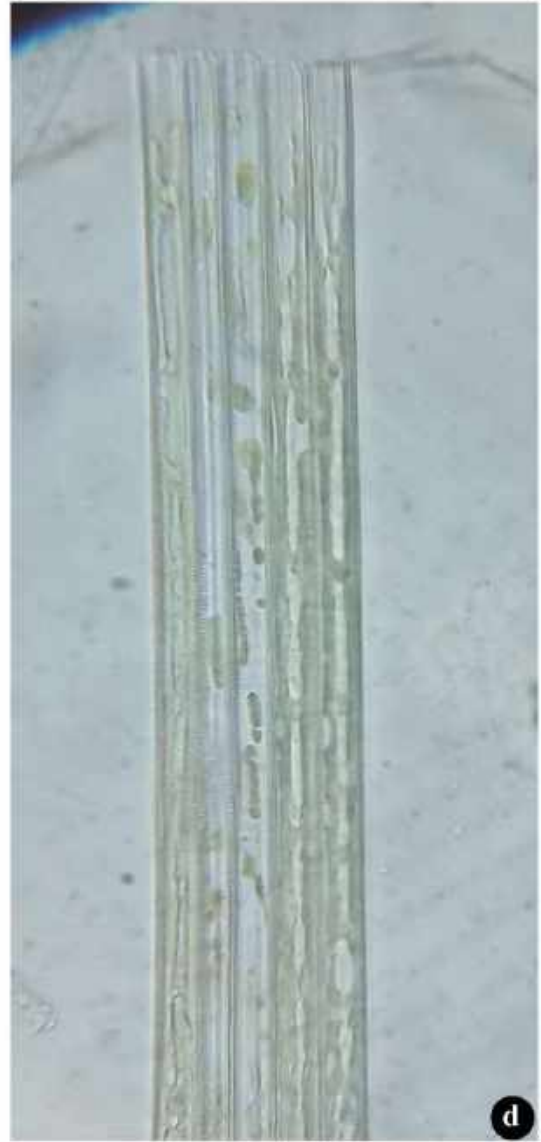
This genus is readily distinguished by the definite, rectilinear arrangement of spherical or oval cells in rectangular plates. Colonies increase in size by fission of cells in 2 directions. *Merismopedia convoluta* been is an uncommon species in which the colonies become very large sheets with enrolled margins. There are several species in the United States, differentiated by cell size, presence or absence of pseudo vacuoles, and by size of the colony.

Order- Nostocales***Spirulina platensis* (Nordst.) Gomont**

Thallus blue-green; trichomes slightly constricted at the cross-walls, 6-8µ broad, not attenuated at the ends or only a little attenuated, more or less regularly spirally coiled; spirals 26-36µ broad, distances between the spirals 43-57µ; cells nearly as long as broad, or shorter than broad, 2-6µ long, cross-walls granulated; end-cells broadly rounded.



a



d



b



c



e

Plate 4.2: Members of BACILLARIOPHYCEAE recorded from Yogi Kolla a. *Gyrosigma acuminatum* b. *Cymbella tumida* c. *Diatoma vulgare* d. *Meridion circulare* e. *Ulnaria ulna*

Chapter-6

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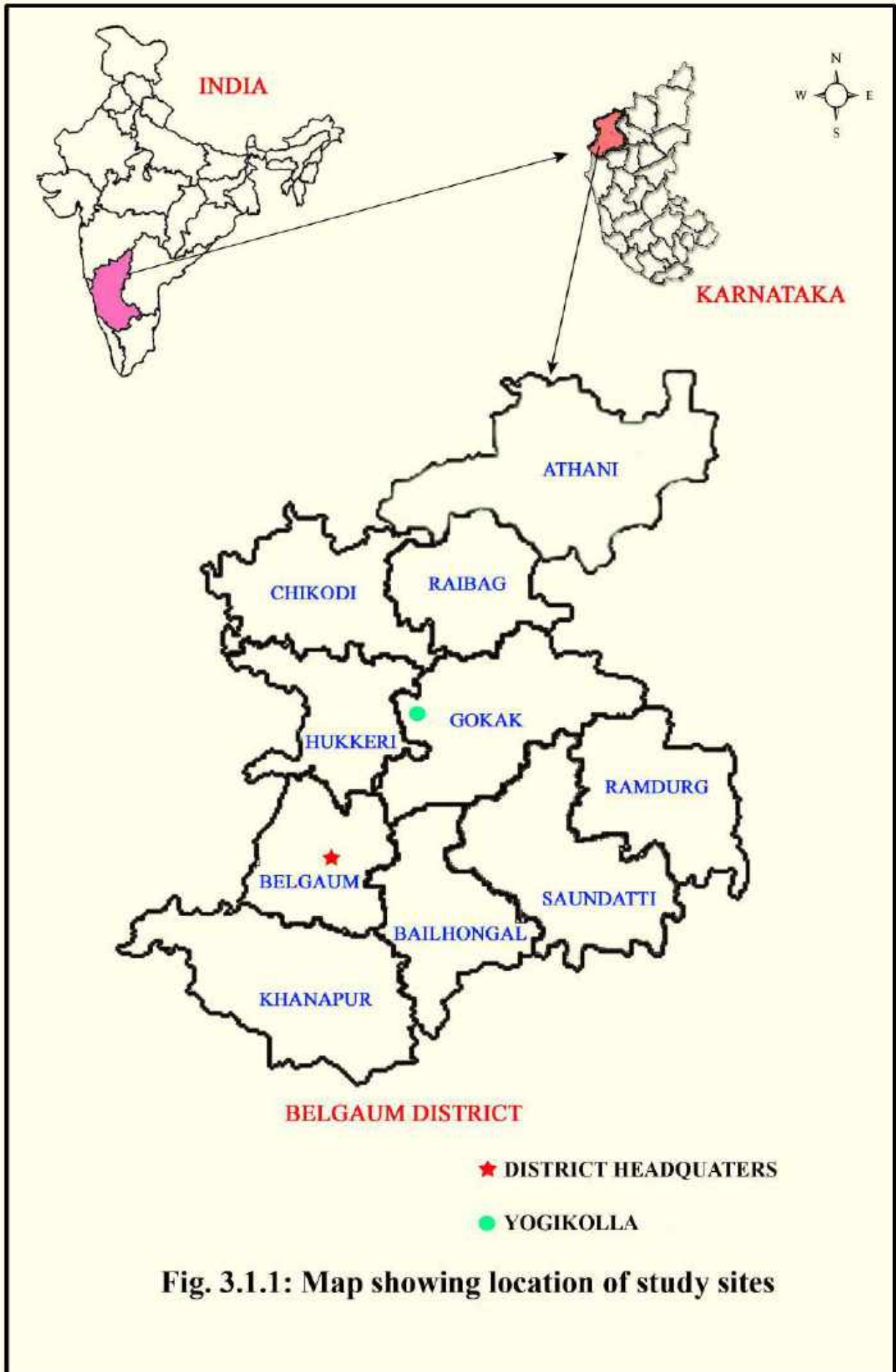
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Fig 3.2: Panoramic view of Markandeya River at YogiKolla, Gokak



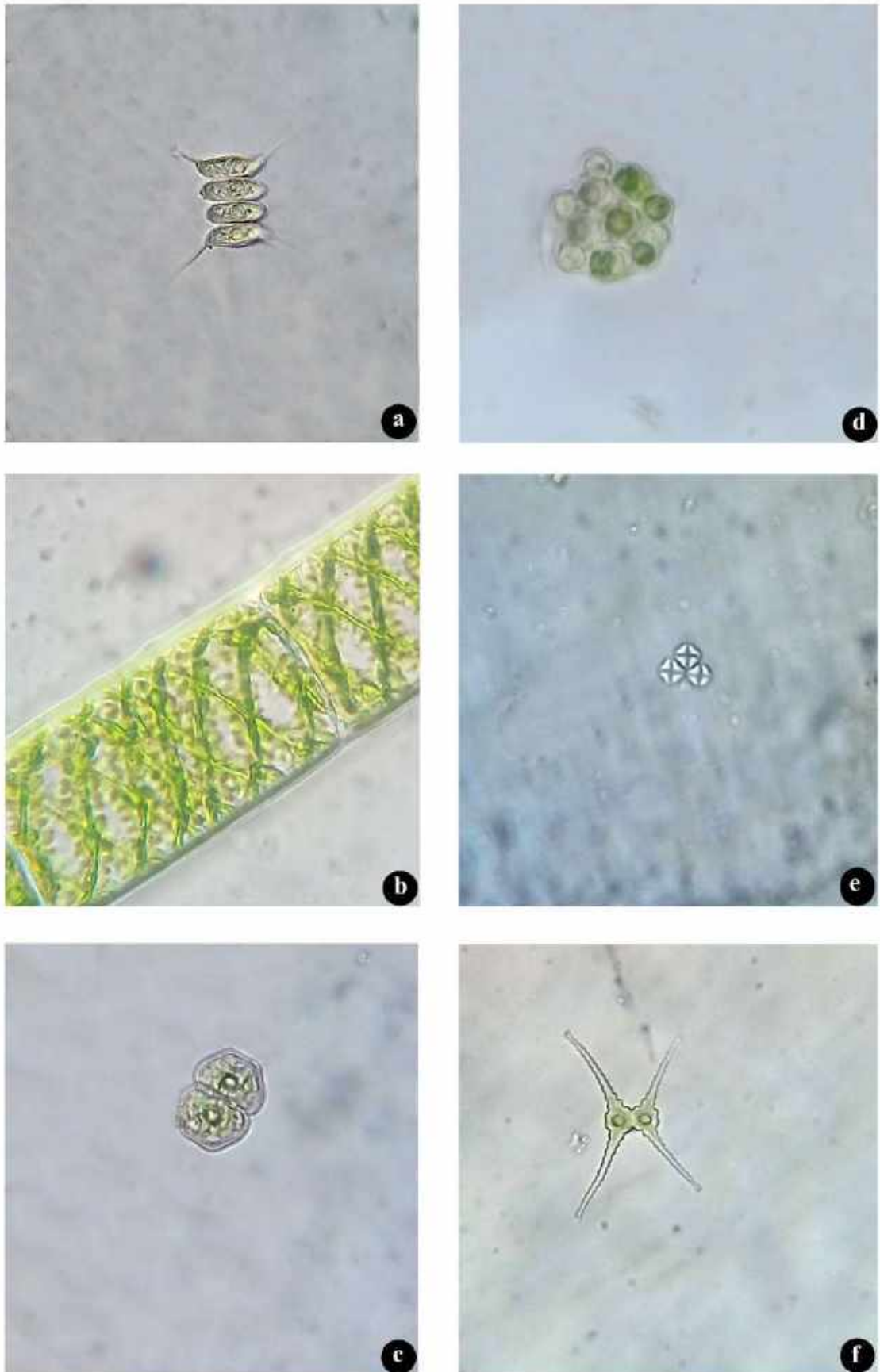


Plate 4.1: Members of CHLOROPHYCEAE recorded from Markandeya River at Yogi Kolla a. *Scenedesmus quadricauda* b. *Spirogyra stictica* c. *Cosmarium* spp. d. *Crucigenia tetrapedia* e. *Staurodesmus convergens* f. *Staurostrum anceps*

Chapter-5

CONCLUSION

The present investigation to explore algal diversity of Markandeya River at Yogi Kolla, Karnataka was conducted to assess its present ecological status.

Belgaum district provides an excellent topography with a large number of lakes and ponds, both natural and man-made, throughout its extension. Each of these habitats differ in size and shape, usage pattern and support exclusive aquatic vegetation. To justify the hypothesis, Planktonic as well as Benthic algae were collected from the study site over a period of 6 months. Appropriate methods were used for the collection, preservation, identification and enumeration of the algae.

Phytoplankton form the life communities and play a significant role in lake ecosystems. Members of the Bacillariophyceae contributed (55%). The distribution of algae enables us to learn peculiarities of sensitive communities to the environment. Long term studies on plankton component in relation to fluctuations of water quality parameters is useful in developing and evaluating significant ecological indices. The present study recorded 42 algal taxa. Bacillariophyceae and Chlorophyceae showed a marked appearance whereas Cyanophyceae and Dinophyceae, were poorly represented by the habitat.

The levels of degradation of the aquatic habitat was found to be moderate. Algal genera *Gyrosigma*, *Amphora*, *Scenedesmus* are the common indicators of organic

pollution. Diatoms serve as excellent tools when conservation strategies are to be developed.

The outcome of the study on Algae of Markandeya River at Yogikolla, Karnataka clearly depicts massive diversity of algae representing the moderate to high level of pollution. Further longterm monitoring using algal assemblage data is required to plan the conservation strategies for the habitat.

PHYTOCHEMICAL ANALYSIS OF INDIGOFERA COLUTEA (BURM.F.) MERR (FABACEAE)



A PROJECT REPORT SUBMITTED TO
RANI CHANNAMMA UNIVERSITY BELAGAVI
FOR THE PARTIAL FULFILMENT OF THE AWARD OF THE DEGREE OF

MASTER OF SCIENCE

IN

BOTANY

SUBMITTED BY

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CERTIFICATE

This is to certify that; this project entitled “**Phytochemical Analysis of *Indigoferacolutea*(Burm.f.) Merr(FABACEAE)**” is being submitted here with for the partial fulfilment of award of the Degree of Master of Science in Botany, Rani Channamma University, Belagavi. The work reported in this report is based upon the results of the original work carried out by Miss. Reetu Jangalagi and Miss. Prema Patil under my supervision.

Place- Chikodi:

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DECLARATION

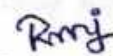
We hereby declare that this project work entitled "Phytochemical Analysis of *Indigofera colutea* (Burm.f.) Merr (FABACEAE)" completed and written by us has not previously formed. This report is based on the results carried out by us.

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Miss Rectu Jangalagi

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CHAPTER 1- INTRODUCTION

Since time immemorable, humans have been wandering in the woods in search of medicinal plants, plant derived drugs which has resulted in discovery of large number of medicinal plants with curative properties to treat diverse ailments. Indian medicinal system such as Ayurveda, Siddha Unani, and Homeopathy majorly prescribe plant derived medicines. Plants are capable of synthesizing diverse types of organic molecule, which may be divided into two major groups: primary and secondary metabolites. Primary metabolites are metabolic intermediates or products found in all living systems, essential to growth and life, and biosynthesized by a limited number of biochemical pathways. These metabolites are involved in a primary metabolic process such as respiration and photosynthesis.

Secondary metabolites are metabolic intermediates or products which are not essential for growth and development of the producing plants but rather required for the interaction of plants with their environment and produced in response to stress. Secondary metabolites are formed due to mutation in primary metabolic pathway (such as glycolysis, TCA cycle, PDH complex, Pentose phosphate pathway, fatty acid biosynthesis, amino acid biosynthesis, nucleotide biosynthesis, respiration, photosynthesis). Secondary metabolites do not play vital role in survival, reproduction growth and development of plants, and are produced when intermediates of primary pathway enter into other pathway and form such products that may be beneficial to the plants. Secondary metabolites cannot be distinguished with primary metabolites by their precursor molecules, both have got the same precursors (Kumari et al., 2017).

1.1 EVOLUTION OF SECONDARY METABOLITES

All the living organisms are associated with one another based on their needs. Plants growing naturally are often prone to pathogenic attack, plants in such case have two options one, it gets itself killed due to infection that is ultimate death or it can defend itself, all organisms want to survive, hence when there is attack of microbes on plants multiple times, mutations occur in metabolic activities in plant body. Few metabolites/intermediates start entering other pathways in order to produce new products which help plants to defend themselves from microbes, herbivores etc.(Francesca et al., n.d.).

Pollen grains must land on the surface of the stigma in order to achieve successful reproduction, this process of pollination can take place by abiotic factors through water, wind but these are not efficient ways of pollination. Hence plants eventually produced chemicals that are colorful, edible, towards which insects got attracted, this brought an effective pollination in plants.

Due to the course of evolution, secondary metabolites are produced in plants that are beneficial for defense, pollination, antimicrobial activity, helps plants to prevent damage caused by high intensity light.

There are three classes of secondary metabolites:

1. TERPENES
2. PHENOLIC COMPOUNDS
3. NITROGEN CONTAINING COMPOUNDS

1.1 PHENOLIC COMPOUNDS

- ❖ These are water soluble
- ❖ Made up of aromatic amino acids phenylalanine, tryptophan, tyrosine
- ❖ These aromatic amino acids are in turn formed in Shikimic acid pathway.
- ❖ Most phenolic compounds are made from phenylalanine.
- ❖ One's all the three aromatic amino acids are formed; two more pathways take place phenyl propanoid pathway and malonic acid pathway.

PHENOLICS

Life originated in water, which slowly moved from water to land. In the beginning there might have been initial failure attempts for the adaptation from water to land, but later gradual and successfully terrestrial habitat was adapted by the plants and here in adaptation on the land, phenolics played important roles. Land became suitable for plants only due to evolution of phenolic compound. All the secondary metabolites are derived from three aromatic amino acids, these aromatic amino acids have 'arene ring' in them. They are generally known as phenolics. Phenolic compounds play an important role in structural components of cell wall. These are toxic in nature and antifeedants of plant defense. Phenolic compounds are coloring agents of flower and fruits, have aroma which attracts birds, insects, animals, ultimately leading to seed dispersal and pollination. Plants successfully came to terrestrial habitat because of the evolution of phenolics compounds (Francesca et al., n.d.).

1.3 PROBLEMS IN THE TRANSITION FROM AQUATIC TO TERRESTRIAL HABITAT.

Aquatic plants did not have vascular tissues due to their aquatic habitat, as the plants evolved from aquatic habitat to terrestrial habitat, due to lack of availability of water, the plants had to develop vascular tissues, that is if plant is evolving from wet habitat to dry habitat it has to develop structure that help in absorption of water such as xylem that is lignified. Absence of lignin leads to a strong transpiration pull and the xylem tissues can collapse inwards, hence lignin solves the problem of water conduction.

1. Aquatic plants have both male and female gametes that are released in the water, male gametes swims towards the female gametes in the direction of the flow of water current, for fertilization, where there is no need for development of attractive structures for fertilization. But terrestrial plants depend on abiotic factors like wind which requires large number of male gametes. Pollens that travel from male plant to the female plant. Here flavones play a vital role in pollination. Flavones are colorful compounds, that attract insects, bring about effective pollination.
2. Aquatic plants may not face heat stress, but terrestrial plants are exposed to heat and light, hence to tackle this problem there is evolution of isoflavonoids. Hence phenolics is mechanical support of plant in absorbing harmful UV radiation
3. Aquatic plants do not fix nitrogen as there is availability of it, but terrestrial plants need to fix nitrogen here flavonoids play a vital role, where they help in attracting symbiotic bacteria towards the plants.

Examples of phenolic compounds-**FURANOCOUMARIN**

These are combination of furans and coumarins. These are intercalating agents which get activated only when they receive UVa rays (320nm-400nm) upon activation they intercalate the DNA, leading to blocking processes like replication, transcription, DNA repair.

CAFFEIC ACID AND FERULIC ACID

These are involved in allelopathy. Some plants release certain chemicals that interfere with the growth of other plants. Farther the secretion of toxins takes place, other plants do not grow in the vicinity of the latter, hence there will be no competition and hence resources available in the area are majorly utilized by the plant.

Chemicals/toxins are not only secreted in the roots but also in the twigs, leaves, branch, that when decomposed by bacteria, releases chemicals. This process is known as allelopathy.

Example 1 – aflatoxins are mycotoxins released from fungus *Aspergillus flavus*. It is an intercalating agent.

Example 2- Lignin is the second most abundant organic compounds found in plants. Structure of lignin is not clearly known, as lignin is not soluble in water nor in organic compounds or any chemicals, hence during extraction of lignin only monomeric units are obtained, through which it is confirmed that lignin is made up of three different phenyl alcohols-Coniferyl, Coumaryl, Sinapyl these join together to form one monolignol. Therefore, monolignol is the monomeric unit of lignin.

Example 3-dicoumarol- these are blood anti-coagulants. Important blood clotting factors are II, VII, IX, X, these require vitamin K for their production which acts as a cofactor. Dicoumarols are phenolic compounds, natural and synthetic that inhibit vitamin K, hence if any individual ingests dicoumarol, it inhibits vitamin K, a main cofactor in the biosynthesis of blood clotting factor II, VII, IX, and X.

Scopoletin is the most prevalent seed natural dicoumarol which prevents seed germination in higher plants.

1.4 FLAVONOIDS

Flavonoids have π bonds, which absorb visible light and reflect in the same range, that lets us to visualize color. Flavonoids are classified into 4 classes. As flavonoids are colorful, they attract insects, and birds (Francesca et al., n.d.).

Example 1 ANTHOCYANIN-it is synthesized in plants during stress, during winter or cold stress to prevent cytosol freezing, anthocyanin is secreted. These are phenolic compounds, water soluble vacuolar pigments. Depending upon their pH they may appear red, purple, blue, or black. They occur in all tissues of higher plants, including leaves, stems, root, flowers and fruits.

Example 2 FLAVONES AND FLAVONOLS

These receive UV b (extremely harmful) radiations and protect plants from damage. Hence called shield pigments. Flavones and flavanols are present in plants in a specific pattern, in flower petals and leaves in dotted form called nectar spots, nectar stripes, and nectar circle. These patterns are called nectar guides, which is visible to certain insects like honey bees (Rao et al., 2016).

Example 3 ISOFLAVONOIDS

Resembles the structure of female hormone estrogen. When estrogen binds to its receptor then estrogen signaling is activated in female body, but if isoflavonoids binds to receptor then over-secretion of estrogen takes place, leads to feedback inhibition signals to pituitary glands to release less LH and FSH hormones. These leads to ovaries secreting less estrogen hormone are less in female body, resulting in infertility.

Sometimes referred to as phytoestrogens, as many isoflavonoids compounds have biological effects via estrogen receptor.

Example- cattle, sheep suffered from clover leaf disease after feeding on clover leaves that lead to female infertility.

Example 4 TANNINS

Animal hide is treated with tannin to produce leather, this process is called tanning. Pure leather is antimicrobial, fire resistant, and water resistant.

There are two classes of tannins

Condensed tannins- compounds difficult or complex to hydrolyze. Need strong acid to release flavonoids.

Hydrolysable tannins- hydrolyze with weak acid and release gallic acid.

1.5 FAMILY FABACEAE

Legumes are considered to be one of the largest comestible dry seeds that play a significant role in human nutrition. Legumes are cultivated on agricultural lands for their pod seeds called pulses. Beans and pulses are economical and affordable food sources consumed by many all over the world. Leguminosae also called Fabaceae is economically diverse due to variety of species present family. The leguminous plants

are of great significance consumed as food by animals and humans, used in the preparation of dyes (*Indigofera* sp.), also used as avenue plants (Soladoye et al., 2010).

1.6 THE GENUS INDIGOFERA

The genus *Indigofera* belongs to family, Fabaceae which is ranked the third largest family of the blossoming plants after Orchidaceae and Asteraceae with approximately 650 genera and 18000 different species. The family in overall is characterized by the pod (legume) type of fruit developing from a single carpal with marginal placentation. The family Fabaceae is divided in to three sub-families (Caesalpinioideae, Mimosoideae, Faboideae). (Rahman et al., 2018).

The term "indigo" is taken from Latin which means Indian as the dye was originally exported to Europe from India. Indigo dye is well-known for natural blue color obtained from the branches, twigs and young leaves (Soladoye et al., 2010).

SYSTEMATIC POSITION

Kingdom - Plantae

Clade - Tracheophytes

Clade - Angiosperms

Clade - Eudicots

Clade - Rosids

Order - Fabales

Family - Fabaceae

Tribe - Indigofereae

Genus - *Indigofera*

Species - *colutea*

1.7 Description of *Indigofera colutea* (Burm.f.) Merr.

The genera of *Indigofera* are widely distributed throughout India and has got many medicinal applications. This species is accepted, and its native range is Tropical & Subtropical Old World. *Indigofera colutea* is an erect or spreading annual or short-lived perennial herb, 10–90 cm tall, appressed or spreading strigose throughout and in most parts also with erect multicellular glandular hairs. Leaf-rachis up to 7 cm long including a petiole longer than the basal leaflets. Leaflets 9–11, elliptic-oblong, up to 14 x 4 mm, glandular hairs present on margins. Inflorescences- Racemes 7–20-flowered; peduncle up to 7–12 mm long, Calyx c. 2 mm long, deeply divided. Corolla pubescent outside. Stamens 3–3.5(–4) mm long. Style 1.2–1.6 mm long, slightly curved upwards. Pod up to 18–23 x 1.8 mm, spreading, straight, densely covered with erect glandular hairs, 8–14-seeded.

The roots are used as a healing medicine. The whole plant is used in the treatment of stomach aches. The plant is used to treat cutaneous and subcutaneous parasitic infections. An aqueous acetone extract of the leaves and stems is rich in polyphenols and flavonoids and has been shown to be an effective antioxidant

The plant is native to:

Afghanistan, Angola, Assam, Bangladesh, Botswana, Burkina, Burundi, Cameroon, Cape Verde, Central African Repu, Chad, China Southeast, Djibouti, East Himalaya, Egypt, Eritrea, Ethiopia, Gambia, Gulf of Guinea Is., Gulf States, Hainan, India, Ivory Coast, Jawa, Kenya, Lesser Sunda Is., Malawi, Mali, Mauritania, Mozambique, Myanmar, Namibia, New Guinea, New South Wales, Niger, Nigeria,

Northern Provinces, Northern Territory, Oman, Pakistan, Queensland, Rwanda, Saudi Arabia, Senegal, Socotra, Somalia, South Australia, South China Sea, Sri Lanka, Sudan, Sulawesi, Tanzania, Thailand, Togo, Uganda, Vietnam, West Himalaya, Western Australia, Yemen, Zambia, Zaïre, Zimbabwe

1.8 PHYTOCHEMICAL STUDIES

Phytochemicals are the chemical compounds present in plants. Phytochemicals is a broader term that includes alkaloids, phytosterols, polyphenols, terpenoids, and organo-sulphuric compounds and so on. Phytochemicals have many characteristics; few are considered to be toxic, while others give the plants a distinct color, aroma, and flavor, due to these properties' phytochemicals have evolved to help achieve efficient pollination in plants. A systematic search of some phytochemicals in *Indigofera colutea* (Burm.f.) Merr. is carried out to know chemical constituents of the plant. This can be a useful parameter for the assessment of quality and possible therapeutic potential of this plant.

1.9. Aims and objectives

To successfully complete the undermentioned tasks, following objectives were designed and the task was carried forward in an elaborate manner.

- Identification, collection and authentication of "*Indigofera colutea*" (Burm.f.) Merr.
- Phyto-evaluation of *Indigofera colutea* (Burm.f.) Merr, for total phenolics and total flavonoid content.

CHAPTER 2- REVIEW OF LITERATURE

From ancient time man has used plants for food, shelters and to treat various common diseases. Even, nowadays medicinal plants are widely used in a variety of products; such as pharmaceutical, and nutraceuticals products. The greatest demand and wide use of herbal products have become a major trade in the world by developing expensive medicines to treat various diseases. One of the ancient health core known to the human beings are the herbal medicines.(Rahman et al., 2018).

The Plant Kingdom represents a “chemical treasure trove” of structurally and functionally diverse classes of bioactive phytochemicals. Plants, specially the medicinal and aromatic plants (MAPs) synthesize enormous numbers and amounts of secondary metabolites including reducing sugars, polyphenols, flavonoids, carotenoids, terpenoids, alkaloids, saponins and the aroma compounds (Literature, n.d.).

Pharmacognosy is a branch of pharmacology that studies medical substances that are derived from natural sources, and their recognition has proved to be a simple tool in identifying crude drugs (Geetha DH, Indhiramuthu Jayashree, 2016).

Plants produce primary and secondary metabolites with varying functionality where primary metabolites include amino acids, simple sugars (glucosides), proteins and lipids that participate in cellular processes. While secondary metabolites are chemically active compounds i.e. (flavonoids, alkaloids, terpenoids, steroids, saponins, etc.), which are produced in response to stress with complexity in structure and more restriction in distribution than the primary metabolites (Kumari et al., 2017).

The secondary metabolites of plants constitute a large and varied group of organic compounds that are produced in trace amounts that have no direct functions in life processes such as respiration, photosynthesis, nutrient assimilation, replication, transcription and translation, solute transport etc. it is believed that they have functions related to defense of plants against predators, pathogens, microbes. They also attract the seed pollinators like bees and birds. Secondary metabolites have got allelopathic activity where they act as toxic substance and do not allow other plants to grow and establish (Francesca et al., n.d.).

There are specific group of compounds that show specific action on particular organ or disease but this statement has very little validation. Antioxidant activity is one of them. The free radical's production leads to damage of cells and tissues of organisms causing serious disorder like cancer, ageing, diabetes etc. here antioxidants play a significant role to block the free radical production. Hence there is a great need in studying plant derivatives like secondary metabolites to prevent the chronic illness (Farklı et al., 2018)

Phenolic compounds are broadly distributed in the plant kingdom and are the most abundant secondary metabolites of plants. There are more than 8,000 phenolic structures currently known, ranging from simple molecules such as phenolic acids to highly polymerized substances such as tannins. Phenolics are synthesized primarily from products of the shikimic acid pathway (Knaggs & Andrew, 2001). A common feature of phenolic compounds is the presence of at least one hydroxyl-substituted aromatic ring system. Phenolic compounds include flavonoids, phenolic acid, tannins and the less common stilbenes and lignans. Most phenolic compounds belong to the flavonoids (anthocyanin, chalcones, flavones, quercetin, kaempferol). Flavonoids are most commonly known for their antioxidant activity in vitro (Review, 2005).

Legumes are excellent sources of protein, carbohydrates, essential micronutrients, and fiber. Substituting legumes for food that are high in saturated fats or refined carbohydrates is likely to lower the risk of cardiovascular disease. Although legumes are rich in a number of compounds that could potentially reduce the risk of certain cancers, the results of epidemiological studies are too inconsistent to draw any firm conclusions regarding legume intake and cancer risk in general. Beans seeds are affordable proteinaceous source. Contain high fiber, complex carbohydrates, magnesium, iron, healthy fats.(Jaya et al., 2019).

The genus *Indigofera* L. is the largest genus of the tribe Indigofereae other than tribe Galegeae of family Leguminosae (Fabaceae). The genus contains around 700 species found in the tropics and subtropics of the Old and New World. The genus is of considerable economic importance. Blue indigo dye is obtained from the stem and leaves of the plant. The dye contains Indigotin and Indican pigments which imparts blue colour. Important dye yielding species are *I. articulata*, *I. suffruticosa*, *I. tinctoria* and *I. caerulea*. Other species are used as medicine, fodder, cover crops, green manure, human food, erosion control and ornamentals. Some species of the economically important *Indigofera* species are *I. arrecta*, *I. suffruticosa* and *I. tinctoria*, especially the last one is widely used in the traditional manufacture of the dye indigo. The other species like *I. caerulea* used as anthelmintic, *I. cordifolia* and *I. glandulosa* considered as good fodder for domestic animals. The decoction leaves of *I. hirsuta* used in diarrhoeal conditions. Beside this, *I. oblongifolia* used to increase appetite by the peoples of Doni area, Kappat hills, Gadag. The seeds of *I. trita* used as nutritive tonic (Kotresha and Kambhar, 2016).

Indigofera belongs to pea-family distributed widely in Asia and South- Africa. The genera include more than 750 species of herbs, shrubs and trees. The plants

Phytochemical Analysis of *Indigofera colutea* (Burm.f.) Merr. (FABACEAE)

bloom to give white or pink flowers that are perennial that range from sub-shrubs to dwarf to small trees. These plants are grown in gardens as ornamental or avenue plants (Journal et al., 2020). Certain species (*Indigofera tinctoria* and *Indigofera suffruticosa*) are used by tropical farmers to produce the dark blue dye called indigo. The cultivation of indigo plants and the extraction of the dyestuff were an important industry in India up to the beginning of the 20th century. Synthetic indigo, developed about that time, gradually replaced natural indigo as a dyestuff. The plants are native to tropical and subtropical regions worldwide. Indigo species are highly variable in appearance but are generally silky or hairy or sticky with compound leaves. The rose, purple, or white flowers are borne in showy spikes or clusters, and the fruit is a pod, usually with a thin partition between the seeds (Encyclopedia Britannica 2018).

Fruits and vegetables are loaded with many antioxidant compounds including phenolics, carotenoids, anthocyanins. Approximately 20% of known plants have been used in pharmaceutical studies, impacting the healthcare system in positive ways such as treating cancer and dreadful diseases. Plants are able to produce a large number of bioactive compounds on broader spectrum. High concentrations of phytochemicals, which may protect against free radical damage, accumulate in fruits and vegetables. Plants containing beneficial phytochemicals may supplement the needs of the human body by acting as natural antioxidants. Various studies have shown that many plants are rich source of antioxidants. For instance, vitamins A, C, E, and phenolic compounds such as flavonoids, tannins, and lignin, found in plants, all act as antioxidants. The regular consumption of fresh fruits and vegetables leads to several health benefits, a result of medicinal properties and high nutritional value (Altemimi et al., 2017).

Aforementioned studies and literature have shown that plants produce secondary metabolites though in trace amounts help plants in defense against pathogens and predators also in pollination, protect the tissues from harmful radiations besides secondary metabolites are widely used by human to treat chronic diseases, and ailments. In order to know the phytochemical constituents of *Indigofera colutea* (Burm.f.) Merr. an extensive Phyto evaluation was carried out by following the protocols mentioned below.

CHAPTER 3- MATERIALS AND METHODS

3.1 Plant material collection

The present study was carried on *Indigofera colutea* (Burm.f.) Merr. (Fabaceae) a legume, collected from its wild habitat in the campus of Basavaprabhu Kore Arts, Science, Commerce College, Chikodi (Photoplate 1) and authenticated by Dr. Sidanand V. Kambhar. The herbaria for voucher specimen of the *I. colutea* (Burm.f.) Merr. (Fabaceae) (Figure 1) was prepared and deposited (BKCC-442) in the PG Department of Botany, Basavaprabhu Kore College of Arts, Science, Commerce Chikodi (Karnataka), India.

Whole plant was shade dried for 10 days and then placed in furnace for an hour at 60° C to ensure proper drying of the plant material. Then the dried plant was ground to fine powder in a grinder and sieved through a mesh to obtain fine powder (Figure 2A).

3.2 Preparation of aqueous and organic extracts.

All the chemicals used in the present study were of analytical grade. 1 g of plant powder was mixed with 10 ml of solvents (methanol, ethanol, petroleum ether, chloroform, distilled water) for 24 hours. This process is called maceration. Further the solvents were centrifuged at 1000 rpm for 15 minutes. The supernatant was collected and the residue was again suspended by adding 5 ml of solvents and centrifuged to complete the extraction. The supernatants pooled and the volume was adjusted to 10 ml by dilution of more distilled water. Same procedure was followed for the preparation of other solvent extracts (methanol, ethanol, chloroform, petroleum ether and acetone) (Figure 2B). All the extracts were kept at 4⁰C and for the assays



Photoplate 1. Collection of *Indigofera colutea* in the Basavaprabhu Kore Art's, Science and Commerce College campus Chikodi



Figure 1. *Indigofera colutea* (Burm.f.) Merr. (Fabaceae): A. Habit, B. Close up view of flowers, C. Close up view of fruiting branch

**A****B**

Figure 2. A. Fine powder of plant material (*Indigofera colutea* (Burm.f.) Merr. (Fabaceae), B. Aqueous and organic solvent extracts

1% (v/v) extracts (diluted with double distilled water or respective solvents) were used for the assay.

3.3 Reagents and standards

Rutin, aluminum chloride, ferric chloride, Folin-ciocalteu reagent, hydrogen peroxide, potassium ferricyanide, sodium phosphate (monobasic and dibasic), sodium carbonate, ethanol, ferrous chloride, sulfuric acid, tannic acid, methanol, petroleum ether, chloroform, (HPLC grade) were procured from. All the solvents used during the study were AR grade.

3.4 Phytochemical studies

Qualitative phytochemical tests were conducted, where aqueous extracts (methanol, ethanol, chloroform, petroleum ether, distilled water) of whole plant of *Indigofera colutea* was taken for spectrophotometric analysis.

3.5 Preliminary test For Phenols and Flavonoids

Preliminary phytochemical screening –The phytochemical screening of the extracts was conducted using standard procedures described by Trease and Evans. The following qualitative tests were carried out (Rao et al., 2016):

Test for phenols

A small amount of the ethanolic extract was taken with 1 mL of water in a test tube and 1 to 2 drops of Iron III chloride ($FeCl_3$) was added. A blue, green, red or purple color is a positive test (Rao et al., 2016) (Figure 3 A).

Test for flavonoids

1 ml plant extract was taken in a test tube and added few drops of dilute



Figure 3. A. Preliminary test for phenols, B. Total phenol content

NaOH solution. An intense yellow colour was appeared in the test tube. It became colorless when on addition of a few drops of dilute acid that indicated the presence of flavonoids (Figure 4).

3.6 Determination of total phenolic content

Total phenolic contents (TPC) of the plant extracts were determined using Folin-Ciocalteu method (Wolfe *et. al.*, 2003). The reaction mixture was prepared by mixing an aliquot of the extracts (0.125ml) with Folin-Ciocalteu reagent (0.125ml) and 1.25 ml of saturated Na_2CO_3 solution. Reaction mixture was thereafter incubated for 90 min at room temperature. The absorbance was measured at 760nm. The samples were prepared in triplicates for each analysis and the mean value of absorbance was obtained. A calibration curve was prepared, using a standard solution of Tannic acid (10 $\mu\text{g/ml}$ to 100 $\mu\text{g/ml}$). Results were expressed in terms of mg Tannic acid equivalents (TAE)/ g dry weight (dw) of sample (Figure 3 B).

3.7 Determination of total flavonoid content

Total flavonoid contents (TFC) of the plant extracts were analyzed according to the colorimetric method (Luximon-Ramma *et. al.*, 2002). The reaction mixture was prepared by adding 1.5ml of extract to 1.5ml of 2% methanolic AlCl_3 . Samples were incubated for 10 min at room temperature. The absorbance was measured at 420 nm. The samples were prepared in triplicates for each analysis and the mean value of absorbance was obtained. The same procedure was used for the standard solution of rutin and the calibration curve was prepared using a standard solution of Rutin (10 $\mu\text{g/ml}$ to 100 $\mu\text{g/ml}$). The results were expressed on a dry weight (dw) basis as mg Rutin equivalents (RE) / g of sample.



Figure 4. A. Flavonoid preliminary test before adding H_2SO_4 , B. Flavonoid preliminary test after adding H_2SO_4

CHAPTER 4- RESULTS AND DISCUSSION

The great scope of secondary metabolites in *Indigofera colutea* (Burm.f.) Merr. has reflected the presence of total phenols and flavonoids having antioxidant properties. The high content of poly-phenolic secondary metabolites (phenols and flavonoids) in *Indigofera colutea* and it's used in complementary medicine are indications that the plant is of great potential for wide range of applications in medicine. Hence the above-mentioned study of phenolic content and flavonoid content of *Indigofera colutea* (Burm.f.) Merr. is carried out.

Statistical analysis

Experimental results were statistically analyzed and expressed as mean \pm standard deviation. All measurements were replicated three times. Data were subjected to different statistical analysis using MS Excel.

Calibration curve

The results of total phenolic content, flavonoid content, were evaluated by analyzing ten concentration levels of standard solutions. Each concentration was repeated three times. The calibration curves of the standards were constructed with the correlation coefficients and regression equations (Table 1). The calibration graphs of different standards were shown in (Figure 5).

Phytochemical constituents

Phenolics and flavonoid content

The systematic literature collection, related to this investigation indicates that the plant phenolics constitute one of the major groups of compounds acting as primary

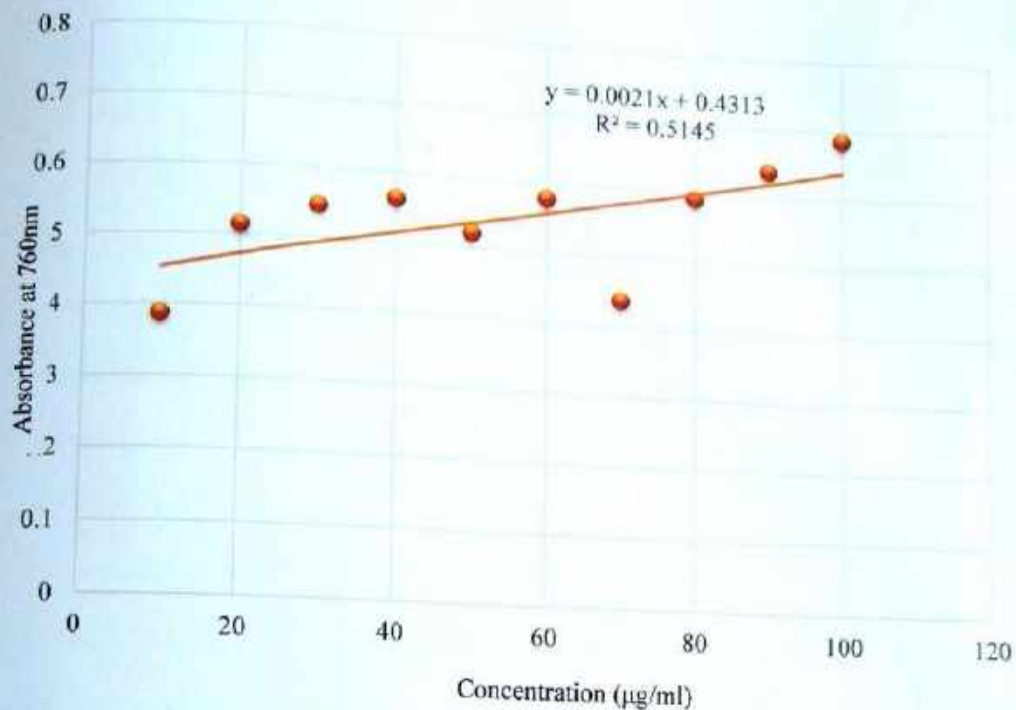


Figure 5. A.: Standard Plot of Phenolics

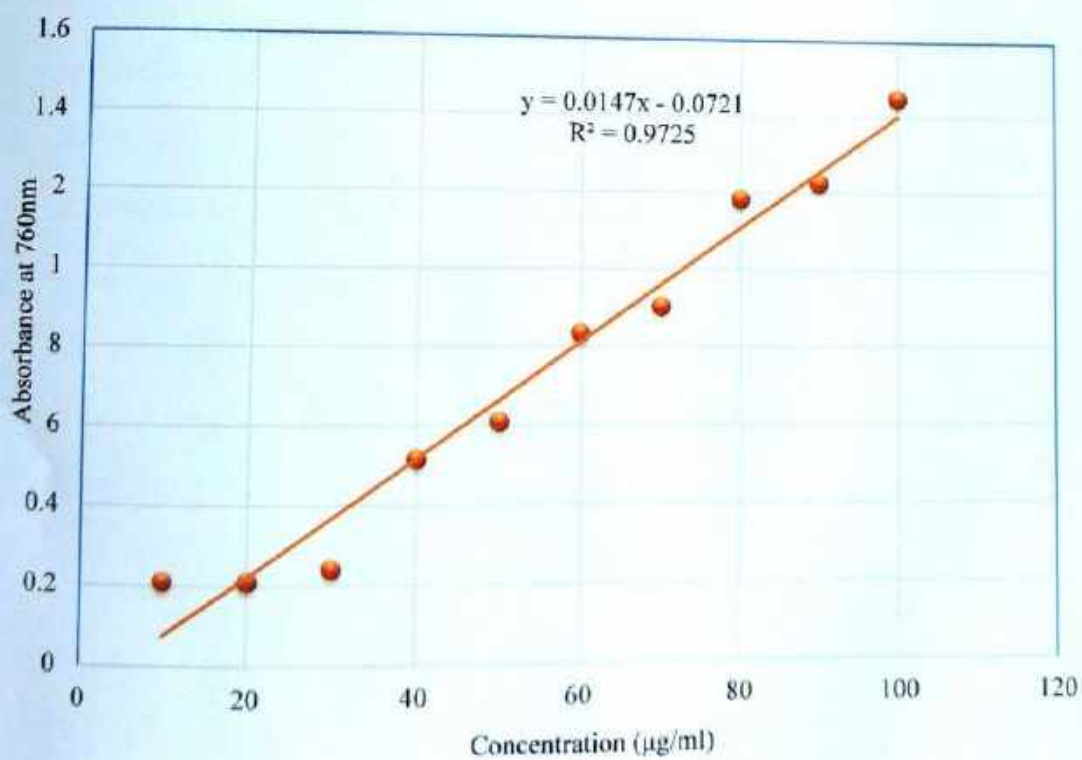


Figure 5. B.: Standard Plot of Flavonoids

antioxidants or free radical terminators. Phenolic antioxidants "stop" free oxygen radicals and free radicals formed from the substrate by donating hydrogen atoms or electrons

Therefore, it is worthwhile to determine their total amount in the plant chosen for the study. Flavonoids as one of the most diverse and widespread group of natural compounds, are likely to be the most important natural phenolics (Agrawal, 1989). These compounds possess a broad spectrum of chemical and biological activities including radical scavenging properties. Such properties are especially distinct for flavanols. Therefore, the content of both groups of phenolics is also determined in the extracts (Table 2). The content of total phenolics in the extracts of *Indigofera colutea* (Burm.f.) Merr. is expressed as tannic acid equivalents (TAE). It can be observed that the content of phenolics in the different solvent extracts is highest in ethanolic extract (0.45 mg TAE /g dw) and lowest in petroleum ether extract (0.039 mg TAE /g dw). The phenolic content is in descending order of ethanol > acetone > methanol > aqueous > chloroform > petroleum ether showing that ethanol possesses a significant high amount of phenolic content. (Table 2) also represents the total flavonoid content in different solvent extracts of *I. colutea* (Burm.f.) Merr. The results revealed that ethanolic extract also have the highest total flavonoid content (1.527 mg RE/g dw) in ethanolic extract as that of phenolic content and petroleum ether extract have the lowest flavonoid content (0.204 mg RE/g dw) in comparison with other fractions of plant extract. The flavonoid content is in descending order of ethanol > acetone > aqueous > methanol > chloroform > petroleum ether.

Table 1. Values of standard calibration graph

Name of Standard	Name of Quantified Compounds	Y Value	R ²
Tannic acid	Phenols	$y=0.0021x+0.4313$	0.5145
Rutin	Flavonoids	$y=0.0147x-0.0721$	0.9725

Table 2. Total Phenolics and Flavonoid content in *Indigofera colutea* (Burm.f.) Merr.

Solvents	Total phenolics (mg TAE/ dw of plant material)	Total flavonoids (Mg TAE/ dw of plant material)
Aqueous	0.318	0.47
Methanol	0.32	0.387
Ethanol	0.45	1.527
Acetone	0.401	1.07
Chloroform	0.188	0.303
Petroleum ether	0.039	0.204

Each value in the table is represented as Mean \pm SD ($n = 3$); phenolic content is expressed as mg TAE/ g dw: milligram tannic acid equivalent per gram dry weight and flavonoid content is expressed as mg RE/g dw: milligram rutin equivalent per gram dry weight.

Figure 6 showing a bar graph indicate concentration of phenols (Figure 6. A) and flavonoids (Figure 6. B) in various solvents.

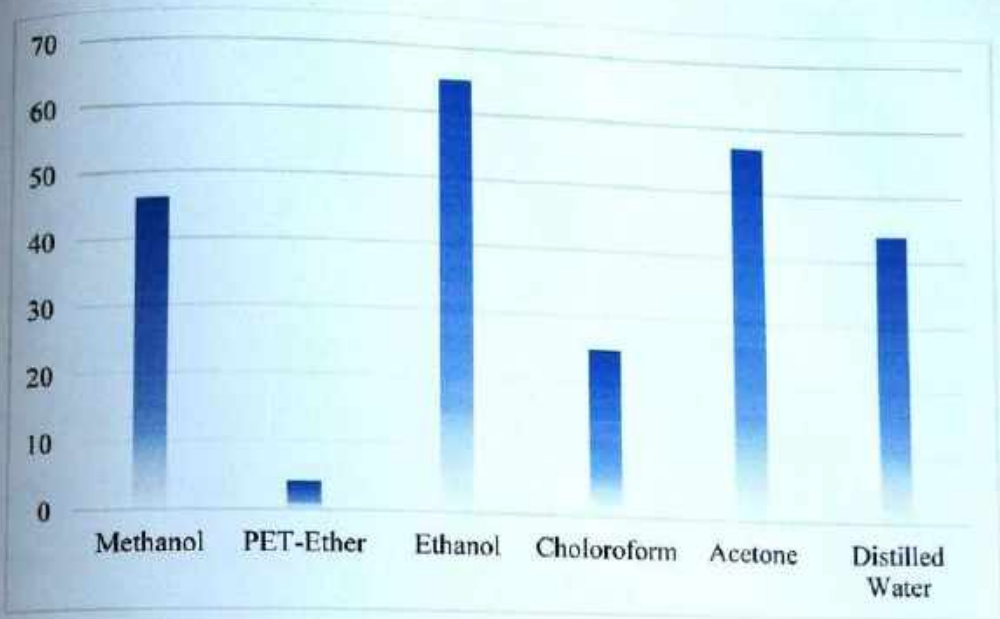


Figure 6.A. : Concentration of Phenols in various solvents

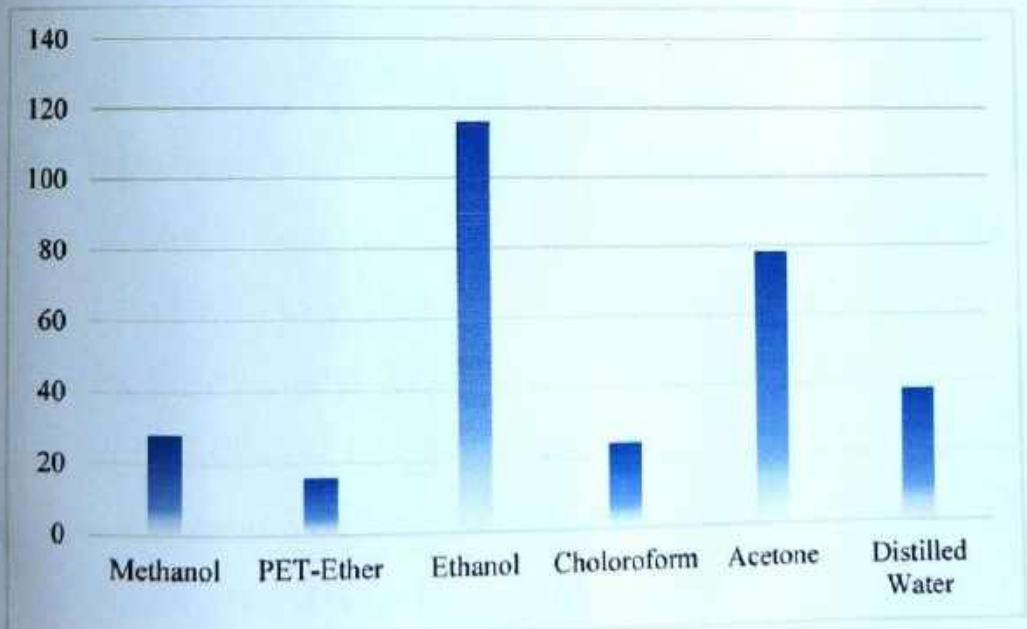


Figure 6.B. : Concentration of Flavonoids in various solvents

CHAPTER 5- SUMMARY AND CONCLUSION

The utilization of medicinal plants is known since former times. The utility of plants as medicine in Indian medicinal systems like Ayurveda, Siddha, Unani has been practiced since ages. Every plant whether herb, shrub, creeper, or a tree has got diverse phytochemicals that help them tackle the harsh conditions of abiotic factor besides these phytochemicals when isolated can be used as drugs to treat certain disorders, in order to know these curative properties of plants the present study is carried out on *Indigofera colutea* (Burm.f.) Merr. for its phytochemical evaluation of phenols and flavonoids.

The results of the study could be summarized as follows,

- *Indigofera colutea* (Burm.f.) Merr is a species of flowering plant belonging to the family Fabaceae. The study began by collection of germplasm of *Indigofera* from its natural habitat.
- To assess the quality of *I. colutea* (Burm.f.) Merr whole plant was subjected to phytochemical analysis making quantitative estimation of total phenolics and total flavonoid content.
- Total phenolic content, total flavonoid content of *I. colutea* (Burm.f.) Merr were determined and effectiveness of different solvent extractions on yield of total phenolics and flavonoid content was examined.
- Among the various solvent extracts analysed for phenolics and flavonoid content the ethanolic extract was found suitable for more yields of total phenolics and flavonoids.
- The study also reveals that ethanol extract in *I. colutea* (Burm.f.) Merr contains

significant amount of phenolics and flavonoids and it is the extent of phenolics and flavonoids present in this range being responsible for its marked antioxidant activity as estimated through various models. Thus, ethanol extract of *I. colutea* (Burm.f.) Merr can be used as an accessible source of natural antioxidants with consequent health benefits.

- From all of these perceptions, following conclusions can be drawn:
- Phytochemical investigation of *Indigofera colutea* (Burm.f.) Merr indicates the presence of phenolics and flavonoids.
- High content of phenolics and flavonoids were recorded in the plant and a strong correlation for antioxidant assays, which attributes new directions for further research. Due to COVID-19 situation in the state, antioxidant assays were not carried out.
- Ethanol extraction system is the best for optimum yield of total phenolics and flavonoids as compared to other solvent systems used for the extraction. This basic effort will help in large scale extraction of the secondary metabolites.
- Information about its phytochemical status provide future herbal-based medicine researchers along with its antioxidant assay with additional data to support their work.

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**ETHNO-BOTANICAL SURVEY OF MEDICINAL PLANTS IN
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1715



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RANI CHANNAMMA UNIVERSITY, BELAGAVI

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MASTER OF SCIENCE

IN

BOTANY

SUBMITTED BY

MISS. ARPITA JUGAL

MISS. ASHA BAGAWALE

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UNDER THE GUIDANCE OF

DR. VEERABHADRA SWAMY A. L., M.Sc., Ph.D.

DEPARTMENT OF POST GRADUATE STUDIES IN BOTANY
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RANI CHANNAMMA UNIVERSITY, BELAGAVI



CERTIFICATE

This is to certify that; this project entitled “Ethno-Botanical Survey of Medicinal Plants in Chikodi and Its Surroundings” is being submitted herewith for the partial fulfillment of award of the Degree of Master of Science in Botany, Rani Channamma University, Belagavi. The work reported in this report is based upon the results of the original work carried out by Miss. Arpita Jugal, Miss. Asha Bagawale & Miss. Sneha Kamble under my supervision and guidance.

Place: Chikodi

Date: 25/09/2021

Dr. Veerabhadra Swamy A. L.

Research Supervisor

Co-ordinator

Post Graduate of Department Botany

DECLARATION

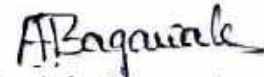
We hereby declare that this project work entitled "Ethno-Botanical Survey of Medicinal Plants in Chikodi and Its Surroundings" completed and written by us has not previously formed. This report is based on the results carried out by us.

Place: Chikodi

Date: 09/09/2021



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MISS. ARPITA JUGAL
MISS. ASHA BAGAWALE
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INTRODUCTION

CHAPTER 1 - INTRODUCTION

1.1 General context

The relation of medicinal plants and human beings dates back to prehistoric period. There is strong evidence since the early Vedic period of plants being used for a wide range of medicinal purposes to cure various kinds of diseases. This continuous, unbroken tradition has been used for over four millennia. The first and oldest source of human knowledge written was placed in *Rigveda* (4500-1500 B.C.). There are around 67 plants being used for mention therapeutic purpose. Thereafter, in *Yazurveda* registers 81 plants where as *Atharvanaveda* listed 290 medicinal plants (1200 B.C.). Another most appreciable documentation of medicinal plants in *Charaka Samhita* (900 B.C.) and *Susruta Samhita* (600 B.C.), listed 341 and 395 medicinal plants (Pullaiah, 2002). The Greek surgeon Dioscorides documented approximately 600 medicinal plants of Mediterranean and published in "*De Materia Medica*". In 1753, Carl Linnaeus wrote "*Species Plantarum*", which included information on about 5,900 medicinal plants.

The 19th century, Alexander von Humboldt collected data from the New World, and the James Cook's voyages brought back collections and information on plants from the South Pacific. Edward Palmer collected botanical specimens from people in the North American West (Great Basin) and Mexico from 1860s to 1890s. During this period, the field of "aboriginal botany" was established which depicted attention of all forms of the vegetable plant of world used by aboriginal people for food, medicine, textiles, ornaments and more (Powers, 1873). Leopold Glueck, a German physician was the first individual to study the emic perspective of the plant world at the end of the 19th century. His published work on traditional medicinal plants used by the rural people in Bosnia (1896) was considered as first modern

ethno-botanical work (Choudhary *et. al.*, 2008). The term "ethno-botany" was first used by Harshberger (1895). He defined Ethno-botany as the science of denoting the uses of plants by the aboriginal people. Traditional knowledge encompasses both wild and domesticated plant species and is rooted in observation, relationship, needs, and traditional ways of knowing. Such knowledge evolves time to time, and is therefore always changing and adding new discoveries, resourcefulness and methods.

In the beginning of the 20th century, the field of ethno-botany practiced with change in methodology and theoretical reorientation from the raw data. This is an initiation of development of academic ethno-botany. Hence the Richard Evans Schultes considered as the father of modern ethno-botany for his studies of indigenous peoples uses of plants in America. His remarkable contribution among Native American communities which lead to be one of the first alert the world about the destruction of the Amazon rainforest and the disappearance of its native people and their traditional knowledge. He collected over 30,000 herbarium specimens and published numerous ethno-botanical discoveries. His book "*The Plants of the Gods: Their Sacred, Healing, and Hallucinogenic Powers*" co-authored with chemist Albert Hofmann, is considered as his greatest popular work in the field of ethno-botany (Schultes and Hofmann, 1979).

In South India, Roxburgh (1832) made floristic investigations of herbal medicinal plants and its uses from their botanical identification and vernacular names. Since 1873, Sir George Watt has studied economically important plant species, especially in Manipur and the adjacent Burma region for about a decade. He described nearly 3000 local names of plant products and their uses as obtained from various regions of India. Later, Bodding (1925, 1927 and 1940) published medicines used by Santal tribe and other useful plants. E. K. Janaki Ammal, as an official programmer in the Economic Botany Section of Botanical Survey of India, studied food plants of

certain tribal communities of South India (Janaki Ammal, 1956). Therefore, the Scientific Indian Ethnobotany was created by her at the Central Botanical Laboratory, Botanical Survey of India, Allahabad in 1960. S. K. Jain made an intensive and extensive ethno-botanical study of Central India and impressed the Indian scientists from different disciplines (Jain, 1963a, 1963b, 1963c and 1963d).

During the 1980's Ministry of Environment and Forests, Government of India also launched an all India co-ordinated project to document ethno-botanical uses of plants by indigenous people in India which was participated by many research institutions and universities of the country. From the study, the department recorded 200 plant species from Arunachal Pradesh used for treatment of 44 various diseases (Hynniewta, 1984), 286 plant species from Assam for treatment of 40 different diseases, 526 plant species from Nagaland for treatment of 83 different diseases and 194 plant species from Tripura for treatment of 50 diseases and ailments (Hynniewta, 1987). Jain and Srivastava (2001) gave a graphic review of the Indian ethno-botanical literature of about 1250 publications during 1982 to 2000. According to the All India coordinated project on Ethnobiology about 7500 wild plant species are used for medicinal purpose by the tribal communities and 950 are found to be new claims and are worthy of scientific scrutiny (Pullaiah, 2002).

1.2 Traditional medicine

Now-a-days, the medicinal plants are highly utilized throughout the world in two distinct lines of health practices and management. They are traditional system of medicine and the modern system of medicine. The traditional medical system is mainly functioning through two distinct ways (1) Local or folk or tribal stream and, (2) Codified and organized Indian system of medicines like Ayurveda, Siddha and Unanni. Since the last few decades, the importance and applications of traditional

medicine have been expanded globally and has received attention by the peoples. It has been continuously used for primary health care of the poor and developing countries. According to World Health Organization (WHO), traditional medicine is defined as “the sum total of the knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health, as well as in the prevention, diagnosis, improvement or treatment of physical and mental illnesses”.

Although, the traditional medicinal practices are influence of several factors such as culture, history, personal attitude and philosophy as the knowledge and practices are vary greatly from country to country, and from region to region. The traditional herbal medicines are comparatively safer and cheaper than modern medicine (Akinnibosun *et. al.*, 2009). A great deal of information about the traditional uses of plants is still intact with tribal peoples. But the native healers are often reluctant to accurately share their knowledge with outsiders (Sood *et. al.*, 2001).

1.3 Statement of the problem

The Chikodi is a Panchayat town and Taluk in Belagavi District in the Indian state of Karnataka. Most of the rural and poor people in the district use traditional medicine for various ailments with very negligible cost or sometimes free of cost. There is increasing demand for wild plant resources and their habitats because of over exploitation (Hoft *et. al.*, 1999). Natural habitats represent repositories of medicinal plants and indigenous ethno-botanical knowledge. These biotic and cognitive resources are threatened by vegetation removal and culture change (Voeks, 1996).

This traditional knowledge is verbally transmitted from generation to generation, and hence in danger of extinction as older people die and younger generations fail to learn the traditional way of life. This situation is degraded by rapid

socio-economic, technological and environmental changes (Tabuti *et. al.*, 2003). Indigenous knowledge about uses of wild plant resources such as medicinal plants is disappearing fast from traditional or rural communities (Bagine *et. al.*, 1997). Urbanization, mining, agricultural expansion and other developmental works have also resulted in the decline of interest in traditional culture and its practices.

The available literature divulges that documentation of traditional knowledge has not been carried out earlier in the study area. Hence, there is an urgent need to document and preserve all information on medicinal plants used by rural communities in the Chikodi before it is completely lost or verge of extinction. Documenting the indigenous knowledge through ethno-botanical studies is important for the conservation of biological resources and their sustainable utilization.

1.4. Study area

Location

The Chikodi is the Taluk in Karnataka state, as per the 2021 Aadhaar estimates, Chikodi Taluk population in 2021 is 779712. According to the 2011 census of India total Chikodi population is 628800 people are living in this taluk, of which 319797 are Male and 309003 are Female.

Around to 200 - 300 years ago Chikodi was called as Chik-kodi (small village) while the nearby the Hirekodi (big village) was a bigger than the Chikodi overtime, Chikodi experienced growth due to its famous betel leaves and its position on the major roads. famous for Shri. Mallikarjuna (Gramadevata) and Shri. Dattatreya (Parmatmaraja Maharaja) temple.

Latitude	16.4292	Longitude	74.587	Altitude(feet)	2240
Lat (DMS)	16°25'45.3036"N	Long (DMS)	74°35'15.9684"E	Altitude (meters)	683

This place is underdeveloped and is famous for its rich agriculture produce of Tobacco and sugarcane.

1.5 Objectives

- To document the traditional knowledge on medicinal plants used in Chikodi and its surroundings.
- To find out and document the traditional herbal healers or practitioner in the study area.

REVIEW
OF
LITERATURE

CHAPTER 2 - REVIEW OF LITERATURE

Human beings have been using plants for several purposes from the time of his emergence on this earth. They gained the knowledge regarding medicinal and poisonous plants. Such kind of knowledge becomes an essential part of their cultural development. The earlier studies in archaeology, paleobotany and ethnography revealed the strong and mutual relationship between plants, human beings and the biosphere. Still, the evidences are available regarding the use of medicinal plants in the Vedic period (4500-1500 B.C.) to cure human ailments from different diseases in India.

2.1 Traditional documentation work in India

Several workers have contributed to the development and progress of ethno-botanical research in India. Vartak (1959) reported the medicinal plants from the hilly regions of Pune and Satara districts of Maharashtra. Jain (1963a, 1963b, 1963c, 1963d and 1965) made an intensive ethno-botanical work in North India especially from the tribal areas of Madhya Pradesh. His research work unfolds new vistas of Traditional Medicine in India. He compiled nearly 100 indigenous medicinal plants with authentic information on their distribution, parts used and the medicinal and other uses. Jain and Tarafdar (1970) have worked on the medicinal plants in the folklore of the Santhals. Malhotra and Moorthy (1973) have recorded 126 useful as well as medicinal plants of Chandrapur district in Maharashtra. Bhatnagar *et. al.*, (1973) have conducted medico-botanical studies on the flora of Ghatigaon forests of Gwalior. Raghunathan (1976) has worked on the flora of medicinal plants of different tribal pockets in Nilgiris Hills in Tamil Nadu. Jain and Dam (1979) have made ethno-botanical work in northeastern

India. Tiwari *et. al.*, (1979) have reported the medicinal folklore from Assam and Arunachal Pradesh. Kritikar and Basu (1935) had written a book on Indian medicinal plants in 4 volumes which were reprinted in 1980. Kamble and Pradhan (1980) have conducted ethno-botanical study on Korkus tribe of Maharashtra. Similarly, ethno-botanical works have been done by Rao and Neogi (1980) on Khasi and Garo tribe of Meghalaya, Dam and Hajra (1981) on Mopas of Arunachal Pradesh, Joshi (1982) on Bhil tribe of Rajasthan, Megoneitso and Rao (1983) on Angami Nagas in Nagaland, John (1984) on Kani tribes of Kerala, Prasad and Abraham (1984) on Nayadis of Kerala, Shrivastava (1985) on Bhil tribe of Madhya Pradesh, Sharma and Lakshmi Narasimhan (1986) on tribes of Nasik district in Maharashtra, Das and Mishra (1987) on Deomali tribe of Orissa, Goel and Mudgal (1988) on tribes of Santhal Pargana in Bihar, Dagar (1989) on Onge tribe of Andaman, Maheshwari *et. al.*, (1990) on Oraon and Korwa tribes of Madhya Pradesh, Negi and Pant (1990) on Gangwal tribe of Himachal Pradesh and Rao (1990) on some Adivasi tribes of Nagaland in Northern India.

Tiwari *et. al.*, (1979) have investigated the folklore medicine of Assam and Arunachal Pradesh. Role of beliefs and folklore on sacred groves along the Western Ghats of Maharashtra and Goa was studied by Vartak and Gadgil (1981). Singh and Pandey (1982) have described the religious use of plants in Rajasthan. Dixit and Pandey (1984) have studied the plants used in Jhansi and Lalitpur of Bundelkhand in Uttar Pradesh. Sahu (1982, 1983) has studied the ethno-medicine of Madhya Pradesh. Pushpangadan and Atal (1984) have worked on ethno-medico botanical investigations in Kerala. Saxena (1986) and conducted ethno-botanical works in Madhya Pradesh and Bihar respectively. Ghosh (1986) has conducted the ethno-botanical survey of Cooch Bihar district in West Bengal. Sharma and Singh (1988) have made ethno-botanical studies of some common plants in Kangar Range, Madhya Pradesh. Jain *et.*

al., (1989) has investigated the medicinal plants known among several tribes of India. Mukherjee and Namhata (1990) have studied medicinal plant lore of Sundargarh in Orissa. Nayar and Sastry (1987, 1988 and 1990) have published 3 Volumes of Red data book of Indian medicinal plants for the Botanical Survey of India.

Pandey *et. al.*, (1991) and Brijlal (1993) have conducted ethno-botanical studies on Baiga tribes of Madhya Pradesh. Similarly, ethno-botanical studies were made by Ghoshal (1991) on Kolha tribe of Orissa, Tiwari and Padhye (1993) on Gond tribe of Chandrapur and Gadchiroli districts of Maharashtra. Singh and Ali (1998) have made a survey on folk herbal dugs of a Sub-Himalayan forest tract in eastern Uttar Pradesh. Prakash and Singh (2000) have reported medicinal plants used by tribes in Uttar Pradesh.

Dubey and Gayetri (2001) have conducted ethno-botanical study on the Gond tribe of Madhya Pradesh. Similar works have been done by Chaudhari and Hutke (2002) on Melghat tribes of Maharashtra. Ayyanar and Ignacimuthu (2005) have studied the medicinal plants used for treating snake bite and skin diseases in Tamil Nadu. Uniyal *et al.* (2006) have documented medicinal plants used by the tribal communities of Chhota Bhangal in Western Himalaya. Ragupathy *et. al.*, (2008) have studied traditional aboriginal knowledge of medicinal plants in the Velliangiri holy hills of Tamil Nadu. Venkataswamy *et. al.* (2010) have made ethno-botanical study of medicinal plants used by Malasar tribes in Coimbatore district of Tamil Nadu. Gupta *et. al.*, (2010) have surveyed ethno-medicinal plants used by Gond tribe of Bhandara district in Maharashtra. Panda and Misra (2011) have conducted ethno-botanical survey of medicinal plants used by local herbal healers in South Orissa. Singh (2012) has made a detailed study on ethno-botanical uses of plant biodiversity from the Indian western Himalaya. Elavarasi and Saravanan (2012) have documented the medicinal plants used in the treatment of diabetes by tribal people of Kolli Hills in

Namakkal district of Tamil Nadu. Pragada *et. al.*, (2012) have documented ethno-medicinal plants used in the treatment of dysentery in North Coastal Andhra Pradesh. Jitin Rahul (2013) has made ethno-botanical survey of medicinal plants used in the Bundelkhand region of Uttar Pradesh. Rajesh *et. al.*, (2013) have made ethno-botanical study of Dudhwa National Park in Uttar Pradeesh. Bilal *et. al.*, (2013) have worked on the distribution pattern and current conservation status of threatened medicinal plants of Menwarsar Pahalgam in Kashmir Himalayas. Rana *et. al.*, (2013) have documented the ethno-botanical knowledge of Nanda Devi Biosphere reserve in Uttarakhand.

2.2 Traditional documentation work in Karnataka

In Karnataka, a very few people have contributed to the field of ethno-botanical research in the earlier period. But now, a considerable amount of good progress has been made in many districts of the state. Rao (1977) has recorded the plants of folklore medicine in Mysore district. Pushpalata *et. al.*, (1990) has studied folk medicine from rural area of Bangalore district. Ethno-botanical works were carried out in various districts of Karnataka state such as, South Kanara (Iyengar *et. al.*, 1986), Tumkur (Yoganarasimhan *et. al.*, 1982), Chikmagalur (Gopakumar *et. al.*, 1991), Kodagu (Kalyanasundaram Indira, 1995) and Uttar Kannada (Harsha *et. al.*, 2003). Similar works have also been carried out in Shimoga (Parinitha *et. al.*, 2004; Shivanna and Rajkumar, 2010), Bidar (Vidyasagar and Prashantkumar, 2007), Chitradurga (Hiremath and Taranath, 2011) and Gulbarga district (Ghatapanadi *et. al.*, 2010).

Harihar and Kotresha (2010) have worked on wild medicinal plants of Kappat Hills in Gadag district and documented 43 species belonging to 39 genera and 31 families. Kotresha and Kambhar (2010) documented nine plants used for the

orthopedic treatment in Gadag district, Karnataka. Prakash *et. al.*, (2010) has documented the indigenous medicinal plants used by the people of NR Pura Taluk in Chikmagalur district. Guru prasad (2011) has conducted survey of ethnomedicinal plants from Chamundi hills of Mysore. Singh and Vidyasagar (2013) have documented ethno-medicinal plants used in the treatment of skin diseases in Hyderabad-Karnataka region. Recently, Yogesh Kumar *et. al.*, (2014) have reported the ethno-medicinal plants used by the traditional herbal healers of Tarikere Taluk in Chikmagalur district. Kambhar *et. al.*, (2014) documented 77 medicinal plants from the vicinity of some sacred grove/temple complexes of Bijapur town. Kambhar and Satish Dandinnavar (2020) documented 66 medicinal plants from Raibag and its Surrounding area.

MATERIALS
AND
METHODS

CHAPTER 3 - MATERIALS AND METHODS

3.1 Traditional Data Collection Methods

Ethno-medicinal surveys of traditional medicinal plants was carried out in Chikodi Taluk from December 2020 to March 2021 using ethno-botanical and Participatory Rural Appraisal (PRA) methods. A brief group discussion was made by the informants at each village prior to ethno-botanical data collection to get their consent and to explain them that their cooperation is a valuable contribution to the documentation of the traditional medicinal plants of the Chikodi area.

The information was recorded by means of interviews with the informants in a standard questionnaire prescribed by the Ethno-botanical Society of India (Appendix – Page no. 46). Group discussions and field observation were also applied to collect data on knowledge and management of medicinal plants. The group discussions were conducted to elaborate the methods of preparation, mode of administration and storage of medicinal plants. Interviews were conducted in local “Kannada” language.

3.2 Plant Identification

The reported medicinal plant species were photographed wherever possible and collected from natural vegetation, cultivated fields and gardens during the field walks. The collected species were identified with the aid of state and district floras (Cooke, 1901-1908; Saldanha, 1984; Singh, 1988 and Saldanha, 1996; Seetharam *et al.*, 2000; Kotresha and Kambhar, 2016).

RESULTS AND DISCUSSION

CHAPTER 4 - RESULTS AND DISCUSSION

Five traditional healers were found in different localities in the study area based on the recommendation from elders and local people of the locality (Table 1, Fig 1).

Sl. No.	Name	Age	Sex	Address
01	Shri. Kakasaheb Kabadige	49	M	Chinchani
02	Smt. Jinnamati Duragannavar	75	F	Kakamari
03	Shri. Pradeep Shetti	58	M	Ankali
04	Shri. Shailesh Kore	46	M	Ankali
05	Smt. Nirmala Mestri	37	F	Nippani

Table 1. List of the Traditional healers of Chikodi Taluk

Based on the collected reviews from traditional healers, total of 48 medicinal plants belongs 30 families were documented in the study area. The list of plant with their family name, habit and local name (in Kannada) represented in Table 2 and Fig 2 and Fig 3. The medicinal plant species are enumerated with their botanical name, common name, mode of preparation and administration against the ailments given in Table 3.

Table 2. List of plants with their family name, habit and local name

Sl. No.	Botanical Name	Family	Local Name
1	<i>Achyranthus aspera</i> L.	Amaranthaceae	Uttarani
2	<i>Allium cepa</i> L.	Amaaryllidaceae	Ullagaddi
3	<i>Allium sativum</i> L.	Amaaryllidaceae	Belluli
4	<i>Aloe barbdensis</i> Mill.	Asphodelaceae	Lolesara
5	<i>Asparagus racemosus</i> Willd	Poaceae	Shatavari
6	<i>Azadirachta indica</i> A. Juss	Meliaceae	Bevumara

7	<i>Brassica juncea</i> (L.) Czern.	Brassicaceae	Sasive
8	<i>Bumbara vulgaris</i> Schrad. ex J. C. Wendl.	Poaceae	Bidiru
9	<i>Carica papaya</i> L.	Caricaceae	Pappayi
10	<i>Catharanthus rosesus</i> (L.) G. Don	Apocynaceae	Sadapushpa
11	<i>Chrysopogon zizaniodes</i> (L.) Roberty	Poaceae	Lavancha
12	<i>Citrus limon</i> (L.) Burm.	Rutaceae	Nimbe
13	<i>Cinnamomum verum</i> J. Presl	Lauraceae	Dalchinni
14	<i>Clerodendrum phloidis</i> L.f	Verbenaceae	Usalakki
15	<i>Coccinia grandis</i> (L.) Voigt.	Cucurbitaceae	Tonde balli
16	<i>Cocous nucifera</i> L.	Arecaceae	Tenginmara
17	<i>Coriandrum sativum</i> L.	Apiaceae	Kotambari
18	<i>Crossandra infundibuliformis</i> (L.) Ness	Acanthaceae	Abuli
19	<i>Crossandra lutea</i>	Acanthaceae	Bhagava Abuli
20	<i>Cumimum cymimum</i> L.	Apiaceae	Jeerige
21	<i>Curcuma longa</i> L.	Zingiberaceae	Arasina
22	<i>Datura metel</i> L.	Solanaceae	Kanagunki
23	<i>Daucus carrota</i> L.	Apiaceae	Gajjari
24	<i>Eclipta alba</i> (L.)	Myretaceae	Kadigarag
25	<i>Elettaria cardamum</i> (L.) Maton.	Zingiberaceae	Yalakki
26	<i>Eucalyptus globulus</i> Labill.	Myretaceae	Nilagiri
27	<i>Glycyrrhiza globara</i> L.	Fabaceae	Jestamadh
28	<i>Hibiscus rosa-sinesis</i> L.	Fabaceae	Daswal
29	<i>Leucas aspera</i> (Willd.) Link.	Lamiaceae	Turbi
30	<i>Menta piperita</i> L.	Lamiaceae	Mente
31	<i>Moringa oleifera</i> Lam.	Moringaceae	Nugge
32	<i>Musa</i> L.	Musaceae	Balegida
33	<i>Ocimum sanctum</i> L.	Lamiaceae	Tulsi
34	<i>Paethenium hysterophorus</i> L.	Asteraceae	Kangress
35	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Nelanelli
36	<i>Piper betle</i> L.	Piperaceae	Veeledyele
37	<i>Piper nigrum</i> L.	Piperaceae	Kalamensu
38	<i>Piper longum</i> L.	Piperaceae	Hippali

39	<i>Pterococcus corniculatus</i> (Smith)	Euphorbiaceae	Raktachandan
40	<i>Punica grantum</i> L.	Punicaceae	Dalimbe
41	<i>Ricinus communis</i> L.	Euphorbiaceae	Audal
42	<i>Solanum lycopersicum</i> L.	Solanaceae	Tomato
43	<i>Terminalia chebula</i> Retz.	Combretaceae	Alelikayi
44	<i>Tinospora cardifolia</i> (Wild.) Meirs. ex Hooks.f. & Thoms.	Menispermaceae	Amrutballi
45	<i>Trachyspermum ammi</i> (L.) Sprague.	Asteraceae	Ajavaana
46	<i>Tribulus terrestris</i> L.	Zygophyllaceae	Neggalu
47	<i>Withania somnifera</i> (L.) Dunal.	Solanaceae	Ashwagandha
48	<i>Zingiber officinales</i> Rosc.	Zingiberaceae	Shunti

Table 3. Medicinal plant species with their botanical name, local name and mode of preparation against the ailments.

Sl. No.	Ailments	Botanical name with local names, parts used and mode of preparation
1	Acidity	Take <i>Tinospora cardifolia</i> (Wild.) Meirs. ex Hooks.f. & Thoms.[Amrutballi] leaves, add one glass of water and drink it for 2 to 3 days.
2	Bauine viral Diarrohea	Take leaves of <i>Bumusa vulgaris</i> [Bidiru] and <i>Aristolochia indica</i> L.[Hinginmita] feeds the cattles.
3	Bone and joint pain	Take 10 to 15 leaves of <i>Azadirachta indica</i> A.Juss. [Neem] grind it, add paste into two cups of boiled water for 5 min, then filter the extract, add lemon juice and take daily once in the early morning. <i>Pterococcus corniculatus</i> (smith) [Rakthachandan] make a paste, apply in wound place in daily.
4	Blood Clotting	6 to 7 cloves of <i>Allium sativum</i> [Belluli] / [Garlic] eat it in the early morning empty stomach.
5	Constipation	Daily eat <i>Carica papaya</i> L. [Pappayi] with Banana cure the constipation.

		Take 3 to 4 <i>Piper nigrum</i> L. seeds [Kalamenasu] / [Pepper seed], add pinch of salt crushed then eat it.
6	Cough	Two spoons of <i>Ocimum sanctum</i> L. [Tulsi] leaves juice, 2 to 3 spoon <i>Zingiber officinale</i> Rosc. [Zinger] / [Shunti] and add one spoon of Honey mix it gently, eat the mixture at the night before sleeping continue for 3 to 4 days. Take <i>Terminalia chebula</i> Retz. [Hirada] fruit rind chewing it up to 3 days for 3 to 4 times per day.
7	Dandruff	5 to 10 flowers of <i>Hibiscus rosa sinensis</i> [Hibiscus] / [Daswal] along with leaves prepare the paste, apply on scalp and massage it twice in a weekly. Make a fine powder of <i>Cuminum cyminum</i> L. [Cumin seeds] / [Jeerige] seeds add Milk prepare paste apply on scalp, it reduces dandruff.
8	Diabetes	Take <i>Catharanthus roseus</i> (L) leaves dry it, make a fine powder. One spoon of dry leaves powder add water to it and drink the mixture in empty stomach for daily.
9	Depression	Prepare juice of <i>Solanum lycopersicum</i> L. [Tomato] and 1 to 2 spoon of sugar mix it drink the juice.
10	Dehydration	<i>Cocos nucifera</i> L. [Coconut] water drink it early morning on empty stomach.
11	Digestion	Daily consume 4 to 5 <i>Allium sativum</i> L. [Garlic] / [Belluli] with food. Take 1 to 2 spoons of <i>Aloe barbdensis</i> Miller. [Aloevera] / [Lolesara] pulps add <i>Curcuma longa</i> L. [Turmeric] / [Arasina] powder mix it well and take it in empty stomach.
12	Dog bite	Make the paste <i>Crossandra lute</i> [Abuli] and <i>Cuminum cyminum</i> L. [Jeerige], add one glass of water filter it and take it in empty stomach.
13	Earache	<i>Phyllanthus emblica</i> L. [Nelaneli] fruit is used to earache problems.
14	Eye-ache	1 to 2 spoons of <i>Allium cepa</i> L. [Onion] / [Ulagaddi] juice, 2 spoons of <i>Daucus carota</i> subsp. <i>sativus</i> [Carrot] /

		[Gajjari], then add <i>Achyranthus aspera</i> [Uttarani] juice, add 1 spoon of honey mix it well. Drop it on eye 3 times/day.
15	Feeders for cattle	<i>Datura metel</i> L. leaves paste apply on the infected area.
16	Gum pain	Take <i>Allium cepa</i> L. [onion], Greengram add <i>Allium sativum</i> L. [Garlic] clove, mix it in ghee put on the gum after reduces pain.
17	Hair fall	Boil equal amount of water and leaves of <i>Aloe barbadensis</i> Miller. [Aloe vera] / [Lolesara] add <i>Cocos nucifera</i> L. [Coconut] oil when become a soft strain it apply on hair. Handful of <i>Eclipta alba</i> L. [Bhrungraj] leaves paste, add <i>Cocos nucifera</i> L. [Coconut oil] boils it, then cool the oil, stir it apply on hairs daily. <i>Mentha piperita</i> L. [Mente] seeds add water, soak it some hours and grind it apply the paste on hairs. Crush the leaves of <i>Piper betel</i> L. [Veeledyele] mix in Coconut oil, apply on hairs. 2 spoons of <i>Cocos nucifera</i> L. [Coconut] oil, 1 spoon of <i>Ricinus communis</i> [Castor] oil, 1 spoon of <i>Brassica juncea</i> [Mustard] oil. Mixtures of 3 oils warm it and apply on hairs.
18	Heat	Take a handful of <i>Chrysopogon zizanioides</i> [Lavancha] roots put in 1 to 2 glasses of water over night and next day morning drink it, empty stomach for 3 days.
19	Jaundice	Take <i>Ricinus communis</i> [Castor] leaves juice, 2 spoons of sugar and add one glass of Cow milk mixed and drink the mixture. For twice in a week.
20	Joint pain	<i>Aloe barbdensis</i> Miller. [Aloe vera] pulp massage on joints until one month.
21	Kidney stone	<i>Phyllanthus emblica</i> L. [Nelanelli] leaves eaten morning in empty stomach. The inner pillow of <i>Musa</i> L. [Banana] plant taken add one glass of water, juice it. Take until 7 days.

		Mixture of <i>Cuminum cyminum</i> [Cumin] seed, Honey take weekly thrice by empty stomach.
22	Lack of Lactation in cattle	<i>Coccinia grandis</i> L. [Tonde balli] root, <i>Pandanus odorifer</i> root crush it, feed to cattle and massage on backbone of cattle.
23	Lactation in women	One glass of milk adds a half spoon of <i>Asparagus racemosus</i> wild. [Shatawari] powder add 10 gram of rock sugar mix it drink it for 10 to 15 days.
24	Laryngitis (Throat infection)	Take <i>Glycyrrhiza glabra</i> L. [Jestmadh] stem chewed 2 to 3 times in a day. Continue this for 3 to 4 days.
25	Mouth ulcers	3 to 4 <i>Hibiscus rosa sinesis</i> [Hibiscus] flowers prepare the paste apply on mouth part. 4 to 5 leaves of <i>Ocimum sanctum</i> L. [Tulsi] eaten in empty stomach for 2 to 3 days.
26	Nerve problem	Take <i>Withania somnifera</i> (Linn) leaves [Ashwagandha] add water boil for 20 minutes strain it.
27	Piles	<i>Elettaria cardamum</i> (L.) Maton with <i>Musa</i> L. [Banana] eat daily.
28	Pimples	Equal amount of <i>Azadirachta indica</i> A. Juss [Neem], <i>Moringo oleifera</i> [Drumstick] / [Nugge] leaves paste and add 1 spoon of <i>Curcuma longa</i> L. [Turmeric] mix the paste, apply on face. Use for twice in a week.
29	Scorpion bite	<i>Parthenium hysterophorus</i> L. [Kangress] leaves paste apply on bitted area.
30	Skin infection	Take a handful of <i>Azadirachta indica</i> A. Juss [Neem] leaves add water boil it, strain out the leaves once in becomes soft taking a bath with Neem infused water will keep all the infection away from the body.
31	Skin scars	Prepare <i>Corinandra sativum</i> L. [Kotambari] juice add <i>Citrus limon</i> [Lemon] juice mix it properly apply on scars.
32	Snake bites in Cattle	Take <i>Clerodendrum phlomidis</i> L.f [Usalakki] leaves, crush it add water to give drink to cattle.
33	Stomach pain	Take a half bowl of <i>Punica grantum</i> [Pomegranate] /

		[Dalimbe] leaves juice drink for 3 days before sleeping. One glass of milk, add 2 spoons of <i>Curcuma longa</i> L. [Turmeric] boil it drink the mixture.
34	Tonsils	<i>Achyranthus aspera</i> L. [Uttarani], <i>Piper betle</i> L. [Veeledyele] eat it.
35	Toothache	Take <i>Crossandra infundibuliformis</i> [Abuli] leaves add salt put on the teeth. It reduces the pain.
36	Urine infection	5 grams of <i>Tribulus terrestris</i> [Neggalu] add 1 glass of water, boil it for 5 minutes, stir the mixture, drink it early morning, empty stomach for 15 days.
37	Vomiting	Prepare juice of <i>Citrus limon</i> [Lemon], sugar in water and then add <i>Elettaria cardamum</i> (L.) Maton [Cardmomum] / [Yalakki] mix it and drink the mixture.
38	Weight loss	25 grams of <i>Trachyspermum ammi</i> (L.) Sprague. [Ajavaana] soak in water over night, filtered and add honey drink it, empty stomach.

4.1 Diversity of Medicinal Plants in Chikodi

A total of 48 medicinal plants belonging to 30 families were documented in the study area. The results gathered during the survey are summarized here, which provide the information such as, scientific name, family in bracket, local names, part used and medicinal uses of each species. The most represented families, Apiaceae with 3 species followed by Zingiberaceae, Solanaceae, Lamiaceae, Piperaceae, Poaceae. and Fabaceae with two species followed by Amaryllidaceae, Acanthaceae, Euphorbiaceae, Asteraceae, Myretaceae, The families like Amaranthaceae, Asphodelaceae, Meliaceae, Brassicaceae, Caricaceae, Apocynaceae, Rutaceae, Lauraceae, Verbenaceae, Cucurbitaceae, Arecaceae, Moringaceae, Musaceae, Phyllanthaceae, Punicaceae, Combretaceae, Menispermaceae, Zygophyllaceae represented with only one species each. In similar results were found in Coochbehar district of West Bengal where Fabaceae were dominant families (Datta

et. al., 2014). Medicinal plants belonging to families like, Lamiaceae were dominant in Kadapa district of Andhra Pradesh (Reddy *et. al.*, 2011). Asteraceae were the leading families in Kerala state (Rajith and Ramachandran, 2010), whereas in Kancheepuram district of Tamil Nadu, Amaranthaceae were the dominant ones (Chellaiah Muthu *et. al.*, 2006).

4.2 Medicinal plants used in treating common ailments

According to WHO, nearly 80 % of the world populations rely on traditional medicines for primary health care, most of which involve the use of plant extracts (Sandhya *et. al.*, 2006). Today about 65 % of Indian population depend on the traditional system of medicine (Arya *et. al.*, 2014). In Chikodi, jaundice, joint pain and stomach-ache were the most common diseases, for which large number of patients visit the traditional medical practitioners. The possible reason behind these diseases in the investigated region might be due to lack of proper sanitation, fuel wood smoke houses and poor quality food.

For the treatment of jaundice in Chikodi taluk, *Ricinus communis*, *Allium sativum* L., *Azadirachta indica*, *Tinospora cordifolia*, found effective for treating jaundice. The species of *Phyllanthus amarus* are also used as an effective remedy for jaundice in Pakistan (Jan *et. al.*, 2009). *Ricinus communis* is used to treat worms in the teeth and skin cracks in Nepal (Joshi *et. al.*, 2011), while *Leucas aspera* is used for treating snake bite and one side headache in Tamil Nadu (Revathi and Parimelazhagan, 2010).

Traditionally, rural women in the study area prefer plant medicines rather than modern medicines for gynecological problems such as dysmenorrhoea (painful menstruation). Most commonly used medicinal plant for these problems was; the bark of *Mangifera indica*, *Ficus benghalensis*, *F. religiosa*, and *Polyalthia longifolia*. For

this similar kind of problems, the species of *Caesalpinia bonduc* and *Clitoria ternatea* are also used for in Bidar district of Karnataka (Vidysagar and Prashantkumar, 2007) and Madhya Pradesh (Tripathi *et. al.*, 2010), respectively. Savithramma *et. al.*, (2012) reported that *C. bonduc* is used to treat rheumatic pains in Andhra Pradesh. *Withania somnifera* is used to treat rheumatism in Rajasthan (Choudhary *et. al.*, 2008) and tumors and ulcers in Maharashtra (Mali and Bhadane, 2011).

The most commonly used plant species for treating dysentery in the study area is *Aegle marmelos* which used for the same problem in Tamil Nadu (Johnsy *et. al.*, 2013), Orissa (Sen and Behera, 2008), and Madhya Pradesh (Wagh *et. al.*, 2011). However, *Aloe vera* is used for menstrual disorders in Himachal Pradesh (Rawat and Kharwal, 2011), and for respiratory disorders in Cameroon (Focho *et. al.*, 2009). *Senna auriculata* is used for treating dysentery in Rajasthan (Negi and Sharma, 2012), and for skin diseases in Tamil Nadu (Senthilkumar *et. al.*, 2006). Although some of the plants used in the study area, were also used for the same ailments in other regions, they differ in the parts used, method of drug preparation and administration.

4.3 Medicinal plants and traditional knowledge

In the present survey, 48 medicinal plant species used for the treatment of various diseases of human beings was listed. The diseases like Jaundice, stomach-ache, dysentery, indigestion, piles and teeth-ache found in human beings was well reported and documented. The reported plant species include both wild and cultivated ones. The rural people of Chikodi area are highly dependent on the traditional herbal medicine because of their poor socio economic conditional and availability of effective drugs. The data collected is expedited to serve as a useful tool for the establishment of herbal drug industries and improve the economy of the region. There

is still enormous traditional knowledge hidden among the medicinal plant practitioners in the district, which requires some other strategies to disclose.

It is found that ethno-medicinal knowledge is becoming restricted only to the elders, traditional practitioners and local farmers, while young people are totally ignorant of this wealth. Advancement in science and technology has changed the social values and therefore, the younger generation are transforming at a much faster rate into the new tradition. Medicinal plant knowledge is going to be obsolete because of the interference of modern cultural changes. This situation appears to occur in many parts of the country and the world (Yirga, 2010; Umapriya *et. al.*, 2011). It is therefore very important to document the native flora along with their ethno-medicinal recipes before the extinction of the indigenous knowledge.



Fig. 1: Field visit photograph with traditional healers.

A. Kakasaheb Kabadge, traditional healer in Chinchani.

B. Pradeep Shetti, traditional healer in Ankali.



Fig. 2: Some of the traditional medicines collected during the field visit.



Fig. 3: Some of the traditional medicinal plants collected during the field visit.

A. *Prosopis juliflora*, **B.** *Aristolochia indica*, **C.** *Nicotina*, **D.** *Leucas aspera*, **E.** *Crossandra infundibuliformis*, and **F.** *Clerodendrum phlomidis*.

SUMMARY

SUMMARY:

The medicinal plants are highly utilized throughout the world and it is influenced by several factors such as culture, history, personal attitude and philosophy as the knowledge and practices are vary greatly from country to country and from region to region. A great deal of information about the traditional uses of plants is still intact with tribal peoples. Most of the rural and poor people in the Belagavi district use traditional medicine for various ailments with very negligible cost or sometimes free of cost. This traditional knowledge is verbally transmitted from generation to generation, and hence in danger of extinction as older people die and younger generations fail to learn the traditional way of life. Hence, there is an urgent need to document and preserve all information on medicinal plants used by rural communities in the Chikodi before it is completely lost or verge of extinction. Documenting the indigenous knowledge through ethno-botanical studies is important for the conservation of biological resources and their sustainable utilization. Group discussions and field observation were also applied to collect data on knowledge and management of medicinal plants. Five traditional healers were found in different localities in the study area and based on the collected reviews from traditional healers, total of 48 medicinal plants belongs 30 families were documented in the study area.

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APPENDIX

Appendix: Questionnaire used for recording information revealed by traditional healers

A) Informants' consent for the participation in the study:

I..... (name of informant) hereby give my full consent and conscious to participate in this study and declare that to the best of my knowledge the information that I have provided are true, accurate and complete.

Date..... (Signature/Thumb impression of Informant)

B) Informants' details:

Name:

Gender:

Age:

Occupation:

Education:

Location/Residence:

C) Data about medicinal plant and its use:

Plant (Local name):

Habit (Tree/ Herb/ Shrub/Climber):

Plant part used:

Cultivated/ Wild:

If cultivated, cultivated for:

If wild, availability in natural resources (easy/ difficulty/ very difficult)

Conservation needs:

Conservation efforts made by Government and local residents:

Method of collection and storage:

Name of disease(s) treated:

Method of crude drug preparation:

Mode of administration:

Dosage:

Other uses (if any):

Remarks:

Plant identified as:

Genus, species with family

Signature of Researcher

CHECKLIST OF FLOWERING PLANTS OF KADABAGATTI FOREST RANGE GOKAK



A PROJECT REPORT SUBMITTED TO

RANI CHANNAMMA UNIVERSITY BELAGAVI

FOR PARTIAL FULFILLMENT OF THE AWARD OF THE DEGREE OF

MASTER OF SCIENCE

IN

BOTANY

SUBMITTED BY

MR. DNYANADEV S HUDDAR Reg. No: BT191407

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UNDER THE GUIDANCE OF

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DEPARTMENT OF POST GRADUATE STUDIES IN BOTANY,
KLE SOCIETY'S, BASAVAPRABHU KORE ART'S, SCIENCE AND COMMERCE
COLLEGE, CHIKODI, BELAGAVI- 591 201

2021

*Dedicated To Our
Beloved Parents, Teachers and
Friends for External Source of
Inspiration that Helped Us in
Achieving Our Goal.*

RANI CHANNAMMA UNIVERSITY BELAGAVI



C E R T I F I C A T E

This is to certify that; this project entitled “**Checklist of Flowering Plants of Kadabagatti Forest Range Gokak**” is being submitted herewith for the partial fulfillment of award of the Degree of Master of Science in Botany, Rani Channamma University, Belagavi. The work reported in this report is based upon the results of the original work carried out by **Mr. Dnyanadev S Huddar , Mr. Sachin I Pattar** under my supervision and guidance.

Place:Chikodi

Dr. Kambhar S.V.

Date:

Research Supervisor

Co-ordinator

Post Graduate of Department Botany

DECLARATION

We hereby declare that this project work entitled “**Checklist of Flowering Plants of Kadabagatti Forest Range Gokak**” completed and written by us has not previously formed. This report is based on the results carried out by us.

Place: Chikodi

Date:

Mr. Dnyanadev S Huddar

Reg. No: BT191407

Mr. Sachin I Pattar

Reg. No: BT191415

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Last but not least we are thankful to all our well-wishers.

Mr. Dnyanadev S Huddar

Mr. Sachin I Pattar

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CHAPTER 1- INTRODUCTION

India is one of the mega-diversity countries along with Australia, Brazil, China, Columbia, Ecuador, Indonesia, Madagascar, Malaysia, Mexico, Peru and Zaire which holds together about 70 percent of its total flowering plants diversity (Mc Neely *et al.*,1990). The richness of biodiversity is chiefly due to a diverse abiotic and biotic environment. Geographically, India is covering about 329 million ha of land and its coastline stretches to over 7,000 km, which constitutes all kinds of climate from hot arid in Thar Desert to arctic in the Himalaya with all intermediate gradations occur here. Hence India can be divided into eight distinct floristic regions, namely, the western Himalayas, the eastern Himalayas, Assam, the Indus plain, the Ganga plain, the Deccan, Malabar and the Andamans (Research Reference and Training Division, 2010).

There is a global attention for evaluating the status of living organisms belonging to various groups and conserving their diversity. All life is depending upon the genetic code; all forms have life evolved by natural selection and all life is connected to each other. There is no exact estimation regarding the total number of species in the world, although the sum of recorded number exceeds 1.7 million. Among the different organisms, the plants are the important source for the conversion of solar energy and it act as suppliers of food, oxygen and a host of many more important products. Hence it is more essential to prepare comprehensive databases of plants and their constituents. The main requirements for an inventory are correct identification, nomenclature, description and its environmental status.

As stated that, India is one of the 12 centres of mega-diversity in the world and encompass of 17,500 flowering plant species. It exhibits a wealth of complex and diverse ecosystems with a great deal of variation (Venu, 1998, Kotresha and Kambhar, 2016). It accounts for 8% of the global biodiversity with only 2.4% of the total land area in the world (Singh *et al.*, 2011).

We know that plants are one of the major components of biodiversity. Thus, thorough investigation of our flora has become an urgent necessity not only an essential resource for human well-being and ecological importance of biodiversity but also of accelerated genetic erosion occurring as consequence of destruction of the forest and other habitat (Manilal, 1998; Sumeet *et al.*, 2010; Talukdar&Talukdar, 2012). Inventory is a continuous process of searching and re-examining the earlier findings. Inventory only will identify the key issues of management for these precious resources that are not fixed and will certainly vary with time and space (Yadav &Sardesai, 2000).

For this reason, detail information of the known local plant species from surrounding area is essential. The information is important as it allows us to prevent or avoid the prospective chances of biodiversity loss and to plan future policy for the protection of our environment.

The present study was undertaken for the following objectives;

- ❖ Collection, identification and inventorisation of the flowering plants in the kadabagatti area.
- ❖ To find out the rare, endangered and endemic plants.

CHAPTER 2- STUDY AREA

2.1 Study area in general

Gokak is a taluka and Town Municipal Council city in the Belagavi district of Karnataka, India. It is a Subdivision of the district. Chikodi, Athani, Gokak, Raybag, Ramdurga and Soudatti are the taluks that come under Gokak Subdivision. It is 48 kilometers from the city of Belagavi, 109 kilometers from Kolhapur, 100 kilometers from Miraj, 115 kilometers from Hubballi, and 541 kilometers from the capital of Karnataka state, Bengaluru. It is one of the major cities that lie in the border between Karnataka and Maharashtra states.

Gokak is located at 16.1667°N 74.83°E. It has an average elevation of 570 meters (1870 feet) (Figure 1.). The town has an area of 33.05 km², and is situated amidst hills. (See Panoromic view photoplate) The topography within 2 kilometers of Gokak contains significant variations in elevation as it is surrounded by range of hills, with a maximum elevation change of 570 meters and an average elevation above sea level of 657 meters.

2.2 Soil

Gokak Taluk: The 1543 Sq. kms of geographical area of Gokak taluk is presence of the sandy soil texture class. 36.53 percent of entire geographical area of the taluk. This type of soil texture class is observed in the areas of Benachinamaradi, Mamadapura, Hadaginal, Kalloli, Sanganakeri, Yadwad, Bhairnatti, Konnur, Kankanawadi, Ghataprabha, Arabhavi of Gokak taluk. 1543 Sq. kms, which accounts

for 70.47 percent of geographical area of the taluk is under clayey soil texture class and it is noticed.

2.3 Climate

The climatic condition in the Gokak taluka is characterized by general dryness except during the monsoon seasons. The region has hot summer with exception of which is very moist during June to September. The taluka is broadly divided into three parts on the basis of differences in the rainfall and temperature. The western part has the more rainfall and comparatively more moisture conditions. The middle part has the rainfall moisture conditions in medium nature while the eastern part has least rainfall and dry climatic condition. Though there are sufficient rainfall and favourable climate, mostly foodgrain crops are cultivated in the western part only because of lack of fertile land. Middle part is having fertile land, water supply and climatic conditions. Due to this almost all types of crops are cultivated in this area. In the eastern part, rainfalls are limited, climate is dry but due to the existence of fertile land and sufficient irrigation facilities, different suitable crops are cultivated. Productivity is more in middle part of the taluka. (This experience reveals that the simultaneous existence of fertile land and favourable climatic conditions are necessary for rapid agricultural developments.)

2.4 Average Weather

In Gokak, the wet season is warm, oppressive, windy, and overcast and the dry season is hot and partly cloudy. Over the course of the year, the temperature typically varies from 61°F to 98°F and is rarely below 56°F or above 102°F.

2.5 Temperature

The hot season lasts for 2.5 months, from March 8 to May 22, with an average daily high temperature above 94°F. The hottest day of the year is April 19, with an average high of 98°F and low of 72°F.

The cool season lasts for 2.9 months, from June 21 to September 16, with an average daily high temperature below 83°F. The coldest day of the year is January 1, with an average low of 61°F and high of 84°F.

2.6 Rain fall

The normal rainfall in the Gokak taluka is 820.4 mms. There are 8 Rain gauge stations in the entire taluka. About 68% of the annual rainfall is received during the monsoon months from June to September. July being generally the rainiest month.

2.7 River system

The river system of the taluka consists of The Ghataprabha, Markandeya, Gadhar nadi, Hiranyakeshi and Bellary nala. The Ghataprabha and Markandeya, are the major rivers of the Gokak taluka. None of these are navigable. Krishna the premier river of south India, flows for the length of 8 km in the northern part of Gokak Taluka.

CHAPTER 3- REVIEW OF LITERATURE

3.1 Past work in India

In India, notable systematic botanical investigation was started by Van Reede (1678-1683) who published work on Indian plants in his monumental work '*Hortus Indicus Malabaricus*'. Major contributions in the southern region of Peninsular India were made by Louis Theodore Leschenault, W. Roxburgh and Robert Wight. *Icones Plantarum Indiae Orientalis* (1838-1853) and *Illustration of Indian Botany* (1840) is the most important contributions made by Wight. Together with Arnott he published *Prodromus Florae Peninsulae Indiae Orientalis* (1834) in which several new taxa were described.

The *Flora Sylvatica of South India* (1869-1874) and *Icones Plantarum Indiae Orientalis* (1868-1874) were contributed by Beddome who extensively collected the plants from Madras presidency and Eastern Ghats. Further, *Flora of British India* made by Hooker *et al.* (1872-1897) exhibited floristic wealth of British India in seven volumes. Subsequently, Cooke (1901-1908), Talbot (1909-1911) and Gamble (1915-1936) published the '*Flora of Presidency of Bombay*', '*Forest flora of Bombay Presidency and Sind*' and '*Flora of the Presidency of Madras*' respectively. In addition Blatter & McCann (1935) published Grasses of Bombay and Bor (1960) published Grasses of Burma, Ceylon, India and Pakistan respectively were made great contribution to documentation of this land.

3.2 Major floristic study in Karnataka

The work of Buchanan-Hamilton (1807) seems to be a pioneering work in Karnataka. Buchanan-Hamilton explored the area and given an account of Mysore plants (now Karnataka State). His observation was published in 1807 in two volumes entitled “*A Journey from Madras through the countries of Mysore, Canara and Malabar*”.

In the last few decades, a quite numbers of floras were published on different regions of Karnataka. The detailed study of Flora of Karnataka was published by Saldanha and his associates in two volumes (1984 & 1996). In addition to this, in the same year Sharma *et al.* (1984) published The Flora of Karnataka Analysis. It is simply a check list of Karnataka State based on BSI herbarium. Later, Flora of Eastern Karnataka was published by Singh (1988) which covered eastern districts of Karnataka. It includes Bellary, Bidar, Bijapur, Chitradurg, Gulbarga, Kolar, Raichur and Tumkur districts. The recent detailed study of Sedges of Karnataka (Cyperaceae) brought out by Prasad & Singh (2002). It was followed by the number of regional floras in different districts of Karnataka. The Flora of Bangalore district by Ramaswamy & Razi (1973) comprises about 979 spp. of flowering plants. Flora of Hassan district by Saldanha & Nicholson (1976), Flora of Chikmagalur district by Yoganarasimhan *et al.* (1977), Flora of Coorg (Kodagu) by Keshava Murthy & Yoganarasimhan (1990), Flora of Gulbarga district by Seetharam *et al.* (2000) documented about 600 spp. of flowering plants belonging to 101 families, Flora of Shimoga district by Ramaswamy *et al.* (2001). Flora of Udupi district by Bhat (2003) described 1242 spp. of flowering plants belonging to 694 genera and 171 families. In 2004, Flora of Davangere district by Manjunatha *et al.* documented total of 861 plants

spp. belonging to 498 genera and 112 families. Kunnur (2009) explored the 57 Malvaceous taxa from different districts of Karnataka, of these 57 few plants have been recorded for the state. In most recently, Kotresha and Kambhar (2016) published Flora of Gadag district, which comprising of 815 species of flowering plants belonging to 518 genera and 113 families. More than 800 species belonging to 400 genera and more than 100 families are described. In 2018, the flora of Bidar published by Seetharam et al., which includes more than 800 species belonging to 400 genera and more than 100 families were described.

3.3 Major floristic study in Belagavi

With reference to the present area, exploration was made for the Flora of the Bombay Presidency by T. Cooke (1901-08) wherein only Belgaum district was cited several times. Till the end of the nineteenth century and the beginning of the twentieth century, when Cooke, Woodrow and Talbot collected plants from Belagum district.

The important earlier floristic work covering some parts of the district was by T. Cooke a century ago and till date his work is most preferred in many of the research organizations and Universities. T. Cooke, (1901-1908) reported about 613 species of Dicots and Monocots belonging to the 93 families of which 94 species belonging to 13 families of monocots. Sharma et al, (1984) in his 'Flora of Karnataka Analysis' reported 706 species of flowering plants belonging to 118 families of which 166 species belonging to 18 families were monocots.

In 2010, a total of 1619 taxa of Dicotyledones belonging to 792 genera under 148 families have been collected and described from Belgaum district which was followed by Bentham and Hooker system of Classification (Malpure, 2010). Subsequently, 715 taxa, (including 7 subspecies and 22 varieties) belonging to

275 genera and 43 families of monocotyledons have been collected and described for Belgaum district by Chandore (2010). In spite of this, the present checklist is to understand the diversity of flowering plants in Kadabagatti forest range, Gokak. This will serve as a database for regional or our college students, especially for undergraduate students even postgraduate students, botanists, ecologists, foresters, and those who are interested in the flora of Kadabagatti Forest Range Gokak .

CHAPTER 4- MATERIALS AND METHODS

The plant specimens were collected (in duplicate) throughout the study area, between October 2020 and July 2021. On the spot some observations were noted in the field notebook, such as habit, habitat, colour of flower and local names. Photographs of the fresh flower, twigs etc. were made with Nikon D3500. Collector number was given to each specimen. The collected specimens were identified with aid of floras (Cooke, 1901-1908, repr. ed. 1958; Talbot, 1909 & 1911; Blatter & McCann, 1935, repr. ed. 1984; Saldanha, 1984; and Saldanha, 1996, Yadav and Sardesai, 2000).

Besides these floras adjacent districts flora also been used (Seetharam *et al.*, 2000; Kotreasha and Kambhar, 2016, Seetharam *et al.*, 2018). In addition to this some of the pictorial field guides were used (Ingalhalikar, 2005; Ingalhalikar, 2007).

The nomenclature of the taxa was updated with the most recent available monographs, revisionary works and recent published floras. A checklist has been prepared with their botanical name; distinguish characters, flowering and fruiting time, origin of the taxa and collection number.

Precautions were taken to protect herbarium specimens from damage. Insect repellent such as Paradichlorobenzene (Lawrence, 1951) kept in small quantities in herbarium cabinet and sprayed a weak solution of Mercuric Chloride (0.1% HgCl₂) on the specimens to control the fungal attack (Ravindranath & Premnath, 1997). The specimens were deposited in the Herbarium Post Graduate Department of Studies in Botany, Basavaprabhu Kore College, Chikodi.

CHAPTER 5- RESULTS

In the present work a total of 81 taxa, belonging to 71 genera and 27 families of angiosperms have been collected and represented in Table 1.

Table 1. List of flowering plants with their family name, habit, habitat and flowering and fruiting.

SL. NO.	BOTANICAL NAME	FAMILY	HABIT	HABITAT	FLOWERING AND FRUITING	COLL . NO.
1	<i>Abrus precatorius</i> L.	Fabaceae	Climbers	Frequent in hedges and on bunds	September to January	012
2	<i>Aerva javanica</i> (Burm.f.) Juss. ex Schult.	Amaranthaceae	Herbs	Frequent in hill slopes	August to December	035
3	<i>Aerva lanata</i> (L.) A. L. Juss. ex Schultes.	Amaranthaceae	Herbs	Frequent in hill slopes	August to December	053
4	<i>Albizia amara</i> (Roxb.) Boivin	Mimosaceae	Trees	Dry deciduous forests and along roadsides	April to August	054
5	<i>Allmania nodiflora</i> (L.) R. Br.	Amaranthaceae	Herbs	Frequent in hill slopes	September to December	014
6	<i>Alternanthera pungens</i> Kunth	Amaranthaceae	Herbs	Common in waste places	October to April	036
7	<i>Alysicarpus bupleurifolius</i> (L.) DC.	Fabaceae	Herbs	Frequent in hill slopes	August to December	008
8	<i>Amaranthus spinosus</i> L.	Amaranthaceae	Herbs	Common in waste places	July to December	055
9	<i>Amaranthus viridis</i> L.	Amaranthaceae	Herbs	Frequent in wastelands and border of fields	August to December	013
10	<i>Andrographis paniculata</i> (Burm.f.) Nees	Acanthaceae	Herbs	Frequent in hill slopes	August to February	004
11	<i>Anisochilus carnosus</i> (L.f.) Wall. ex	Lamiaceae	Herbs	Wet rocky areas	July to December	015

SL. NO.	BOTANICAL NAME	FAMILY	HABIT	HABITAT	FLOWERING AND FRUITING	COLL . NO.
	Benth.					
12	<i>Aristida purpurea</i> Nutt.	Poaceae	Herbs	Frequent in hill slopes	July to December	016
13	<i>Aristolochia indica</i> L.	Aristolochiaceae	Herbs	Open forests	September to December	037
14	<i>Canthium parviflorum</i> Lam.	Rubiaceae	Shrubs	Frequent in hill slopes	March to May	010
15	<i>Carissa carandas</i> Lour.	Apocynaceae	Shrubs	Frequent in hill slopes	August to December	056
16	<i>Cassia fistula</i> L.	Caesalpiniaceae	Trees	Along roadsides	February to April	017
17	<i>Chamaecrista pumila</i> (Lam.)K.Larsen	Caesalpiniaceae	Herbs	frequent in hill slopes	September to December	038
18	<i>Chloroxylon swietenia</i> DC.	Flinderniaceae	Trees	Dry deciduous forests	March to June	057
19	<i>Cissus pallida</i> Salisb.	Vitaceae	Herbs	Frequent in hill slopes	December to April	018
20	<i>Coelus barbatus</i> (Andrews) Benth. ex G.Don	Lamiaceae	Herbs	Frequent in hill slopes	December to April	059
21	<i>Crotalaria pusilla</i> DC.	Fabaceae	Herbs	Ocassaional in grasslands	September to December	019
22	<i>Cynanchum acidum</i> (Roxb.) Oken	Apocynaceae	Climbers	Frequent in hill slopes	December to April	058
23	<i>Cynotis fascicularis</i>	Commelinaceae	Herbs	Frequent in hill slopes	August to December	007
24	<i>Dalbergia latifolia</i> Roxb.	Fabaceae	Trees	Dry deciduous forests	February to May	020
25	<i>Dalbergia sissoo</i> Roxb. ex DC.	Fabaceae	Trees	Frequent in hill slopes	February to May	039
26	<i>Decalepis hamiltonii</i> Wight & Arn (2)	Apocynaceae	Climbers	Rare in hill slopes	July to December	060
27	<i>Digera muricata</i> (L.) Mart., Beitr.	Amaranthaceae	Herbs	Frequent in wastelands and border of fields	August to September	040
28	<i>Dodonea viscosa</i> Jacq.	Sapindaceae	Shrubs	Frequent in hill slopes	July to December	006

SL. NO.	BOTANICAL NAME	FAMILY	HABIT	HABITAT	FLOWERING AND FRUITING	COLL . NO.
29	<i>Dolichandrone atrovirens</i> (Roth) K.Schum.	Bignoniaceae	Trees	Ocassaional in hill slopes	March to May	021
30	<i>Eupatorium adenophorum</i> Spreng.	Asteraceae	Herbs	Frequent in hill slopes and roadside	August to December	041
31	<i>Euphorbia gokakensis</i> S.R.Yadav, Malpure & Chandore	Euphorbiaceae	Herbs	Rare in hill slopes	July to December	061
32	<i>Euphorbia nivulia</i> Buch.-Ham.	Euphorbiaceae	Shrubs	Frequent in hill slopes	July to December	005
33	<i>Euphorbia tirucalli</i> L.	Euphorbiaceae	Shrubs	Dry deciduous forests	February to April	063
34	<i>Evolvulus alsinoides</i> (L.) L.	Convolvulaceae	Herbs	Gravelly plains and grasslands	June to January	022
35	<i>Glossocardia bosvallea</i> DC.	Asteraceae	Herbs	Frequent in grasslands	August to December	062
36	<i>Gomphrena indica</i> (L.) A.J.Paton	Asteraceae	Herbs	Frequent in hill slopes	August to December	042
37	<i>Grewia hirsuta</i> Vahl	Malvaceae	Shrubs	Dry deciduous forestsNatural	June to July	064
38	<i>Hardwickia binata</i> Roxb.	Caesalpiniaceae	Trees	Common in hill slopes	February to May	071
39	<i>Hedyotis herbacea</i> L.	Rubiaceae	Herbs	Frequent in hill slopes	August to December	003
40	<i>Heteropogon contortus</i> (L.) P.Beauv. ex Roem. & Schult.	Poaceae	Herbs	Common in grasslands	September to December	023
41	<i>Holoptelea integrifolia</i> (Roxb.) Planch.	Ulmaceae	Trees	Frequent in hill slopes	February to May	043
42	<i>Hybanthus enneaspermus</i> (L.) F.Muell.	Violaceae	Herbs	Frequent in hill slopes	August to December	072
43	<i>Indigofera linnaei</i> Ali	Fabaceae	Herbs	Grasslands, gravelly plains and wastelands	June to January	024
44	<i>Jasminum roxburghianum</i> Wall. ex C. B.	Oleaceae	Shrubs	Frequent in hill slopes	July to December	065

SL. NO.	BOTANICAL NAME	FAMILY	HABIT	HABITAT	FLOWERING AND FRUITING	COLL . NO.
	Clarke					
45	<i>Justicia trinervia</i> (L.) Lindau	Acanthaceae	Herbs	Frequent in hill slopes	August to December	011
46	<i>Lannea coromandelica</i> (Houtt.) Merr.	Combretaceae	Trees	Common in dry deciduous area	February to April	025
47	<i>Lavandulla bipinnata</i> (Roth) Kuntze	Lamiaceae	Herbs	Frequent in hill slopes	August to December	044
48	<i>Lepidagathis cristata</i> Willd.	Acanthaceae	Herbs	Frequent in hill slopes	August to January	066
49	<i>Lophopogon tridentatus</i> (Roxb.) Hack.	Poaceae	Herbs	Frequent in hill slopes	August to December	073
50	<i>Maytenus emarginata</i> (Willd.) Ding Hou	Sapindaceae	Shrubs	Frequent in hill slopes	July to December	026
51	<i>Mesosphaerum suaveolens</i> (L.) Kuntze	Lamiaceae	Shrubs	Common along roadside	July to December	074
52	<i>Mimosa hamata</i> Willd.	Mimosaceae	Shrubs	Ocasssional in roadside and hill slopes	February to May	045
53	<i>Morinda pubescens</i> Buch.-Ham.	Rubiaceae	Trees	Frequent in hill slopes and roadside	March to May	027
54	<i>Mundulea sericea</i> (Willd.) A.Chev.	Fabaceae	Shrubs	Common in hill slopes	December to April	067
55	<i>Ocimum sanctum</i> L.	Lamiaceae	Shrubs	Frequent in hill slopes	July to December	046
56	<i>Paraophubia delphinifolia</i>	Scrophulariaceae	Herbs	Common in grasslands	August to December	075
57	<i>Pavonia zeylanica</i> L.	Malvaceae	Herbs	Frequent in hill slopes	July to December	028
58	<i>Polycarpaea aurea</i> Wight & Arn.	Caryophyllaceae	Herbs	Common in rocks and plains	August to November	076
59	<i>Polygala elongata</i> Klein ex Willd.	Polygalaceae	Herbs	Common in grasslands	September to December	068
60	<i>Pulicaria wightiana</i> Gaertn.	Asteraceae	Herbs	Frequent in hill slopes	August to December	047
61	<i>Rhus mysorensis</i> G.Don	Anacardiaceae	Shrubs	Frequent in hill slopes	July to December	077

SL. NO.	BOTANICAL NAME	FAMILY	HABIT	HABITAT	FLOWERING AND FRUITING	COLL . NO.
62	<i>Rhynchosia minima</i> (L.) DC.	Fabaceae	Climbers	Grasslands and open areas	July to January	029
63	<i>Rivea hypocrateriformis</i> (Desr.) Choisy	Convolvulaceae	Climbers	Common in scrub forests	December to March	048
64	<i>Securingea leucopyrus</i> (Willd.) Müll. Arg.	Euphorbiaceae	Shrubs	Common in hill slopes	July to December	009
65	<i>Senecio tenuifolia</i> (Jacquem. ex Besser) Tzvelev	Asteraceae	Herbs	Common in grasslands	August to December	002
66	<i>Senna auriculata</i> (L.) Roxb.	Caesalpiniaceae	Shrubs	Common in grasslands and roadside	August to February	030
67	<i>Sida cordata</i> (Burm.f.) Borss.	Malvaceae	Herbs	Common in open areas	July to December	049
68	<i>Sida cordifolia</i> L.	Malvaceae	Herbs	Occasional in open areas	June to December	069
69	<i>Spermacoce articularis</i> L.f.	Rubiaceae	Herbs	Open areas and seasonal grasslands	August to November	078
70	<i>Spermacoce pusilla</i> Wall.	Rubiaceae	Herbs	Frequent in hill slopes	August to December	080
71	<i>Striga asiatica</i> (L.) Kuntze	Scrophulariaceae	Herbs	Seasonal Wetlands	August to January	050
72	<i>Striga densiflora</i> (Benth.) Benth.	Scrophulariaceae	Herbs	Frequent in hill slopes	August to December	079
73	<i>Stylosanthes fruticosa</i> (Retz.) Alston	Fabaceae	Herbs	Open areas and wastelands	Throughout year	070
74	<i>Tephrosia purpurea</i> (L.) Pers.	Fabaceae	Shrubs	Open areas and wastelands	July to December	031
75	<i>Terminalia anogeissiana</i> Gere & Boatwr	Combretaceae	Trees	Dry deciduous forests	September to February	051
76	<i>Terminalia elliptica</i> Willd.	Combretaceae	Trees	Common in dry deciduous area	January to May	032
77	<i>Terminalia paniculata</i> Roth	Combretaceae	Trees	Frequent in hill slopes	March to May	052
78	<i>Vernonia cinerea</i> (L.) Less.	Asteraceae	Herbs	Frequent in hill slopes	August to April	033

SL. NO.	BOTANICAL NAME	FAMILY	HABIT	HABITAT	FLOWERING AND FRUITING	COLL . NO.
79	<i>Waltheria indica</i> L.	Malvaceae	Shrubs	Open areas, seasonal grasslands and wastelands	October to January	001
80	<i>Xenostagia tridentata</i> (L.) D.F. Austin & Staples	Convolvulaceae	Herbs	Frequent in hill slopes	August to December	034
81	<i>Zornia gibbosa</i> Span.	Fabaceae	Herbs	Open areas and grasslands	July to January	008

CHAPTER 6- DISCUSSION AND CONCLUSION

In the present work a total of 81 taxa, belonging to 71 genera and 27 families of angiosperms have been collected and described from study area.

Out of 27 families, the first 10 dominant families constitute 54 species (67%), of these Fabaceae 11 spp. (13%) is the leading family, Amaranthaceae 07 spp. (11%), followed by Asteraceae with 06 species (07%), Euphorbiaceae 04 spp. (4%), Convolvulaceae 03 spp. (3%), Apocynaceae 03 spp (3%), Acanthaceae 03 spp. (3%), Poaceae 03 spp. (4%), Combretaceae 04 spp. (4%), Rubiaceae 05 spp. Lamiaceae 05 spp. (6%) (Figure 2).

Dominance of these families is due to their adaptability to the arid climatic condition. Most of these families have a large number of herbs (Kambhar and Kotresha, 2011). The remaining families are Aristolochiaceae and Anacardiaceae , Bignoniaceae and Caryophyllaceae has 01 spp. each. Ulmaceae, Violaceae, Oleaceae and Flindersiaceae 01 spp. each. Vitaceae, , Commelinaceae, has 01 spp. each. Scrophulariaceae has 03 spp , Caesalpinaceae, has 04 spp. each. Sapindaceae has 02 spp.

An analysis on the life form composition of plant species of the study area reveals that majority of the plant species are herbs predominate with 46 species (58%) followed by trees with 13 species (16%), climbers with 5 species (5%) and shrubs with 17 species (21%) (Figure 3). The herbs get physiological maturity soon and produce the progeny in a couple of months in comparison to trees and shrubs that need a longer time to mature. The greater tolerance to harsh conditions could result in the predominance of herbs (Kambhar and Kotresha, 2011, Kambhar, 2012).

The main component of being *Albizia amara* (Roxb.), *Dalbergia sissoo* Roxb. ex DC., *Dolichandrone atrovirens* (Roth) K.Schum. *Hardwickia binata* Roxb. The shrubs occurring all over the area are *Waltheria indica* L. is dominantly spreading in the forest, which is associated with the *Senna auriculata* (L.) Roxb. being found.

The climbers found within the area are quite distinct. Some of the common plants *Abrus precatorius* L., *Rhynchosia minima* (L.) DC., and *Rivea hypocrateriformis* (Desr.) Choisy. The common herbs occurring all over the area are *Aerva javanica* (Burm.f.) Juss. ex Schult., *Alternanthera pungens* Kunth, *Alysicarpus bupleurifolius* (L.) DC. *Andrographis paniculata* (Burm.f.) Nees. Some frequently seen species are *Cynanchum acidum* (Roxb.) Oken and *Lepidagathis cristata* Willd. The species like *Gomphrena indica* (L.) A.J.Paton, *Zornia gibbosa* Span. and *Striga densiflora* (Benth.) Benth., are sporadically occur in the forest. In monsoon season the species *Anisochilus carnosus* (L.f.) Wall. ex Benth.

The study area is represented with one IUCN endangered species, *Decalepis hamiltonii* Wight & Arn (2) with 30 to 40 individuals . and one rare plant species, *Euphorbia gokakensis* S.R.Yadav, Malpure & Chandore.

Among the grasses the common species occurs all over the area are *Heteropogon contortus* (L.) P.Beauv. ex Roem. & Schult., *Lophopogon tridentatus* (Roxb.) Hack.

The important earlier floristic work covering some parts of the district was by T. Cooke a century ago and till date his work is most preferred in many of the research organizations and Universities. T. Cooke, (1901-1908) reported about 613 species of Dicots and Monocots belonging to the 93 families of which 94 species belonging to 13 families of monocots. Sharma et al, (1984) in his 'Flora of Karnataka

Analysis' reported 706 species of flowering plants belonging to 118 families of which 166 species belonging to 18 families were monocots.

In 2010, a total of 1619 taxa of Dicotyledones belonging to 792 genera under 148 families have been collected and described from Belgaum district which was followed by Bentham and Hooker system of Classification (Malpure, 2010). Subsequently, 715 taxa, (including 7 subspecies and 22 varieties) belonging to 275 genera and 43 families of monocotyledons have been collected and described for Belgaum district by Chandore (2010). In spite of this, the present checklist is to understand the diversity of flowering plants in Kadabagatti forest range Gokak. This will serve as a database for regional students, especially for undergraduate students even postgraduate students, botanists, ecologists, foresters, and those who are interested in the flowering plants.

CHAPTER 7- REFERENCES

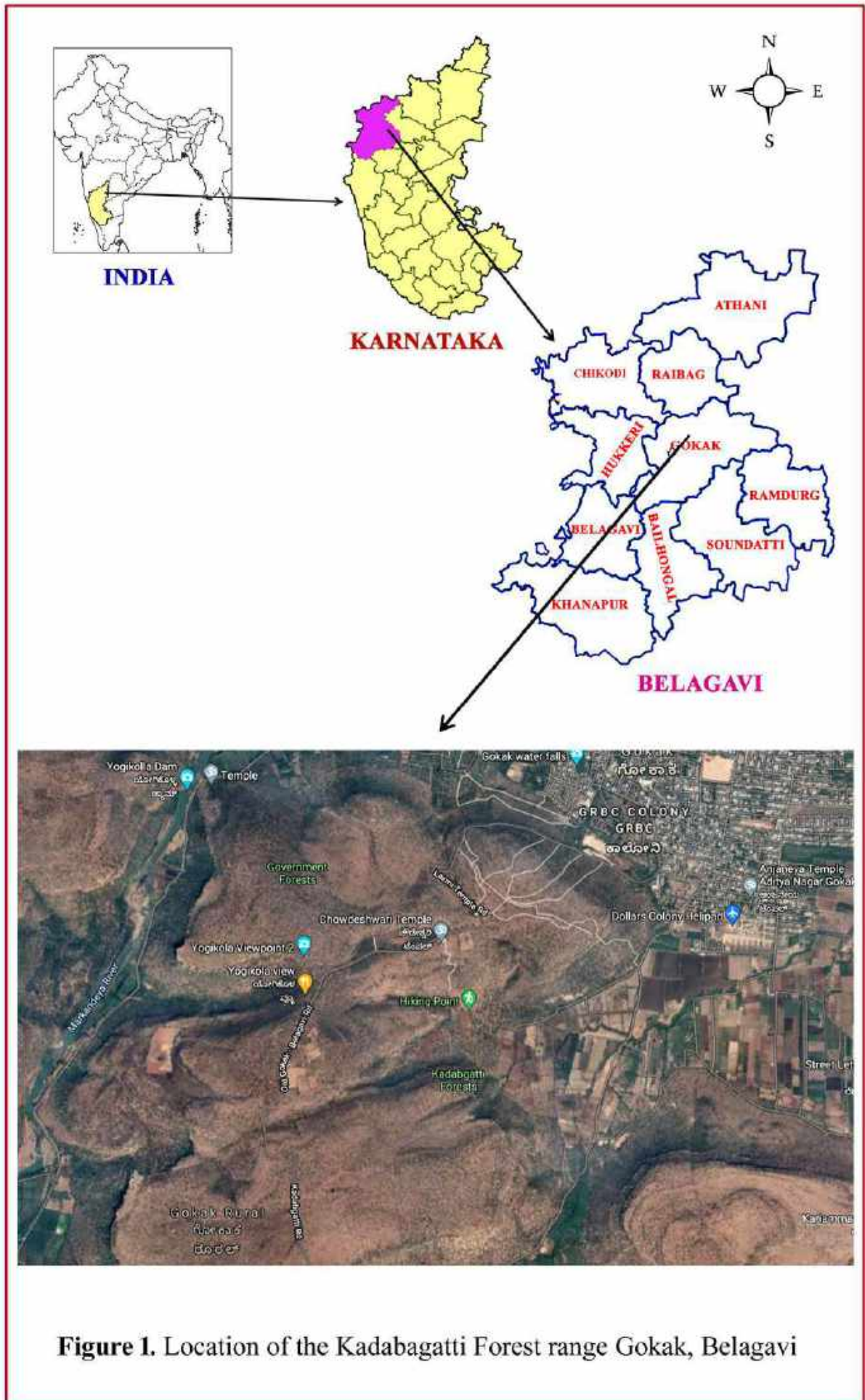
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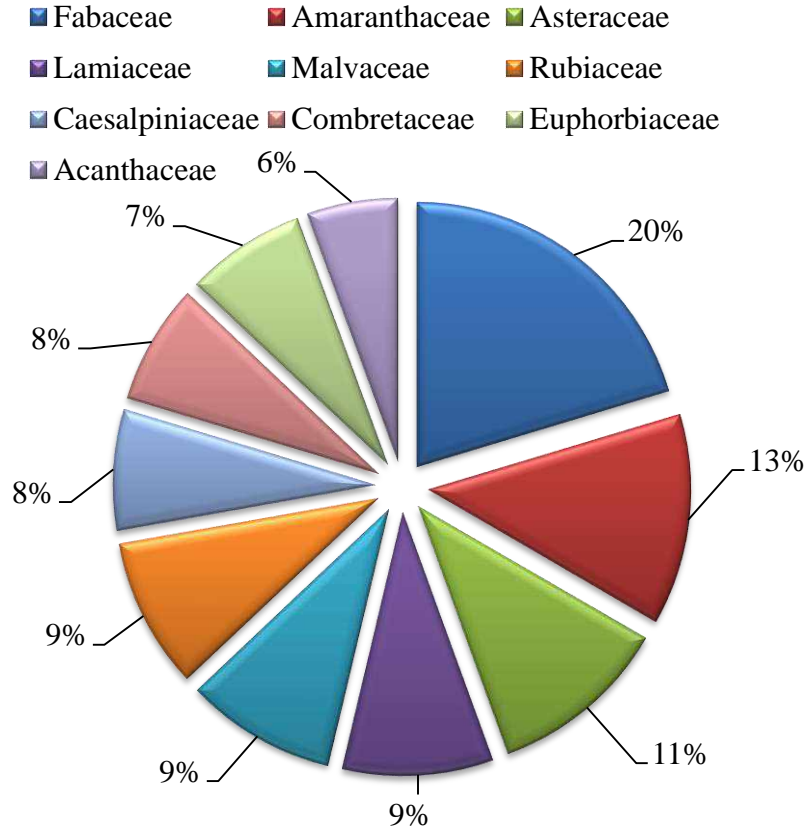


Figure 2. Family-wise distribution of species in study area

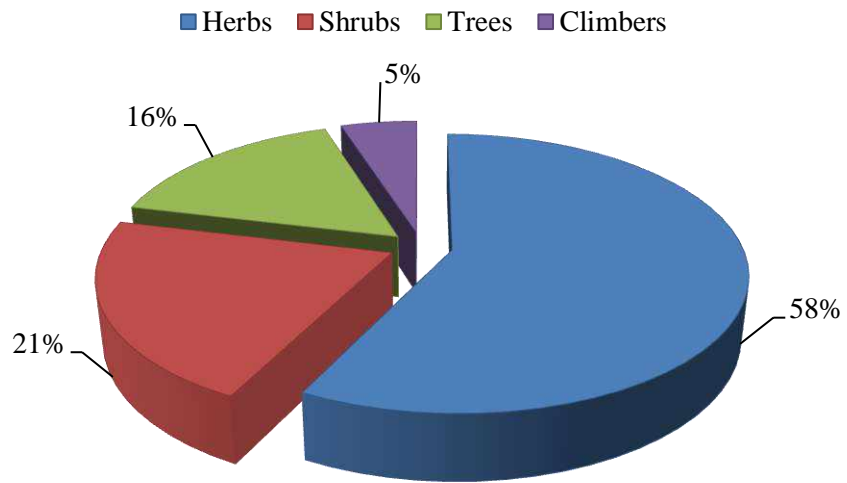


Figure 3. Habit-wise distribution of species in study area



Panoromic view of Kadabagatti Forest during Monsoon and Summer season



Photoplate 1. A. *Abrus precatorius* L., B. *Aerva lanata* (L.) Juss. ex Schult., C. *Alysicarpus bupleurifolius* (L.) DC., D. *Anisochilus carnosus* (L.f) Wall.



Photoplate 2. A. *Chamaecrista pumila* (Lam.) K. Larsen, B. *Chloroxylon swietenia* DC., C. *Coleus barbatus* (Andrews) Benth. ex G. Don, D. *Crotalaria pusilla* DC.



Photoplate 3. A. *Decalepis hamiltonii* Wight & Arn, B. *Cynanchum acidum* (Roxb.) Oken, C. *Dolichandrone atrovirens* (Roth) K. Schum.



Photoplate 4. A. *Gomphrena celosioides* Mart., B. *Heteropogon contortus* (L.) P. Beauv. ex Roem. & Schult., C. *Indigofera linnaei* Ali, D. *Lophopogon tridentatus* (Roxb.) Hack.



Photoplate 5. A. *Mesosphaerum suaveolens* (L.) Kuntze, B. *Mimosa hamata* Willd., C. *Mundulea sericea* (Willd.) A. Chev., D. *Parasopubia delphiniifolia* (L.) H.-P. Hofm. & Eb. Fisch.



Photoplate 6. A. *Polycarpaea aurea* Wight & Arn., B. *Polygala elongata* Klein ex Willd., C. *Pulicaria wightiana* (DC.) C.B. Clarke, D. *Rhus mysorensis* G. Don



Photoplate 7. A. *Sida cordifolia* L., B. *Striga asiatica* (L.) Kuntze, C. *Terminalia anogeissiana* Gere and Boatwr, D. *Terminalia elliptica* Willd., E. *Waltheria indica* L.

DIVERSITY OF ALGAE IN KOHALLI LAKE, ATHANI



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2021

DECLARATION

We declare the work in this dissertation entitled "Diversity of Algae in Kohalli Lake, Athani" has been carried out by us in the P.G. Department of Botany, Basavaprabhu Kore College, Chikodi. The information derived from the literature has been duly acknowledged in the text and list of references provided. No part of this dissertation was previously presented for another degree or diploma at this or any other institution.

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Date:

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CERTIFICATE

This is to certify that; this project entitled "**Diversity of Algae in Kohalli lake, Athani**" is being submitted herewith for the partial fulfillment of award of the Degree of Master of Science in Botany, **Rani Channamma University Belagavi**. The work reported in this dissertation is based upon the results of the original work carried out by **Miss. Monika Khot** and **Miss. Shruti Naik** under my supervision and guidance.

Dr. Rahul R. Patil

Research Supervisor

Place: Chikodi

Date: 24/09/2021

Co-ordinator

Department of Post Graduate Studies in Botany



25.9.2021

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Miss. Monika Khot

Miss. Shruti Naik

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Chapter-1

INTRODUCTION

1.1 General introduction

Freshwater comprises about 2.5% of the earth's total volume of water, in which only 0.77% is free freshwater (*i.e.* in streams, wetlands, aquifers, soil pores etc.) that is available after subtracting the volume of freshwater locked as ice caps and glaciers. Freshwater ecosystems are considered as one of the most important natural resources for the survivalence of life in biosphere. Fresh water habitats are of much prominence to mankind but they occupy a relatively small portion of the earth's surface as compared to the marine and terrestrial habitats (Santra, 2001). It is the availability of water which determines the nature, composition and abundance of terrestrial life. Over-exploitation, misuse and contamination of water are responsible for making it scarce and unfit for consumption. Despite an increased awareness by governments and the general public of the need for protecting all types of aquatic habitats, human impacts continue to impair the services that these ecosystems provide. The alarming rate of declining quality of fresh water resources is now a global problem. Increased monitoring activities that locus on all major biological compartments are needed to quantify the present condition of Earth's aquatic resources and to evaluate the effectiveness of regulations designed to rehabilitate damaged ecosystems (McCormick and Cairns, 1994). Lentic water system generally include ponds, lakes, bogs, swamps, reservoir, pools etc. and they vary considerably in physical, chemical, and biological characteristics.

A lake is a sizable water body surrounded by land and fed by rivers, springs, or local precipitation. A lake's structure has a significant impact on its biological,

chemical, and physical features. Lake, as an ecosystem has several budgets, as heat budget, water budget and biomass budget. There are about 1350 lakes and reservoirs in the world. Lake ecosystem maintain a state of equilibrium with reference to these factors, which are seasonally varying. An important feature of lakes, is the evaporation of water from its surface. Sedimentation is a regular process in lakes.

Within fresh water ecosystems algae occur either as free-floating (Planktonic) or substrate-associated (largely benthic) organisms. Planktonic algae drift freely within the main body of water with some species able to regulate their position within the water column, while substrate-associated organisms are either fixed in position (attached) or have limited movement in relation to their substrate.

Freshwater algae are globally ubiquitous and highly diverse, with tens or perhaps hundreds of thousands of species, in a myriad of forms and sizes (Andersen, 1992; Norton et al.; 2004; Mann and Vanormelingen, 2013; Guiry and Guiry, 2014). The algae represent between eight and 12 major evolutionary lineages (Graham et al., 2008; Cock et al., 2010), and all have representatives in inland waters. Current classifications consider most algae to be protists with chloroplasts, but there are also photosynthetic prokaryotes (the cyanobacteria) and a subset of the land plants, the Charales, which have been considered to be algae in previous texts (Patterson, 2014). With new molecular tools being applied to understanding algal taxonomy, systematics, and evolution, our understanding of this diversity is rapidly changing and expanding. Efforts to characterize this biological diversity (such as the Tree of Life Project: Maddison et al., 2007) have contributed to a better understanding of many groups of freshwater algae (e.g., Lane and Archibald, 2008; Entwistle et al., 2009; Hall et al., 2010; Ashworth et al., 2013; Stancheva et al., 2013a; Fucikova et al., 2014).

Benthic algae occurs at the bottom of the water column in lakes and rivers, And are directly associated with sediments – including rocks, mud and organic debris these attached algae may form major growths on inorganic surfaces or on organic debris, where they are frequently present in mixed biofilms (with bacteria, fungi and invertebrates also present). Under highlight conditions, the biofilm may become dominated by extensive growth of filamentous algae – forming a periphyton community. Attached algae may also be fixed to living organisms as epiphytes – including higher plants, larger attached algae and large Planktonic colonial algae. Some substrate-associated algae are not attached, but are able to move across substrate surfaces (ex. Pennate diatoms), are loosely retained with gelatinous biofilms or are held within the tangled filamentous threads of mature periphyton biofilms. Many algal species have both Planktonic and Benthic stages in their life cycle.

Algae occur in waters of low salinity (as low as 10ppm) called freshwater. Phytoplanktons, vary in shape and color, and are found in a large range of habitats. The freshwater ecosystem is of lotic and lentic types, lotic include streams, canals, waterfalls, rivers and rivulets. The lentic system includes the pools, puddles, ponds, reservoirs, lakes and the agricultural fields like paddy fields. The freshwater ecosystem is differentiated into various types of planktons (free floating), benthons (attached to sediments) or epiphytic algae (on stones, sand, mud and rock of reservoir and lakes). Studies on algae for over a century were on understanding their structure and reproduction and several treatises (Fritsch, 1888, 1907; Smith, 1920; Prescott, 1938, 1939) and monographs were published for several groups of algae with details on the occurrence and distribution with reference to diverse habitats (Desikachary, 1959; Randhawa, 1959; Pal et al., 1962; Ramanathan, 1964 and Philipose, 1967). Description of taxa have been restricted to generic level with diagnostic keys serving

the means of identification of the species and also to identify the major families of blue green algae in South Indian rice field (Anand, 1989). Depending on the seasons, the algae appear and disappear (Arulmurugan et al., 2010). So, seasonal variation in combination with ecosystem variation results in biodiversity of algal species.

Algae are widely present in fresh water environments, such as lakes and rivers, where they are typically present as micro-organisms—visible only with the aid of a light microscope. Although relatively inconspicuous, they have a major importance in the fresh water environments both in terms of fundamental ecology and in relation to human use natural resources.

These organisms are very important because they make much of earth's oxygen, which humans and other animals need to breathe. They vary greatly in size and grow in many diverse habitats. Microscopic algae, called phytoplankton, float or swim in lakes and oceans. They can tolerate a wide range of temperatures and they can grow in hot springs, on snow banks, or deep within the polar ice.

Planktonic algae are frequently characterized in relation to discrete size bands; Picoplankton ($< 2 \mu\text{m}$), nano plankton ($2 - 20 \mu\text{m}$), micro plankton ($20 - 200 \mu\text{m}$) and macro plankton ($>200 \mu\text{m}$). Each size band is characterized by particular groups of algae.

The shape of algal cells ranges from simple single non – motile shapes to complex multicellular structures. The simplest structure is a unicellular non – motile shapes, which may become elaborated by the acquisition of flagella by a change of body shape or by the development of elongate spines. Cells may come together in groups without defined number or shape or may form globular colonies that have a

defined morphology. Cells may also join together to form linear colonies which may be unbranched or branched. Motility is normally associated with the possession of flagella, some algae can move without the aid of flagellae by the secretion of surface mucilage. In many algae, the presence of surface mucilage is also important in increasing overall cell/colony size and influencing shape.

Freshwater ecosystems vary in size and composition and contain large variety of organisms; microalgae are vast group of photosynthetic organisms found in many different forms; individual cells, colonies or extended filaments and exhibit vast diversity in the ecosystem. They are cosmopolitan in nature found everywhere like oceans, lakes, rivers, ponds, moist surfaces and Freshwater etc. Depending on the seasons the algae appear and disappear. So seasonal variation in combination with ecosystem variation results in biodiversity of algae.

As 90% of the farmers and village people are dependent on rain water and mainly on water of Kohalli Lake it is important to know the pollution status of the lake. Hence the present investigation was undertaken with following objectives:

1.2 Objectives of the study

1. Assess the algal diversity of the Kohalli Lake
2. To know the ecological status of the lake.

Chapter-2

REVIEW OF LITERATURE

All over the world extensive and appreciable work has been carried out on freshwater algal diversity, and limnology. An account on the status of algal diversity in World, India and Karnataka is given below.

2.1 International Status

It was in 1754, Linnaeus gave the name of Algae to a group of plants and Jussieu (1789) was the first person to delimit the algae as known today. After a long period of silence, Link (1820-1833) studied the algal flora of Germany and Agardh worked on Scandinavian algal flora (1817-1824). Agardh (1824) arranged algae in six well defined orders: Diatomaceae (including Desmids), Nostochineae, Confervoideae, Ulvaceae, Florideae and Fucoideae while describing a group of 20 genera. The work of Kuetzing (1843-1849) however, was most significant as he described a bit more number of algal genera than any other contemporary phycologists. Hassal (1842-1845) was another scientist who made an outstanding contribution towards the field of algology. Berger (1894-1936) carried out some work on algae in Sweden, Australia, Argentina, Bolivia and China. Berger (1898-1936) carried out extensive research on freshwater algae of Sweden and examined numerous samples sent to him from collectors of Australia, South Patagonia. Lagerheim (1883-1902) studied the algal flora of Sweden and collections from Equador, India and Abyssinia. Lemmerman (1891-1910) worked on the algal flora of Germany and collections received from China and Paraguay. Nordstedt (1873-1897) described few species of algae from Argentina, Patagonia, Cameroon, Newzealand and Australia. A specific study on Cyanophyta

was initiated by Borzi (1878 - 1894), De Toni (1888-1905).

British researchers were also among the pioneers of algal research. G.S. West (1899- 1916) and W. West (1889-1909) made an exclusive study on freshwater algae and discovered a number of new species and also examined specimens sent to them by collectors from Tanganyika, Victoria, Egypt, Southwest Africa, Madagascar, West Indies, Ceylon, Burma, Bengal and Madras. Another remarkable contribution was made by Fritsch and Rich (1907- 1937) on the freshwater algae of South Africa. Strom (1920-1926) described some new species of algae from Turkey, Norway and Iceland.

Interest in Diatoms increased manifold from the very day of its discovery. Their taxonomic position has still been unsettled. Being a pioneer worker, Agardh (1824) published his work on Diatoms including Desmids. Schutt (1896) divided diatoms into two groups Centricae and Pennatae. Islam and Haroon (1975) and Islam and Morshed (1985) worked out the taxonomy, systematic and other aspects of the group diatom. Krishnamurthy (1954) and Gandhi (1955) have worked on diatom flora of India.

Fritsch (1935 & 1945) studied algae in detail, describing their morphology and reproduction in two volumes of his works under the name of “The Structure and Reproduction of the Algae”, which was an incredible contribution to the field of algology and is considered as one of the most important treasure in the field of phycology. Thienemann (1954) studied the tropical freshwater plankton. Bold and Wynne (1978) also worked on the structure and reproduction of freshwater algae. John et al. (2002) in their book, provided the first modern account and identification guide to more than 2200 species of freshwater algae.

Coker (1954) studied the ecology of streams, lakes and ponds of United States. Lund (1965) studied the ecology of freshwater. Regarding the freshwater ecology of algae remarkable contributions had come from many renowned workers. Arnold (1969) studied the ecological status of Lake Erie. Bennett (1970) studied the ecology of lakes and ponds of New York.

Algae as indicator of environmental quality are one of the important topics in the contemporary world. Prescott (1962), after an extensive study in Michigan and Wisconsin reported that blue green algae are rare or absent in lakes with pH below 5. Presence of algae as disturbance indicator of biological equilibrium in tanks was studied by Fogg et al. (1973).

Ecology of some freshwater phytoplankton was also studied by Hutchinson (1957). While working on ecology of freshwater phytoplankton, Lund (1965) described algal productivity in lakes and its related factors.

Economic value of algae and algal products are uncountable. Algae are very useful as food either directly or as food products but still their use are limited. Tilden (1935), Johnston (1970, 1976), Dixon (1973) gave extensive account of algae used as food and food products. *Spirulina* has achieved the highest position in case of protein content, as it has 60- 70% of protein of its total biomass. Now a day's *Spirulina* is used for curing of anemia (Takeuchi, 1978), antiviral activity (Gustafson, 1989), treatment of nutritional deficiency (Belay et al., 1993). Moreover, it is rich in vitamins, minerals and β -carotene, thus truly declared as the best future food for mankind by UN at the world food conference in 1979.

2.2 National Status

Phycology in Indian context was started much later than that of world standard. Most of the pioneering works were done by British colonial workers. The works of Indian authors can be clearly grouped into three periods. During the first period *i.e.* from 1798 to 1854 some classical works like description of seaweed.

The second period extended from 1858 to 1907. In this period some classic and valuable works came from a group of professional workers. Lagerheim (1888) described 52 desmids from Bengal. Turner (1883) published an account of “The Freshwater Algae of East India” which included detailed contribution of algal flora recorded so far. He included 22 species of Myxophyceae, 542 of Desmids. Other contemporary phycologists of that period were Hobson (1863), Martens (1871), Dickie (1882) and many more.

It was from 1919 onwards, third phase of algal study started in India where Indian phycologists came forward and performed a great deal of appreciable works. Sengupta (1920-1954) worked a lot on Volvocales, Chaetophorales, Zygnematales and Blue green algae of India. Sengupta et al. (1940, 1941, 1944, 1981) studied morphological details of *Cylindrocapsa geminella*, *Polysiphonia platycarpa*, *Microdictyon tenuis*. Due to such an immense contribution, he is truly called as “Father of Modern Algology in India”. Bruhl and Biswas (1929) was the pioneer in studying algae in Eastern India. Bharadwaja (1928-1936) contributed towards the knowledge of BGA and he along with his followers established a base of algal research at Banaras Hindu University. Another outstanding contribution came from the great Indian algologist Randhawa, who published his works as research articles on species of Zygnematales, Oedogoniales and Vaucheriaceae. And his

monograph on Zygnemaceae is a valuable ethic. Prasad (1952) described some new forms of Nostocaceae from river of Baranasi. Krishnamurthi (1954) described for the first time the freshwater diatom flora of South India and reported a number of new forms. Gandhi (1959, 1960) presented a detail account of diatoms collected from Sagar and also the diatom flora of temporary ponds of India and reported many new taxa. Desikachary (1959) published his monograph "The Cyanophyta" which was an exclusive document for the workers till today. Vasistha (1960) working on Myxophyceae of India and reported two new species and one new variety. The morpho-taxonomic studies of Eastern Himalayan algal flora have contributed by Das (1961), Santra and Adhya (1973, 1976) and Alfred (1978).

Singh and Saha (1982) described 16 new species of pond diatoms from Bihar. Gurudeva et al. (1983) illustrated the systematic position of 72 taxa of desmids and eight out of them were new records from India. Hosmani and Bharati (1983) described 42 species of Euglenineae from Madgaon. Kou1 et al. (1983) described 44 species of algae from Dal Lake in Kashmir, of them eight species were new to India and one to world algal database (*Scenedesmus longus* var *naegelli* f. *srinagari*). Somashekar (1983) collected 50 desmids, 35 Chlorococcales and 104 blue greens from river Cauvery concluding that the polluted stations of river are mostly dominated by Cyanophyceae.

Hedge (1986a) reported five new taxa of desmids belonging to *Cosmarium corda*. Hedge (1986b) added 24 new freshwater pond dwelling desmids to the algal flora of Karnataka. Isaacs and Hedge (1989) collected 72 freshwater algae from permanent ponds of Kannada dist. of Karnataka. Regarding the contribution to the North Indian algal flora the noteworthy literatures have been made by Kant and

Anand (1978), Habib (1996, 1997), Kant and Gupta (1998), Singh and Gupta (2000), Suseela and Dwivedi (2001), and Mishra et al. (2002, 2005).

Other than these general topics on algae, many authors contributed a lot on algal cytology, physiology, taxonomy, ecology, evolution, productivity, response to toxicity, response to environmental changes, role in economy etc. Munawar (1970) during his extensive limnological studies on freshwater ponds of Hyderabad described the biocenose, distribution and seasonal abundance of unicellular and colonial phytoplankton in polluted and unpolluted environment. Zutshi and Vaas (1978) studied the limnological studies in Dal Lake. Kiran et al. (1998) carried out a comparative water quality assessment of Yedyur and Bannerghatta lakes of Bangalore.

Bharati and Hedge (1982) studied the freshwater algae from 52 different ponds of Karnataka and Goa and recorded 47 desmids. Chadha and Pandey (1982) explored the algal taxa growing in exposed walls of buildings and recorded 24 taxa and also noted some peculiar variations on their distributional patterns on different kinds of walls.

Bongale (1987a) studied the distribution of algae in acidic paddy field soils of Karnataka and reported 63 species of Cyanophyceae, 17 Chlorophyceae and 26 Bacillariophyceae which includes seven new taxa of Chroococcales. Patel and Jawale (1985) studied the morphological and cytological features of *Lychnothamnus barbatus* (Meyen.) Leonh. Saha (1986) reported 280 algal taxa from freshwater ponds of Bhagalpur. Studies on phytoplankton diversity in response to abiotic factors in Veeranam Lake in the Cuddalore district of Tamil Nadu was studied by Senthilkumar and Sivakumar (2008). Seasonal variation of phytoplankton in a

freshwater tank of Maharashtra was studied by Milind and Hujare (2008).

Many more workers and researchers made contributions to the Indian phycology. Prominent contributors were Mishra (1937), Allen (1925, 1928, 1961), Kundu (1929, 1934), Dixit (1937), Venkataramana (1953-1957), Desikachary (1939-1949), Vaidya (1963 & 1968), Kodhari (1967), Ramanathan (1964, 1968), Prasad and Godward (1963), Prasad and Mehrotra (1970), Prasad and Jain (1973), Kant (1971), Patel and Isabella (1974), Verma (1981), Prasad and Srivastava (1992), Singh et al. (1982), Trivedy (1982), Patel and Patel (1982), Jha and Kaushal (1983), Mehrotra and Jaitly (1983), Maity and Santra (1985), Pal and Santra (1985 & 1987), Prasad and Jaitly (1985), Jha et al. (1986), Prasad and Chowdhury (1986), Shukla et al. (1988), Vohra (1991), Rawla and Rattan (1989), Bharati (1990), Nirmala et al. (1990) Kant and Vohra (1991), Srivastava and Odhwani (1992), Kant and Gupta (1998), Gandhi (1999), Subha and Chandra (2005), Muthukumar *et al.* (2007), Arulmurugan et al. (2010).

The variations of algal variety in pure and polluted water bodies were studied in India by Seenaya (1972), Rama Rao et al. 1978), Mishra and Saksena (1993) have offered the noteworthy contributions towards this field of algae related to aquatic pollution. Verma and Dalela (1975) during their study in Kalindi River designated *Oscillatoria*, *Spirogyra* and *Stigeoclonium* as pollution marker. Similar results were also obtained by other workers during their own study in different aquatic systems (Patrick, 1948 & 1965, Rama Rao et al., 1978, Jeeji Bai and Rajendran, 1980). Zutshi et al. (1980) made a comprehensive limnological study on nine lakes of Jammu and Kashmir and concluded that the tropic evolution of lakes occurred due to human interference.

Mishra and Saksena (1993) during their studies in Moras river in Madhya Pradesh stated that *Anabaena*, *Scenedesmus*, *Closteriun*, *Navicula*, *Euglena gracilis*, *Phacus* were pollution indicator algae. Achae et al. (1995) studied the phytoplankton species diversity in Deeghali beel and recorded 60 genera. Ragothaman and Patil (1995) made a study in Narmada Estuary and counted the algal number as 60 units/ml to 18000 units/ml which may be due to seasonal variation in the extent of agricultural runoff.

Indian contributions towards the ecology and productivity of freshwater bodies started from Roy (1955) who studied the phytoplankton ecology of river Hoogly and observed that some species of algae are tolerant to pollution and some are very much sensitive. Zafar (1968) studied the ecology of algae in some fish ponds of Hyderabad and their physicochemical complex.

Kumar and Singh (1974) observed that Cyanophyceae and Euglenoid flagellates were mostly associated with organically rich water bodies with having low oxygen content. Research regarding the ecology of blue green algae was done by a number of Indian authors. Munawar (1974) performed limnological studies on fresh water ponds of Hyderabad. Kaur et al. (1996) studied the biotic components of a fresh water pond in Patiala and confirmed its eutrophic condition.

2.3 Status in Karnataka

Hosmani and Bharathi (1982) worked on the waterbodies (Yemekeri pond, Keigeri lake and Naggikeri lake) of Dharwad of Karnataka and reported *Euglena*, *Phacus*, *Scenedesmus*, *Closterium*, *Pediastrum* and *Navicula* as the most frequent genera. Somashekar (1983) recorded 21 genera and 32 species of algae in the river Cauvery of Karnataka. Hegde and Bharathi (1986) reported 61 taxa of fresh water

algae belonging to 26 genera from Bijapur district, Karnataka. Bharathi and Hosmani (1975, 1977, 1982) extensively worked on the limnological aspects of ponds and lakes in Karnataka. Considerable work has been done on the use of algae as bioindicators of the ecosystem by Hosmani (1973-2014). Giriyappanavar and Patil (2013) used algal diversity to assess the state of the lake ecosystem in Karnataka. Patil et al. (2021) suggested the use of algal assemblages and multimetric indices and functional grouping of algae to assess the health of aquatic ecosystem.

Chapter-3

MATERIALS AND METHODS

3.1 General Topography of the study site

Kohalli is a village situated in Belagavi district of Karnataka, India. Kohalli Lake located in the Kohalli village and is at the distance of 25km from Athani and 100km from Chikodi. The total geographical area of village is 2791.23 hectares. Kohalli has a total population of 6,594 peoples. The geographical co-ordinates *i.e.*, latitude of Kohalli 16° 49' 44" N longitude is 75° 14' 41" E respectively and Elevation-590 meters above mean sea level.

Village name Kohalli, name of the lake–Kohalli lake. Catchment area – 75.73sq.km, water spread area (hecter) -96.00. Live capacity (Mcft)- 75.73, height of lake(mtrs)– 14.40. Discharge capacity (cusecs)-9580. Usage-agriculture, drinking, domestic.

Kohalli lake is a medium sized water body present in the Kohalli village of Athani taluk and is located near the Athani-Belagavi road. The lake has a huge stony wall towards the eastern part of it, to store huge quantity of water.

The Lake water was used to drinking purposes but now a days it is exclusively used for the domestic purposes like Cattle bathing, for washing clothes and irrigation etc.

3.2 Collection and Processing of Sample:

Composite surface water sampling method from 4 different sites of reservoir was followed to reduce variations in qualitative estimates of algal attributes, due to spatial variations in habitat conditions (Stevenson and Smol, 2003). The collection of samples was done between 7 am to 9 am on first week after every 2 months during the course of the study period (September to March). Black plastic carbuoys of one litre capacity were used for collecting the samples. For transportation of samples to laboratory, dark coloured bag was used in order to avoid the exposure of samples to sunlight, variations in temperature.

Benthic diatom samples were collected from the surface of the rocks, boulders by scraping the sample with brush in a plastic tray and stored in glass vials.

3.2.1 Processing and Preservation of Phytoplanktons:

Planktonic samples were brought to the laboratory soon after collection and preserved by adding Lugol's Iodine into Glass Column in dark for 48 hours as described by Welch (1948) to sediment the Phytoplanktons. The sample was concentrated to 30 to 50ml with the help of centrifuge. Finally, the planktonic samples were preserved in 50ml plastic reagent bottles.

3.2.2 Processing and Preservation of Benthic Diatoms:

Benthic diatom samples were processed to remove the dirt and clear the diatom frustules by hot HCl and KMnO₄ method described by Hasle (1978) and adapted by Round et al. (1990). Following are the steps followed during processing:

- ✓ 10ml of sample was taken in a heat-resistant beaker.
- ✓ The beaker was marked clearly with the sample number in several places.
- ✓ Then 10ml of potassium permanganate (KMnO₄) solution was added, mixed well and was left for 48 hours.
- ✓ Later 10ml of concentrated HCl (32%) was added, taking care by not to inhale the gases released. Then covered the beaker with a watch glass and was heated on a hot plate at 90 degrees for 1 hour. Later the solution was turned to yellow in colour. Proper care was taken to avoid cross contamination of samples during violent bubbling while heating with acid.
- ✓ After the oxidation of organic materials, carefully 1ml of hydrogen peroxide was added to check if the oxidation process is complete.
- ✓ Then this sample was allowed to cool and was transferred to 10ml centrifuge tube. The beakers were vigorously swirled, to re-suspend the diatoms and the stone and sand particles were settled down.
- ✓ Then sample was rinsed by centrifuging with distilled water at 1000rpm for 20mins.
- ✓ Then the supernatant was poured off in a single movement, while not to lose any diatom material.
- ✓ Finally, supernatant was decanted and centrifugation was repeated and further observation was done.

3.3 Identification of Algae:

For the identification of both the plankton as well as benthic diatoms concentrated sample was used. For identification, one drop of sample was taken with the help of dropper on a clean glass slide. A clean cover slip was placed over the glass slide so that the sample remains intact and free from other particles like dust particles, and the slide was observed under the microscope of different magnifications like 10X, 40X and 100X. Photomicrographs of the Algae observed were taken. Algal identification was done by referring the standard monographs. Desikachary (1959), Phillipose (1967), Prescott (1982), Scott and Prescott (1961), Sarode and Kamath (1984), Karthick et al. (2013), John et al. (2011), Ramanathan (1964), Iyengar and Desikachary (1981), Randhawa (1959), Krishnamurthy (2000).

Chapter-4

RESULTS AND DISCUSSION

A total of 40 species of algae belonging to Bacillariophyceae, Chlorophyceae, Euglenophyceae, Dinophyceae, Cyanophyceae were recorded during the present investigation. The list of the recorded algal taxa is represented in the Table 4.1 and percent contribution of each class of algae from the study site is represented in Graph 4.1. Microphotographs of selected algal taxa are represented in Plate 4.1 and 4.2.

Fig. 4.1: Percent contribution of Algal groups in Kohalli lake

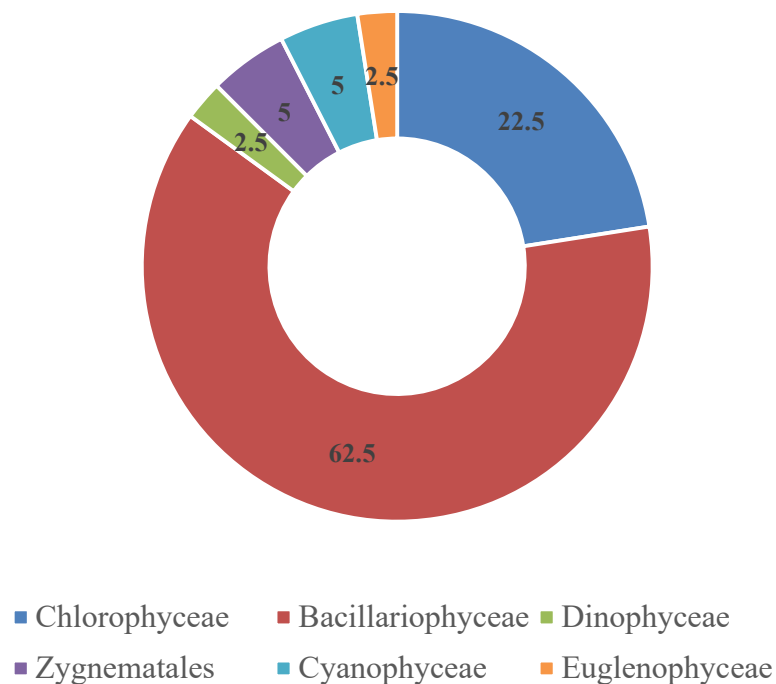


Table 4.1: List of Algae recorded from Kohalli Lake during present investigation

Sl. No	Algal Taxa
Class –BACCILAROPHYCEAE	
1	<i>Achnanthes lanceolata</i> (Breb.) Grun.
2	<i>Amphora ovalis</i> (Kutz.)
3	<i>Cyclotella meneghiniana</i> (Kutz.)
4	<i>Gomphonema parvulum</i> (Kutz.)
5	<i>Gomphonema dharwarensis</i> (Gandhi)
6	<i>Gyrosigma obtusatum</i> (Sullivant et Wormley) Boyer
7	<i>Gyrosigma acuminatum</i> (Kutz) Rabenhorst
8	<i>Mastogloia recta</i> (Thwaites ex W. Smith)
9	<i>Cymbella tumida</i> (Brebisson) Van heurck
10	<i>Meridion circulare</i> (Agardh)
11	<i>Melosira varians</i> (Agardh)
12	<i>Pinnularia borealis</i> (Hustedt, Kammer, K)
13	<i>Pinnularia viridis</i> (Nitzsch) Ehreberg
14	<i>Pinnularia amabilis</i> (Krammer)
15	<i>Pleurosigma langela</i> (Bertalotii Karthik and Kociolek)
16	<i>Planothidium biporumum</i> (Hohn and Hellerman) Lange-Bertolot
17	<i>Fragillaria ungeriana</i> (Grunow)
18	<i>Frustulia crassinervia</i> (Brebisson) Lange-Bertalot et Krammer
19	<i>Surirella ovalis</i> (Brebisson)
20	<i>Stauroneis phoenicenteron</i> (Nitzsch) Ehrenberg
21	<i>Cocconeis placentula</i> v. <i>lineate</i> (Ehrenberg) Van. Heurck

-
- 22 *Ulnaria ulna* (Nitzsch) Compere
 23 *Melosira granulata* (Ehrenberg) Ralfs
 24 *Stauroneis anceps* (Ehrenberg)
 25 *Rhoicosphenia abbreviata* (C. Agardh) Langebertalot

Class –CHLOROPHYCEAE

Order-Volvocales

- 26 *Eudorina elegans* (Ehr.)

Order-Zygnematales

- 27 *Closterium diana* var. *bravium*
 28 *Desmidium aptogonum* var. *ehrenbergii*
 29 *Cosmarium undulatum* (Corda ex Ralfs)
 30 *Coelastrum astroideum* (De Notaris)
 31 *Dictyosphaerium indicum* (M.O.P. Iyengar and Ramanathan)

Order-Chlorococcales

- 32 *Pediastrum boryanum* (Turpin) Meneghini
 33 *Pediastrum simplex* (Meyen)
 34 *Scenedesmus costatus* (Schmidle)
 35 *Scenedesmus dimorphus* (Turpin) Kutz
 36 *Selenastrum gracile* (Reinsch)

Class-EUGLENOPHYCEAE

- 37 *Phacus orbicularis* (K.Hubner)

Class-DINOPHYCEAE

- 38 *Ceratium hirudinella* (O.F.Muller) Dujardin
-

Class –CYANOPHYCEAE

Order-Chroococcales

- 39 *Merismopedia glauca* (Ehrenberg) Nagelia
- 40 *Microcystis aeruginosis* (Lutz. emend. Elekin)
-

Descriptions of the recorded taxa:

Class –BACCILAROPHYCEAE

***Achnanthes lanceolata* (Breb.) Grun.**

Is a common species which occurs on stalks, epiphytizing filamentous algae. These frustules are symmetrical in valve view but not when seen from the side. They are, in general, elliptic or fusiform in valve view, undulate-rectangular and bent in girdle view. The epivalve shows a pseudoraphe, the hypo valve a raphe. There may be a distinctive lateral, horseshoe-shaped clear area in the midregion of the valve which has the pseudoraphe. The cells may be free, or more commonly attached by a gelatinous stalk to various substrates, sometimes forming packets or filaments. There are over 30 species which have been reported from the United States.

***Amphora ovalis* (Kutz.)**

Frustules in this genus are crescent -shaped in valve view but broadly elliptic with truncate poles in girdle view. The raphae present two curved lines near the central margin of the valve, the two curves meeting over the central nodule which lies next to the central margin of the cell. The cells usually are found lying with the concave surface of the hypovalve upper most when viewed under the microscope, but in nature occurs with the concave face against the substrate (often filamentous algae) H-shaped chloroplast with central bridge, flanked by two conscious droplets, one towards each cell apex.

***Cyclotella menenghiniana* (Kutz.)**

These circular cells are narrowly rectangular in girdle view and often lie parallel with one another to form chain or short filaments. In valve view there is a zone of radiate costae within the valve margin and a central smooth or finely punctate area. Species are planktonic, often occurring with stephanodiscus.

***Gomphonema parvulum* (Kutz.)**

Valves lanceolate, tapering quite sharply to narrow foot poles with bluntly rounded but narrow, subrostrate or rostrate head poles, 10-36 μm long, 4–8 μm wide; valve shape somewhat variable but cells often possess a clearly rounded pyrenoid; striae difficult to resolve in live material, often about 15 in 10 μm .

***Gomphonema dharwarensis* (Gandhi)**

Valves clavate with broadly rounded headpole and narrowly rounded footpole. Axial area narrow at the poles, gradually becoming wider towards the center. Central area rectangular, expanded unilaterally, with one stria reduced in length and an isolated stigma. Raphe lateral, undulate with proximal raphe ends deflected onto the mantle. Stria distinctly punctuate, slightly radiate, curved in the center and parallel throughout the valve.

***Gyrosigma obtusatum* (Sullivant et Wormley) Boyer**

Valves slightly sigmoid, linear-lanceolate with tapering to obtusely rounded ends. Axial area and raphae sigmoid. Transverse striae more conspicuous than longitudinal striae

***Gyrosigma acuminatum*. (Kutz) Rabenhorst**

Valves linear – lanceolate at centre, sigmoidly deflected into broad, bluntly rounded apices. Raphe slit central; fissures deflected in opposite directions. Terminal fissures curved over valve apices. Transverse striae more or less parallel, crossed by longitudinal striae that follow curvature of the raphe.

***Mastogloia recta* (Thwaites ex W. Smith, 1856)**

Two plastids, one towards each pole, consisting of two valve appressed plates connected by a narrow bridge containing a pyrenoid. Loculae present on girdle bands.

***Cymbella tumida* (Brebisson) Van heurck**

Valves strongly dorsiventral dorsal margin strongly convex, ventral margin convex, always with characteristic swollen or tumid mid-region. Apices protracted, rostrate. Axial area narrow, with linear margins. Central area distinct, rounded to rhombic in shape. Raphe lateral, proximal endings distinct and ventrally deflected. A cosmopolitan species found in oligo-to mesotrophic waters with moderate electrolyte content. Found attached to epiphytes.

***Meridion circulare* (Agardh 1824)**

Cells attached closely by their valve faces to form straight or fan shaped colonies heteropolar taxa isopolar, more or less linear in valve view, rectangular in girdle view. Prominent ribs across the valves visible in both valve and girdle view. Plastids numerous (-18-12), rather irregularly discoid, lying along the valve face. *M. Circulate* (Greville) C.A.Agardh - often abundant in calcareous springs and streams; particularly in the spring in cool water.

***Melosira varians* (Agardh)**

Cells cylindrical, in girdle view and forming filaments of linked cells. Valve face and margin without discernible ornamentation on the valve face as seen with light microscopy. Valve mantle is covered by small granules. *Melosira varians* has more lightly silicified cell walls than *Melosira lineate*. The valve mantle of *M. varians* is relatively thin and straight, as compared to the thick, curved interior mantle of *M. Lineate*.

***Pinnularia borealis* (Hustedt, Kammer, K)**

These mostly solitary and free-floating frustules vary considerably in shape but mostly they are naviculoid with broadly rounded poles in valve view. Some species are enlarged in the midregion. The conspicuous feature is the prominent transverse costae or costae like striae on either side of a relatively wide, straight axial field. The striae open into the cavity of the cell. The raphe in axial field is sigmoid. There are no septa. In girdle view the frustules are rectangular with truncate poles. Some species have cells which are perhaps the largest among fresh water diatoms.

***Pinnularia viridis* (Nitzsch) Ehreberg**

Valves linear-elliptical to linear with parallel margins and broadly rounded apices. Axial area narrow, forming a relatively small, linear to elliptical central area. Raphe lateral undulate. External proximal raphe ends dilated, and curved to one side. Longitudinal lines present at about half the way between the axial area and the margins, running the length of the valve.

***Pinnularia amabilis* (Krammer)**

Valves linear, with slightly undulated valve outline. Ends broadly capitate without distinct shoulders. Raphe narrow and undulate. Proximal raphe ends unilaterally bent. Axial area linear, expanding broadly into the central area. Striae curved and radiate.

***Pleurosigma langela* (Bertalotii Karthik & Kociolek)**

Valves large, sigmod-lanceolate, apices narrow, rounded, curved in opposite directions. Axial area narrow, thickened, and forming a weak "S". Central area elliptical with a thick central nodule. Raphe filiform, curved, with internal proximal fissures straight. Striae straight, parallel throughout, other orientations not notable in light microscopy.

This species occurs in circumneutral streams, at low conductivity conditions in pristine Streams.

***Planothidium biporum* (Hohn and Hellerman) Lange- Bertalot**

Valves are lanceolate with subrostrate apices. Raphe valve has a linear axial area and a variable central area. Rapheless valve has a linear- lanceolate axial area and an asymmetrical central area containing a hood on the internal valve surface. The raphe is straight with expanded external proximal endings. Striae are radiate throughout in both valves.

***Fragillaria ungeriana* (Grunow)**

Linear valves with cuneate poles and sub-capitate apices. Well defined hyaline area is present at the centre of the valve, reaching one valve margin only. Striae parallel and ghost striae may be visible in the hyaline area. A single labiate process is located near the apex of one end of the valve.

***Frustulia crassinervia* (Brebisson) Lange- Bertalot et Krammer**

Valves lanceolate to elliptical-lanceolate, with apices protracted, rounded. Margins are convex and sometimes slightly undulate. Axial area narrow, straight, central area not distinguished. Raphe ribs continuous, forming a porte-crayon at the ends. Striae fine, forming 2 patterns of ornamentation, both parallel and perpendicular to axial area.

***Surirella ovalis* (Brebisson) 1838**

These boat-shaped or oval cells are usually identified readily by the very prominent costae which extend from margin as seen in valve view, with a clear, linear region along the axis. Some species are spirally twisted. The raphe is marginal in both valves. Cells are solitary in both and tycho plankton; are relatively larger diatoms.

***Stauroneis phenicenteron* (Nitzsch) Ehrenberg**

Valves are lanceolate with broadly rounded, weakly protracted apices. The axial area is narrow, widening slightly near the central area. The stauron is rectangular, narrowing slightly toward valve margins. Shortened striae may be present in the central area. The raphe is lateral with straight and slightly inflated proximal ends. Striae strongly radiate near poles and weakly radiate near center.

***Cocconeis placentula* v. *lineata* (Ehrenberg) Van Heurck**

Valves relatively flat, elliptical to linear-elliptical in outline. Raphe valve with hyaline rim marginally placed, bordered towards the centre of the valve by striae that are interrupted near the margin. Axial area vary narrow, with a small, rounded central area formed in the centre of the valve. The raphe is straight, filiform and the external proximal raphe ends are dilated slightly. Striae are punctuate, composed of dash-like areolae and radiate. Occurs in meso-to eutrophic flowing and standing waters. Found in abundance on plants, wood and stones

***Ulnaria ulna* (Nitzsch) Compere**

Valves linear, with margins parallel, tapering to protracted to rostrate apices. Central sternum narrow, straight. Central area transversely expanded rectangular area, nearly square in shape. There may be short or "ghost" striae present at the margins of the

central area. Striae parallel. A single labiate process is located near the apex of one end of the valve

***Melosira granulata* (Ehrenberg) Ralfs 1861**

Barrel-shaped frustules are heavily silicified. The valve faces are flat and joined together to form long, filamentous colonies. In girdle view, the mantles are unevenly thickened internally, creating an undulating appearance. A ring of evenly-spaced rimoportulae encircles the mantle, near the valve edge. Several rimoportulae are also present on the surface of the valve. striae on the valve face are dichotomously branched and radiate from a hyaline central area. Areolae number 13-19 in 10µm.

***Stauroneis anceps* (Ehrenberg) 1843**

Semi cells with 2 extended arms at their apices as seen in front view, narrowly elliptic or fusiform when seen from the top. The species illustration is an example of those members of the genus staurastrum which have arms of semicell directed in 1 plane. Most species are euplanktonic in soft-water lakes.

***Rhoicosphenia abbreviate* (C. agardh) Langebertalot 1980**

Several populations of this species have been observed during the study, but only to populations are depicted here. In girdle view, frustules have a bent wedge shape. Valves are heteropolar, linear to narrowly clavate with a narrowly rounded head pole and attenuated base pole. Valve length varies from 14-52 µm, and the valve width is 5-7µm. The concave R-valve has a fully developed raphe slits line close to poles. Striae on both valves are parallel to weakly radiate throughout the valve length, and distantly spaced 9-12 in 10µm.

Class –CHLOROPHYCEAE

Order-Volvocales

***Eudorina elegans* (Ehr.)**

Cells all the same size within the colony, arranged within the periphery of the colonial mucilage, but showing a tendency to occur in tiers. This species is most common with world-wide distribution, occurs with other colonial volvocales, in both eu-and

tychoplankton. It is differentiated by the colony showing a more definite polarity, with the sheath forming lobes at the posterior end.

Order-Desmidiinae

***Cosmarium undulatum* (Corda ex. Ralfs) 1848**

Cells 30-32 μm wide, 44-46 μm long; sinus deep, narrow, dilated inside; semicells angular at base then almost semicircular; apex retuse; margins with 10-12 undulations; face smooth.

***Coelastrum astroideum* (De Notaris) 1867**

Coenobia spherical, 4-32-celled, up to about 100 μm in diameter; cells 5-20 x 3.5-20 μm , with outer wall strongly protruding, connected basally to neighbouring cells but without obvious wall projections, often hexagonal in surface view due to mutual compression; intercellular the width of the cell. Obovoid spaces often more than half the width of the cell.

***Dictyosphaerium indicum* (M.O.P.Iyengar and Ramanathan)1940**

Coenobia consisting of 4, 8, 16, 32 or 64 cells in groups towards periphery of a spherical or ovoid mucilaginous envelope; cells spherical, oval to cylindrical, obovoid, spindle-shaped, or kidney-shaped, walls smooth or occasionally granulate, forming (2-14-celled groups arising terminally on dichotomously or tetrachotomously branched, ribbon-like remnants of mother cell walls which radiate from centre of colony; chloroplasts parietal, cup-shaped (trough-shaped in longish cells) and possessing a single pyrenoid; asexual reproduction by 4 autospores, more rarely 2 or 8, released by splitting or occasionally by gelatinization of mother cell wall, the spores sometimes remaining attached to wall remnants.

***Pediastrum boryanum* (Turpin) Meneghini 1840**

Coenobia (16-25-180) μm wide; marginal cells (5-18-30x5-19-21) μm , slightly to deeply notched and with two projections; projections lying almost parallel to each other, often projections equal to or shorter than cells bearing them; inner cells 6-20x (4-22.5) μm , polygonal, without intercellular spaces; walls smooth or granulate.

***Pediastrum simplex* (Meyen) 1829**

Coenobia usually 4, -8, -16, or -32, -128 called 65-250µm across; marginal cell 7-36µm extending to form a single and gradually tapering projection; inner cells 40-38µm, 3-5µm side to polygonal, obovoid or spherical, with or without intercellular spaces or occasionally with a single central space; cell wall smooth granular or spiny.

***Scenedesmus costatus* (Schmidle) 1895**

Coenobia flat, consisting of 4 densely packed, distinctly alternating cells in 2 rows; cells 4-10 µm wide, 13-19.8µm long, broadly spindle-shaped to ovoid or slightly ovoid, with 4-10 longitudinal ridges and bluntly pointed apices each with a nipple-like polar thickening.

***Scenedesmus dimorphus* (Turpin) Kutzing 1833**

Coenobia of 4 linearly or distinctly alternatively arranged cells in 1 or 2 rows; cells 2-9.4 µm wide, 6-25µm long, broadly spindle shaped, tapering, marginal cells slightly outwardly curved but only in subapical part.

***Selenastrum gracile* (Reinsch) 1867**

The chloroplast is laminate and parietal, covering most of the wall gracefully curved cells occur in clusters of from 4 to 32, with a tendency to have the convex or 'outer' and 'inner' walls of the crescent are more nearly equal than in the somewhat similarly shaped cells of *Kirchneriella*, a genus which has cells irregularly arranged within a gelatinous envelope. Five species are commonly found in the United States, mostly differentiated by size of cell and degree of curvature. Mixtures of algae from shallow water often include *Selenastrum* but they may occur in the euplankton.

Class-ZYGNEMATOPHYCEA***Closterium diane* var. *bravium***

This is one of the placoderm desmids in which there is no incision or sinus in the mid region. The wall is in two sections, however, and the cell contents are arranged as two semicells, with a chloroplast in each. Whereas some species may be nearly straight, *Closterium* is characteristically bowed or crescent-shaped, sometimes inflated in the midregion, and some times with the concave and convex margins showing different degrees of curvature. The poles may be narrowed to fine points or may be broadly rounded.

Desmidium aptogonum* var. *Ehrenbergii

Cells 21-31 μ m wide, 13-19 μ m long, moderately constricted with an acute, open sinus; 15-24.5 μ m wide; semicells transversely oblong with small inflation on each side of isthmus beyond with lateral margins are slightly concave then converging to apex, 21-24 μ m wide; apices concave in mid-region but at each angle form moderately long connecting processes producing a distinct cavity between adjacent cells; in vertical view mostly 3-4 angular.

Class-EUGLENOPHYCEAE***Phacus orbicularis* (K.Hubner) 1886**

Cells 39-46, wide ,50-80 long, orbicular to broad ovoid in outline; anterior end slightly narrowly rounded; posterior end broadly ended with the short curved tail – piece; apical groove nearly full length of cell pellicle longitudinally and roughly striated, short transverse striae present; paramylon of 1-2 disc –or circular plate- like bodies; flagellum same length as cell. Probably cosmopolitan stagnant mineralized, mildly polluted and humic waters in ponds, swamps, ditches and lakes, also in brackish water; indicator of clean and mildly polluted water.

Class-DINOPHYCEAE***Ceratium hirudinella* (O.F.Muller) Dujardin 1841**

Cells broadly or narrowly spindle shaped depending on degree of horn divergence, strongly dorsoventrally flattened, 28-55 μ m wide, 40-450 μ m long, one apical and 2 or 3 antapical horns; epitheca with distinct shoulders just above cingulum and tapering to a long horn; hypotheca broad and short, divided into 2-3 posterior horns; cingulum narrow; plates smooth and with net-like ornamentation on cell body, coarsening on horns.

Class-CYANOPHYCEAE***Merismopedia glauca* (Ehrenberg) Nageli 1845**

Colony up to 64 cells, regularly and quite densely packed. Margin of mucilage distinct, Extending slightly beyond outer cells. Cells spherical, widely ellipsoidal or (after division) hemispherical, 3-6 μm diameter; cells often rather pale and sometimes pinkish.

***Microcystis aeruginosa* (Lutz. emend. Elekin)**

This species is a frequent component of water blooms, especially in lake with eutrophic characteristics, although it is common to a great variety of aquatic. The tendency to float high in the water results in the formation of large, microscopic clots and floating crusts which develop as the plants push each other above the surface.

Chapter-5

CONCLUSION

The present investigation to explore algal diversity of Kohalli Lake, Karnataka was conducted to assess its present ecological status.

Belgaum district provides an excellent topography with a large number of lakes and ponds, both natural and man-made, throughout its extension. Each of these habitats differ in size and shape, usage pattern and support exclusive aquatic vegetation. To justify the hypothesis, Planktonic as well as Benthic algae were collected from the study site over a period of 6 months. Appropriate methods were used for the collection, preservation, identification and enumeration of the algae.

Phytoplankton form the life communities and play a significant role in lake ecosystems. Members of the Bacillariophyceae contributed (62.5%). The distribution of algae enables us to learn peculiarities of sensitive communities to the environment. Long term studies on plankton component in relation to fluctuations of water quality parameters is useful in developing and evaluating significant ecological indices. The present study recorded 40 algal taxa. Bacillariophyceae and Chlorophyceae showed a marked appearance whereas Cyanophyceae, Dinophyceae, and Euglenophyceae were poorly represented by the habitat.

The levels of degradation of the aquatic habitat was found to be moderate. Algal genera *Gyrosigma*, *Amphora*, *Scenedesmus* are the common indicators of organic

pollution. Diatoms serve as excellent tools when conservation strategies are to be developed.

The outcome of the study on Reservoir at Kohalli Lake, Karnataka clearly depicts enormous diversity of algae representing slightly high level of pollution probably due to addition of minerals in water from the catchment area. Further long-term monitoring using algal assemblage data is required to plan the conservation strategies for the lake.

The outcome of the study on Phycodiversity of Kohalli Lake, Karnataka clearly depicts enormous diversity of algae representing the high level of inorganic pollution presently. Further long-term monitoring using algal assemblage data is required to plan the conservation strategies for the lake.

Chapter-6

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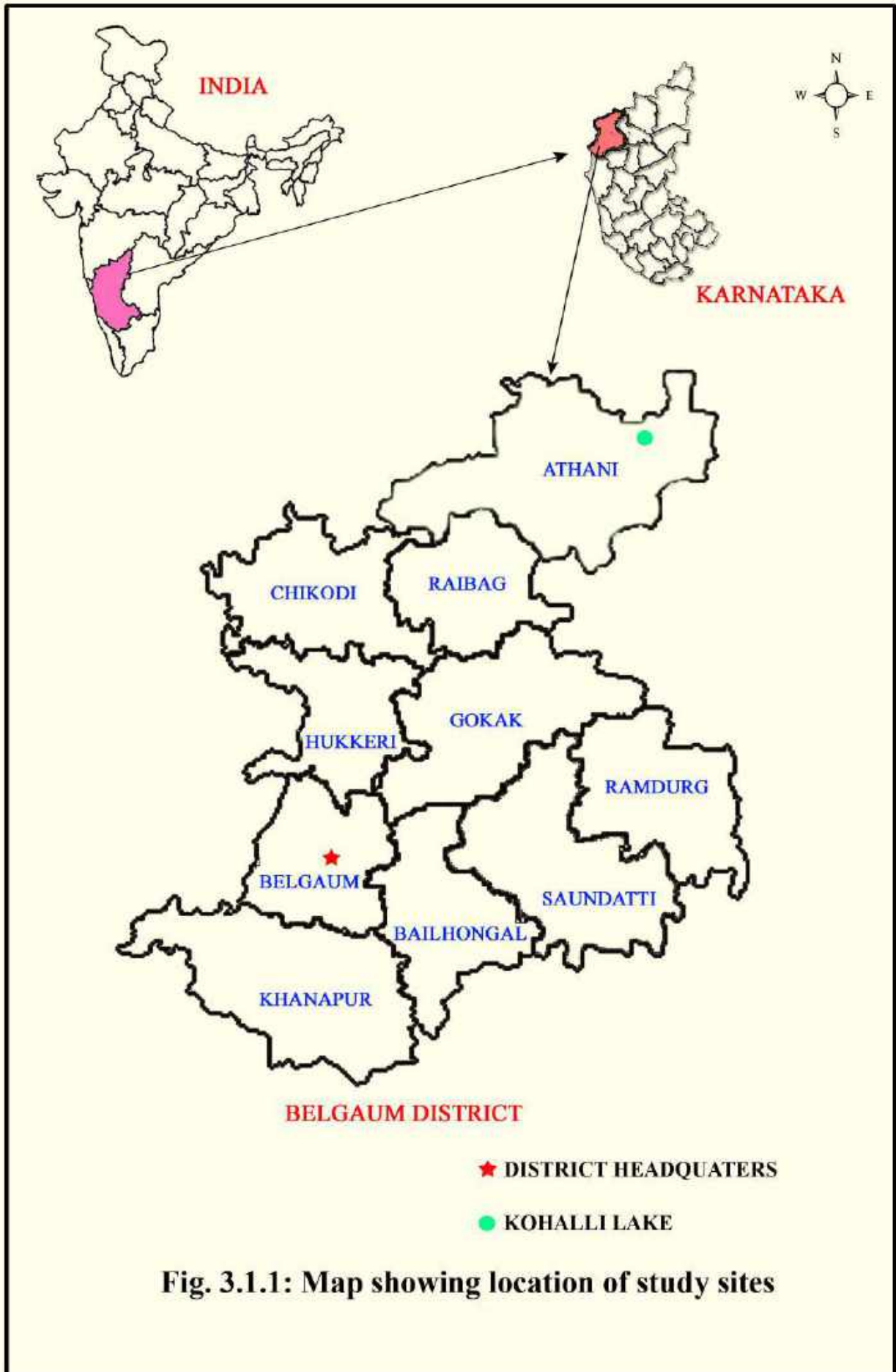




Fig 3.2: Panoramic view of Kohalli Lake

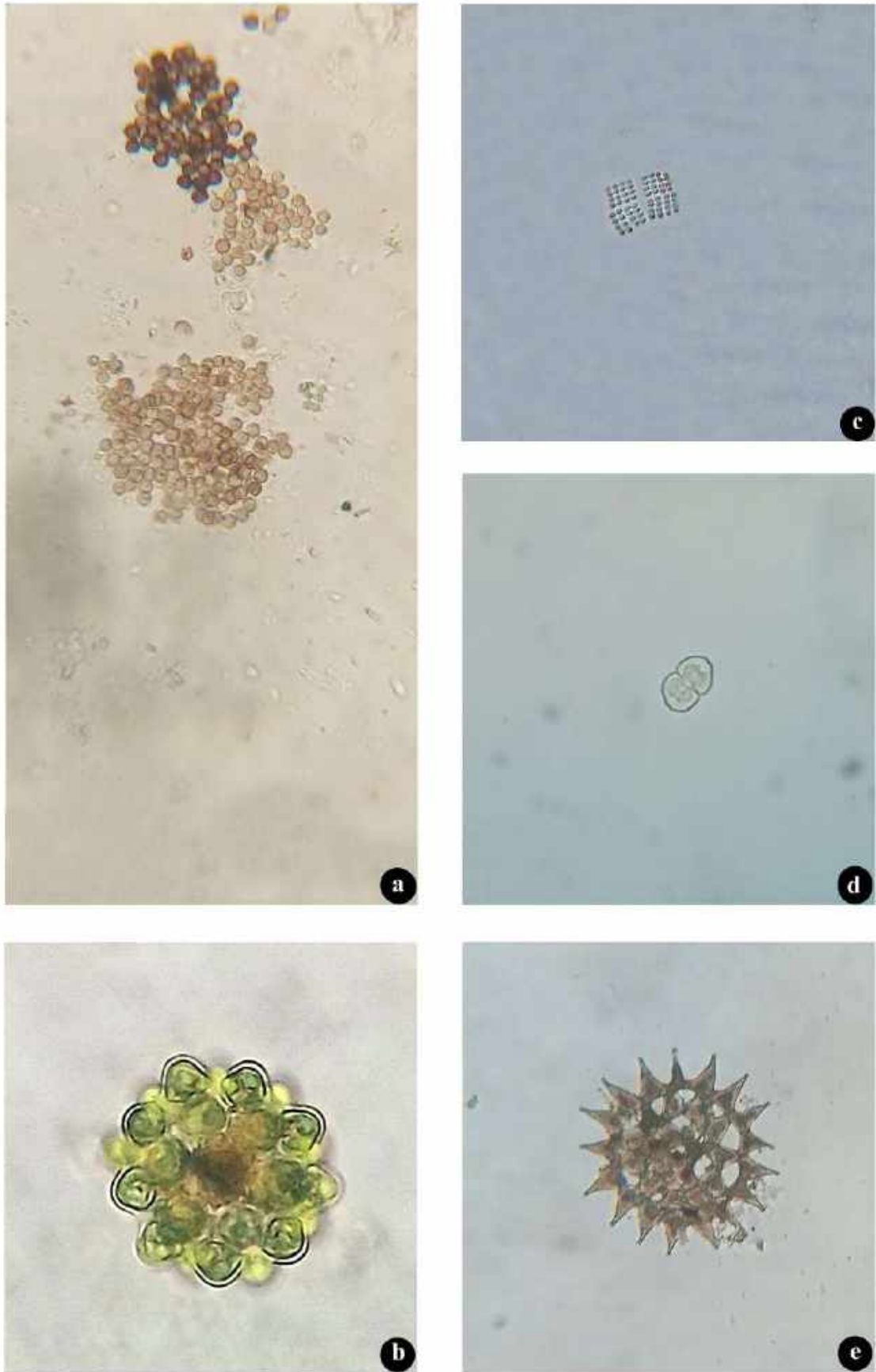


Plate 4.1: Members of CHLOROPHYCEAE and CYANOPHYCEAE from Kohalli Lake
a. *Microcystis aeruginosa* b. *Eudorina elegans*
c. *Merismopedia glauca* d. *Cosmarium undulatum*
e. *Pediastrum simplex*



Plate 4.2: Members of BACILLARIOPHYCEAE recorded from Kohalli Lake
 a. *Achnanthes lanceolata* b. *Melosira granulate*
 c. *Amphora ovalis* d. *Surirella ovalis*



Fig 3.3: Collection of Phytoplanktonic and Benthic algal sample from Kohalli Lake

FLOWERING PLANTS OF JALADURG FOREST RAICHUR



A PROJECT REPORT SUBMITTED TO

RANI CHANNAMMA UNIVERSITY BELAGAVI

FOR PARTIAL FULFILLMENT OF THE AWARD OF THE DEGREE OF

MASTER OF SCIENCE

IN

BOTANY

SUBMITTED BY

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COLLEGE, CHIKODI, BELAGAVI- 591 201**

2021

Dedicated to parents,
teachers and friends.

RANI CHANNAMMA UNIVERSITY BELAGAVI



C E R T I F I C A T E

This is to certify that; this project entitled “**Flowering plants of Jaladurg Forest Raichur**” is being submitted herewith for the partial fulfillment of award of the Degree of Master of Science in Botany, Rani Channamma University, Belagavi. The work reported in this report is based upon the results of the original work carried out by **Miss. Jyoti B.Neeli, Miss. Shakuntala L.Kankanawadi and Miss. Shambhavi S.Salimath** under my supervision and guidance.

Place: Chikodi

Dr. Kambhar S.V.

Date:

Research Supervisor

Co-ordinator

Post Graduate of Department Botany

DECLARATION

We hereby declare that this project work entitled “FLOWERING PLANTS OF JALADURG FOREST RAICHUR” completed and written by us has not previously formed. This report is based on the results carried out by us.

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CHAPTER 1-

INTRODUCTION

India is one of the mega-diversity countries along with Australia, Brazil, China, Columbia, Ecuador, Indonesia, Madagascar, Malaysia, Mexico, Peru and Zaire which holds together about 70 percent of its total flowering plants diversity (Mc Neely *et al.*, 1990). The richness of biodiversity is chiefly due to a diverse abiotic and biotic environment. Geographically, India is covering about 329 million ha of land and its coastline stretches to over 7,000 km, which constitutes all kinds of climate from hot arid in Thar Desert to arctic in the Himalaya with all intermediate gradations occur here. Hence India can be divided into eight distinct floristic regions, namely, the western Himalayas, the eastern Himalayas, Assam, the Indus plain, the Ganga plain, the Deccan, Malabar and the Andamans (Research Reference and Training Division, 2010).

There is a global attention for evaluating the status of living organisms belonging to various groups and conserving their diversity. All life is depending upon the genetic code; all forms have life evolved by natural selection and all life is connected to each other. There is no exact estimation regarding the total number of species in the world, although the sum of recorded number exceeds 1.7 million. Among the different organisms, the plants are the important source for the conversion of solar energy and it act as suppliers of food, oxygen and a host of many more important products. Hence it is more essential to prepare comprehensive databases of plants and their constituents. The main requirements for an inventory are correct identification, nomenclature, description and its environmental status.

As stated that, India is one of the 12 centres of mega-diversity in the world and encompass of 17,500 flowering plant species. It exhibits a wealth of complex and diverse ecosystems with a great deal of variation (Venu, 1998, Kotresha and

Kambhar, 2016). It accounts for 8% of the global biodiversity with only 2.4% of the total land area in the world (Singh *et al.*, 2011).

We know that plants are one of the major components of biodiversity. Thus, thorough investigation of our flora has become an urgent necessity not only an essential resource for human well-being and ecological importance of biodiversity but also of accelerated genetic erosion occurring as consequence of destruction of the forest and other habitat (Manilal, 1998; Sumeet *et al.*, 2010; Talukdar&Talukdar, 2012). Inventory is a continuous process of searching and re-examining the earlier findings. Inventory only will identify the key issues of management for these precious resources that are not fixed and will certainly vary with time and space (Yadav &Sardesai, 2000).

For this reason, detail information of the known local plant species from surrounding area is essential. The information is important as it allows us to prevent or avoid the prospective chances of biodiversity loss and to plan future policy for the protection of our environment.

The present study was undertaken for the following objectives;

- ❖ Collection, identification and inventorisation of the flowering plants in the Jaladurg area.
- ❖ To find out the rare, endangered and endemic plants.

CHAPTER 2-

STUDY AREA

2.1 Study area in general

Raichur is a city municipality in the district of Raichur in the India of Karnataka Raichur, located between Krishna and Thungabandra rivers, is the headquarter of raichur district. It is located 411 km from the state capital Bangalore.

Raichur is located at 16.25 N 76.42 E on Deccan pleteau. It has an average of 400 meter (1312 ft). The summer get really hot in this region with temperature going beyond 40⁰C .It receives rainfall during the months between May to August. Overall, the region is warm and humid during most part of the year.

2.2 Soil

The 1543 Sq. kms of geographical area of Raichur district is presence of the sandy soil texture class. 38.53 percent of entire geographical area of the taluk. This type of soil texture class is observed in the areas of Lingasur, Mudgal, Hatti, Naranpur rural, Halbavi, Sunkal, Janganagaddi, Hanchinal, Ammapur, Bachihal of Raichur district. 1543 Sq. kms, which accounts for 70.47 percent of geographical area of the taluk is under clayey soil texture class and it is noticed.

2.3 Climate

The climatic condition in the Raichur district is characterized by general dryness except during the manson seasons. The region has hot summer with exception of which is very moist during June to September. The district is broadly divided into three parts on the basis of differences in the rainfall and temperature. The western part has the more rainfall and comparatively more moisture conditions. The

middle part has the rainfall moisture conditions in medium nature while the eastern part has least rainfall and dry climatic condition. Though there are sufficient rainfall and favourable climate, mostly foodgrain crops are cultivated in the western part only because of lack of fertile land. Middle part is having fertile land, water supply and climatic conditions. Due to this almost all types of crops are cultivated in this area. In the eastern part, rainfalls are limited, climate is dry but due to the existence of fertile land and sufficient irrigation facilities, different suitable crops are cultivated. Productivity is more in middle part of the district. (This experience reveals that the simultaneous existence of fertile land and favourable climatic conditions are necessary for rapid agricultural developments.)

2.4 Average Weather

In District, the wet season is warm, oppressive, windy, and overcast and the dry season is hot and partly cloudy. Over the course of the year, the temperature typically varies from 61°F to 98°F and is rarely below 56°F or above 102°F.

2.5 Temperature

The hot season lasts for 2.5 months, from March 8 to May 22, with an average daily high temperature above 94°F. The hottest day of the year is April 19, with an average high of 98°F and low of 72°F.

The cool season lasts for 2.9 months, from June 21 to September 16, with an average daily high temperature below 83°F. The coldest day of the year is January 1, with an average low of 61°F and high of 84°F.

2.6 Rain fall

The normal rainfall in the Raichur district is 820.4 mms. There are 8 Rain gauge stations in the entire district. About 45% of the annual rainfall is received during the monsoon months from June to September. July being generally the rainiest month.

2.7 River system

The river system of the taluka consists of The Krishna, Doni, Lingasur kere, Narayanpur Dam. None of these are navigable. Krishna the premier river of south India, flows for the length of 15 km in the northern part of Raichur district.

CHAPTER 3-

REVIEW OF LITERATURE

3.1 Past work in India

In India, notable systematic botanical investigation was started by Van Reede (1678-1683) who published work on Indian plants in his monumental work '*Hortus Indicus Malabaricus*'. Major contributions in the southern region of Peninsular India were made by Louis Theodore Leschenault, W. Roxburgh and Robert Wight. *Icones Plantarum Indiae Orientalis* (1838-1853) and *Illustration of Indian Botany* (1840) is the most important contributions made by Wight. Together with Arnott he published *Prodromus Florae Peninsulae Indiae Orientalis* (1834) in which several new taxa were described.

The *Flora Sylvatica of South India* (1869-1874) and *Icones Plantarum Indiae Orientalis* (1868-1874) were contributed by Beddome who extensively collected the plants from Madras presidency and Eastern Ghats. Further, *Flora of British India* made by Hooker *et al.* (1872-1897) exhibited floristic wealth of British India in seven volumes. Subsequently, Cooke (1901-1908), Talbot (1909-1911) and Gamble (1915-1936) published the '*Flora of Presidency of Bombay*', '*Forest flora of Bombay Presidency and Sind*' and '*Flora of the Presidency of Madras*' respectively. In addition Blatter & McCann (1935) published *Grasses of Bombay* and Bor (1960) published *Grasses of Burma, Ceylon, India and Pakistan* respectively were made great contribution to documentation of this land.

3.2 Major floristic study in Karnataka

The work of Buchanan-Hamilton (1807) seems to be a pioneering work in Karnataka. Buchanan-Hamilton explored the area and given an account of Mysore plants (now Karnataka State). His observation was published in 1807 in two volumes entitled “*A Journey from Madras through the countries of Mysore, Canara and Malabar*”.

In the last few decades, a quite numbers of floras were published on different regions of Karnataka. The detailed study of Flora of Karnataka was published by Saldanha and his associates in two volumes (1984 & 1996). In addition to this, in the same year Sharma *et al.* (1984) published The Flora of Karnataka Analysis. It is simply a check list of Karnataka State based on BSI herbarium. Later, Flora of Eastern Karnataka was published by Singh (1988) which covered eastern districts of Karnataka. It includes Bellary, Bidar, Bijapur, Chitradurg, Gulbarga, Kolar, Raichur and Tumkur districts. The recent detailed study of Sedges of Karnataka (Cyperaceae) brought out by Prasad & Singh (2002). It was followed by the number of regional floras in different districts of Karnataka. The Flora of Bangalore district by Ramaswamy & Razi (1973) comprises about 979 spp. of flowering plants. Flora of Hassan district by Saldanha & Nicholson (1976), Flora of Chikmagalur district by Yoganarasimhan *et al.* (1977), Flora of Coorg (Kodagu) by Keshava Murthy & Yoganarasimhan (1990), Flora of Gulbarga district by Seetharam *et al.* (2000) documented about 600 spp. of flowering plants belonging to 101 families, Flora of Shimoga district by Ramaswamy *et al.* (2001). Flora of Udupi district by Bhat (2003) described 1242 spp. of flowering plants belonging to 694 genera and 171 families. In 2004, Flora of Davangere district by Manjunatha *et al.* documented total of 861 plants spp. belonging to 498 genera and 112 families. Kunnur (2009) explored the 57

Malvaceous taxa from different districts of Karnataka, of these 57 few plants have been recorded for the state. In most recently, Kotresha and Kambhar(2016) published Flora of Gadag district, which comprising of 815 species of flowering plants belonging to 518 genera and 113 families. More than 800 species belonging to 400 genera and more than 100 families are described. In 2018, the flora of Bidar published by Seetharam et al., which includes more than 800 species belonging to 400 genera and more than 100 families were described.

3.3 Major floristic study in Raichur

With reference to the present area, exploration was made for survey for the floral components of Raichur was very much limited. Around 158 plant species belonging to 39 families of Angiosperms, 04 species of Pteridophytes, 03 species of Bryophyte, were collected and recorded from the rocks and fort walls from Raichur fort Shrishail *et al.*, (2020). The district comprises have scrubby vegetation throughout the area. Similarly, a 125 plant species belonging to 45 families both lower and higher plants were reported from forts of Hyderabad Karnataka region including Raichur (Shrishail *et al.*, 2009). This was followed by plant species diversity in Kolanki hills of Raichur, Karnataka, India. A total 39 species and 38 genera belonging to different 26 families have been recorded. The study was indicated that number of plants was highest in the rainy season and lower in the summer season. Hill flora shows very poor representation of monocotyledons. It was interestingly noted that the Fabaceae members are dominant followed by Acanthaceae, Convolvulaceae and Euphorbiaceous (Prashant Kumar, 2020).

Subsequently, another work was done on the plant species diversity in Mallikarjun Rocky hills of Raichur, Karnataka, India. The plant species diversity was

mainly relevant to the change of climate of the area. The study investigated the status of plant species diversity in Mallikarjun rocky hills of Raichur. A total 41 species belonging to 41 genera and 29 families have been recorded. The Rocky hill flora shows very rich representation of dicotyledons (35) as compared to monocotyledons (06) (Prashant Kumar, 2020). With this background, it was observed that, there is no comprehensive record on the flowering plants of Jaladurg fort area and therefore, the present study is undertaken to know the regional diversity of the flora in the study area.

CHAPTER 4-

MATERIALS AND METHODS

The plant specimens were collected (in duplicate) throughout the study area, between November 2020 and July 2021. On the spot some observations were noted in the field notebook, such as habit, habitat, colour of flower and local names. Photographs of the fresh flower, twigs etc. were made the collection with mobile photos. Collector number was given to each specimen. The collected specimens were identified with aid of floras (Cooke, 1901-1908, repr. ed. 1958; Talbot, 1909 & 1911; Blatter & McCann, 1935, repr. ed. 1984; Saldanha, 1984; and Saldanha, 1996, Yadav and Sardesai, 2000).

Besides these floras adjacent districts flora also been used (Seetharam *et al.*, 2000; Kotreasha and Kambhar, 2016, Seetharam *et al.*, 2018). In addition to this some of the pictorial field guides were used (Ingalhalikar, 2005; Ingalhalikar, 2007).

The nomenclature of the taxa was updated with the most recent available monographs, revisionary works and recent published floras. A checklist has been prepared with their botanical name; distinguish characters, flowering and fruiting time, origin of the taxa and collection number.

Precautions were taken to protect herbarium specimens from damage. Insect repellent such as Paradichlorobenzene (Lawrence, 1951) kept in small quantities in herbarium cabinet and sprayed a weak solution of Mercuric Chloride (0.1% HgCl₂) on the specimens to control the fungal attack (Ravindranath&Premnath, 1997). The specimens were deposited in the Herbarium Post Graduate Department of Studies in Botany, Basavaprabhu Kore College, Chikodi.

CHAPTER 5- RESULTS

In the present work a total of 71 taxa, belonging to 57 genera and 25 families of angiosperms have been collected and represented in a Table 1.

Table 1. Checklist of Flowering Plants of Jaladurg forest Raichur.

Sl. No.	Botanical Name	Family	Habit	Habitat	Flowering and Fruiting	Coll. No.
1	<i>Abelmoschus ficulneus</i> (L.) Wt. & Arn.	MALVACEAE	Herbs	Dry forests and open areas	August to December	052
2	<i>Abrus precatorius</i> L.	FABACEAE	Climbers	Frequent in hedges and on bunds	September to January	025
3	<i>Abutilon indicum</i> (L.) Sweet	MALVACEAE	Herbs	Dry forests and open areas	August to February	053
4	<i>Abutilon pannosum</i> (Forst. f.) Schlect.	MALVACEAE	Herbs	Dry forests and open areas	July to December	070
5	<i>Acalypha indica</i> L.	EUPHORBIACEAE	Herbs	Open areas and wastelands	July to December	026
6	<i>Achyranthes asper</i> L.	AMARANTHACEAE	Herbs	Open areas and wastelands	September to December	001
7	<i>Aerva javanica</i> (Burm.f.) Juss	AMARANTHACEAE	Herbs	Frequent in hill slopes	August to December	027
8	<i>Agave americana</i> L.	ASPARAGACEAE	Herbs	Dry deciduous and scrub forests	July to September	054

Sl. No.	Botanical Name	Family	Habit	Habitat	Flowering and Fruiting	Coll. No.
9	<i>Albizia amara</i> (Roxb.) Boiv.	MIMOSACEAE	Trees	Dry deciduous forests and along roadsides	April to August	028
10	<i>Anisomeles malabarica</i> (L.) R.Br. ex Sims	LAMIACEAE	Herbs	Open areas and gravelly slopes	September to December	002
11	<i>Argemone mexicana</i> L.	PAPAVERACEAE	Herbs	Open forests and wastelands	Throughout year	029
12	<i>Aristida adscensionis</i> L.	POACEAE	Herbs	Grasslands and open areas	August to January	055
13	<i>Barleria prionitis</i> L.	ACANTHACEAE	Herbs	Open areas and gravelly plains	October to February	030
14	<i>Calotropis gigantea</i> (L.) Dryand	APOCYNACEAE	Shrubs	Open areas and wastelands	June to October	003
15	<i>Catunaregam spinosa</i> (Thunb.) Tirveng.	RUBIACEAE	Shrubs	Dry deciduous forests	May to September	031
16	<i>Chloroxylon swietenia</i> DC.	FLINDERNIACEAE	Trees	Dry deciduous forests	March to June	056
17	<i>Cleome aspera</i> J. Konig ex DC.	CAPPARACEAE	Herbs	Seasonal grasslands and wastelands	July to September	032
18	<i>Coccinia grandis</i> (L.) voigt	CUCURBITACEAE	Climbers	Open areas and in cultivated field	March to January	004
19	<i>Commelina diffusa</i> Burm.f.	COMMELINACEAE	Herbs	Open areas and in cultivated field	July to December	057
20	<i>Commelina forskaolii</i> Vahl	COMMELINACEAE	Herbs	Open areas and wastelands	September to December	033
21	<i>Cryptostegia grandiflora</i> R. Br.	APOCYNACEAE	Shrubs	Open areas and wastelands	August to December	058
22	<i>Euphorbia nivulia</i> Buch.-Ham.	EUPHORBIACEAE	Shrubs	Frequent in hill slopes	July to December	005
23	<i>Guilandina bonduc</i> L.	FABACEAE	Shrubs	Dry deciduous forests and along roadsides	June to February	034
24	<i>Gyrocarpus americanus</i> Jacq.	HERNANDIACEAE	Trees	Deciduous forests	August to January	006

Sl. No.	Botanical Name	Family	Habit	Habitat	Flowering and Fruiting	Coll. No.
25	<i>Hibiscus lobatus</i> (Murray) Kuntze	MALVACEAE	Herbs	Seasonal grasslands and open areas during rainy season	July to October	035
26	<i>Hibiscus panduriformis</i> Burm.	MALVACEAE	Herbs	Seasonal grasslands and open areas during rainy season	July to October	007
27	<i>Indigofera linnaei</i> Ali	FABACEAE	Herbs	Grasslands, gravelly plains and wastelands	June to January	036
28	<i>Ipomoea carnea</i> Jacq.	CONVOLVULACEAE	Shrubs	In lakes, muddy places and wastewater damp.	July to January	059
29	<i>Ipomoea obscura</i> (L.) Ker-gawl.	CONVOLVULACEAE	Climbers	Open areas and wastelands	December to April	008
30	<i>Ipomoea parasitica</i> (Kunth) G. Don	CONVOLVULACEAE	Climbers	Open areas and wastelands	December to April	037
31	<i>Ixora araborea</i> Roxb.	RUBIACEAE	Shrubs	Open areas and wastelands	May to September	060
32	<i>Jatropha curcas</i> L.	CUCURBITACEAE	Shrubs	Dry deciduous forests and along roadsides	April to December	009
33	<i>Jatropha glandulifera</i> Roxb.	EUPHORBIACEAE	Herbs	Dry deciduous forests and along roadsides	September to January	038
34	<i>Jatropha gossypifolia</i> L.	EUPHORBIACEAE	Herbs	Dry deciduous forests, open areas and wastelands	September to January	010
35	<i>Justicia simplex</i> D. Don	ACANTHACEAE	Herbs	Open areas and wastelands	July to December	039
36	<i>Lagascea mollis</i> Cav.	ASTERACEAE	Herbs	Open areas and wastelands	Throughout year	061
37	<i>Lantana camara</i> L.	VERBENACEAE	Shrubs	Common in open forests and wastelands	Throughout year	011
38	<i>Lepidagathis cristata</i> Willd.	ACANTHACEAE	Herbs	Frequent in hill slopes	August to January	040
39	<i>Lepidagathis mitis</i> Dalzell	ACANTHACEAE	Herbs	Dry deciduous forests, open areas and wastelands	July to October	012

Sl. No.	Botanical Name	Family	Habit	Habitat	Flowering and Fruiting	Coll. No.
40	<i>Leucas aspera</i> (Willd) Link	LAMIACEAE	Herbs	Open areas and westlands	September to February	041
41	<i>Leucas martinicensis</i> (Jacq.) R.Br.	LAMIACEAE	Herbs	Dry deciduous forests and along roadsides	July to September	062
42	<i>Martynia annua</i> L.	MARTYNIACEAE	Herbs	Open areas and wastelands	June to December	013
43	<i>Mesophaerum suaveolens</i> (L.) Kuntze	LAMIACEAE	Herbs	Open areas and wastelands	June to December	042
44	<i>Mimosa hamata</i> Willd.	FABACEAE	Shrubs	Deciduous forests	July to October	063
45	<i>Parthenium hysterophorus</i> L.	ASTERACEAE	Herbs	Common in all habitats	Throughout year	014
46	<i>Pavonia zeylanica</i> (L.) Cav.	MALVACEAE	Herbs	Frequent in hill slopes	July to December	064
47	<i>Pergularia daemia</i> (Forssk.) Chiov	APOCYNACEAE	Climbers	Open areas and wastelands	June to March	043
48	<i>Peristrophe paniculata</i> (Forssk.) Brummit.	ACANTHACEAE	Herbs	Dry deciduous forests, open areas and wastelands	July to December	065
49	<i>Phyla nodiflora</i> (L.) Greene	VERBENACEAE	Herbs	Around dried water bodies	October to May	015
50	<i>Physalis minima</i> L.	SOLANACEAE	Herbs	Open areas and wastelands	September to December	044
51	<i>Priva cordifolia</i> (L.f.) Druce	VERBENACEAE	Herbs	Dry deciduous forests and along roadsides	July to December	066
52	<i>Rhynchosia minima</i> (L.) DC.	FABACEAE	Climbers	Grasslands and open areas	July to January	016
53	<i>Rostellularia procumbens</i> (L.) Nees	ACANTHACEAE	Herbs	Gravelly plains and wastelands	August to November	045
54	<i>Rotula aquatica</i> Lour.	BORAGINACEAE	Herbs	Rare and Frequent in hill slopes	May to September	017
55	<i>Sarcostemma acidum</i> (Roxb.) Voigt	APOCYNACEAE	Climbers	The valleys and sub tropical mountains	July to December	046
56	<i>Senna auriculata</i> (L.) Roxb.	FABACEAE	Shrubs	Deciduous forests and open	July to February	018

Sl. No.	Botanical Name	Family	Habit	Habitat	Flowering and Fruiting	Coll. No.
				areas		
57	<i>Senna siamea</i> (Lam.) H.S.Irwin & Barneby.	FABACEAE	Trees	Open forests and Wastelands	April to February	047
58	<i>Senna tora</i> (L.) Roxb.	FABACEAE	Herbs	Open areas and wastelands	July to April	067
59	<i>Senna uniflora</i> (Mill.) H.S.Irwin & Barneby	FABACEAE	Herbs	Open areas and cultivated field	August to December	019
60	<i>Solanum lycopersicum</i> L.	SOLANACEAE	Herbs	Open areas and cultivated field	June to December	048
61	<i>Solanum xanthocarpum</i> Schrad.	SOLANACEAE	Herbs	Grasslands and open areas	Throughout year	068
62	<i>Spermocoe articularis</i> L.f.	RUBIACEAE	Herbs	Open areas and seasonal grasslands	August to November	020
63	<i>Tephrosia purpurea</i> (L.) Pers.	FABACEAE	Herbs	Open areas and wastelands	July to December	049
64	<i>Thespesia populnea</i> (L.) Sol. ex. Corr.	MALVACEAE	Trees	Open areas and wastelands	Throughout year	021
65	<i>Tinospora cordifolia</i> (Willd.) Hook.f. & Thoms.	MENISPERMACEAE	Climbers	Open areas and deciduous forests	January to July	050
66	<i>Tribulus terrestris</i> L.	ZYGOPHYLLACEAE	Herbs	Open areas and wastelands	October to December	022
67	<i>Tridax procumbens</i> L.	ASTERACEAE	Herbs	Open areas and wastelands	Throughout year	069
68	<i>Triumfetta malabarica</i> Koen. ex Rottb.	MALVACEAE	Herbs	Frequent in hill slopes	July-January	023
69	<i>Wrightia tinctoria</i> R. Br.	APOCYNACEAE	Trees	Dry deciduous forests	February to November	051
70	<i>Xanthium strumarium</i> L.	ASTERACEAE	Shrubs	Open areas and wastelands	Throughout year	024

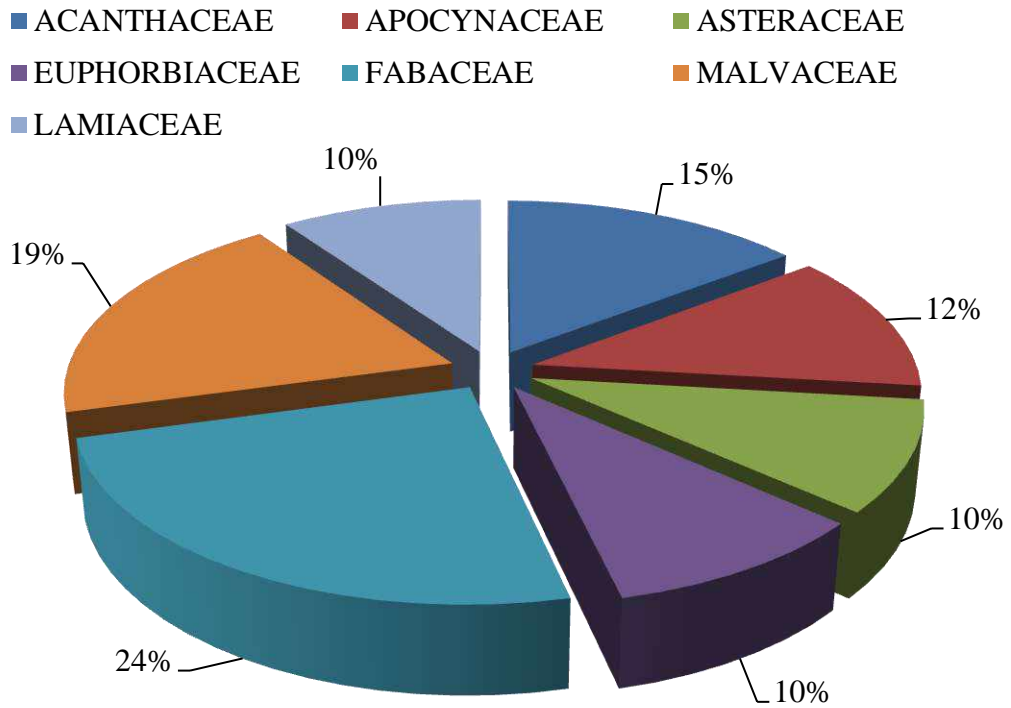


Figure 2. Family-wise distribution of species

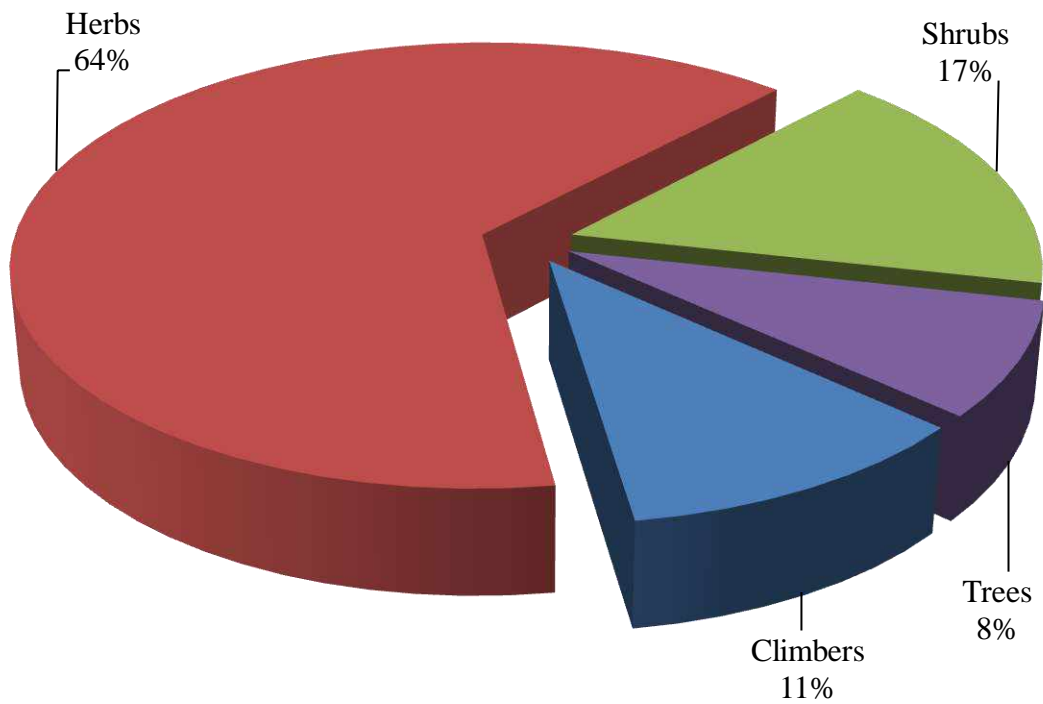


Figure 3. Habit-wise distribution of species

CHAPTER 6-

DISCUSSION AND CONCLUSION

In the present work a total of 70 taxa, belonging to 57 genera and 25 families of angiosperms have been collected and described from study area.

Out of 25 families, the first 7 dominant families constitute 41 species (57%), of these Fabaceae 10 spp. (14%) is the leading family followed by Malvaceae with 8 species (11%), Acanthaceae 6 spp. (8%), Apocynaceae 5 spp. (7%), Asteraceae 4 spp (6%), Euphorbiaceae 4 spp. (6%), Lamiaceae 4 spp. (6%), Convolvulaceae 3 spp. (4%), Rubiaceae 3 spp. (4%), (Figure 2).

Dominance of these families is due to their adaptability to the arid climatic condition. Most of these families have a large number of herbs (Kambhar and Kotresha, 2011). The remaining families are Solanaceae and Verbenaceae has 3 spp. each. Commelinaceae, Cucurbitaceae, has 2 spp. each. Borangiaceae and Capparaceae has 1 spp. each. Flinderniaceae, Hernandiaceae, Martyniaceae has 1 spp. each. Menispermaceae, Mimosaceae, Papaveraceae and Poaceae and Zygophyllaceae has 1 spp. each.

An analysis on the life form composition of plant species of the study area reveals that majority of the plant species are herbs predominate with 47 species (64%) followed by trees with 6 species (8%), climbers with 8 species (11%) and shrubs with 12 species (17%) (Figure 3). The herbs get physiological maturity soon and produce the progeny in a couple of months in comparison to trees and shrubs that need a longer time to mature. The greater tolerance to harsh conditions could result in the predominance of herbs (Kambhar and Kotresha, 2011, Kambhar, 2012).

The main component of being *Albizia amara* (Roxb.) Boiv., *Gyrocarpus americanus* Jacq., *Senna siamea* (Lam.) H.S.Irwin & Barneby. *Thespesia populnea* (L.) Sol. ex. Corr.

The shrubs occurring all over the area are *Calotropis gigantea* (L.) Dryand is dominantly spreading in the area , which is associated with the *Lantana camara* L. being found.

The climbers found within the area are quite distinct. Some of the common plants are *Abrus precatorius* L., *Rhynchosia minima* (L.) DC., and *Ipomoea parasitica* (Kunth) G. Don.

The common herbs occurring all over the area are *Aerva javanica* (Burm.f.) Juss, *Argemone mexicana* L., *Commelina diffusa* Burm.f. , *Phyla nodiflora* (L.) Greene, *Tribulus terrestris* L. Some frequently seen species are *Pavonia zeylanica* (L.) Cav. and *Lepidagathis cristata* Willd. The species like *Leucas martinicensis* (Jacq.) R.Br. *Jatropha glandulifera* Roxb. and *Justicia simplex* D. Don., are sporadically occur in the forest. In monsoon season the species *Commelina forskoolii* Vahl & *Lagascea mollis* Cav. Some rarely occurring herbs or climbers in the forest are *Ipomoea parasitica* (Kunth) G. Don., *Triumfetta malabarica* Koen. ex Rottb.

With reference to the present area, exploration was made for survey for the floral components of Raichur was very much limited. Around 158 plant species belonging to 39 families of Angiosperms, 04 species of Pteridophytes, 03 species of Bryophyte, were collected and recorded from the rocks and fort walls from Raichur fort Shrishail et al., (2020). The district comprises have scrubby vegetation throughout the area. Similarly, a 125 plant species belonging to 45 families both lower and higher plants were reported from forts of Hyderabad Karnataka region including Raichur (Shrishail et al., 2009). This was followed by plant species diversity in Kolanki hills of Raichur, Karnataka, India. A total 39 species and 38 genera belonging to different 26 families have been recorded. The study was indicated that number of plants was highest in the rainy season and lower in the summer season. Hill flora shows very

poor representation of monocotyledons. It was interestingly noted that the Fabaceae members are dominant followed by Acanthaceae, Convolvulaceae and Euphorbiaceae (Prashant Kumar, 2020).

Subsequently, another work was done on the plant species diversity in Mallikarjun Rocky hills of Raichur, Karnataka, India. The plant species diversity was mainly relevant to the change of climate of the area. The study investigated the status of plant species diversity in Mallikarjun rocky hills of Raichur. A total 41 species belonging to 41 genera and 29 families have been recorded. The Rocky hill flora shows very rich representation of dicotyledons (35) as compared to monocotyledons (06) (Prashant Kumar, 2020). With this background, it was observed that, there is no comprehensive record on the flowering plants of Jaladurg fort area and therefore, the present study is undertaken to know the regional diversity of the flora in the study area. This will serve as a database for regional students, especially for undergraduate students even postgraduate students, botanists, ecologists, foresters, and those who are interested in the flowering plants of the forest.

CHAPTER 7-

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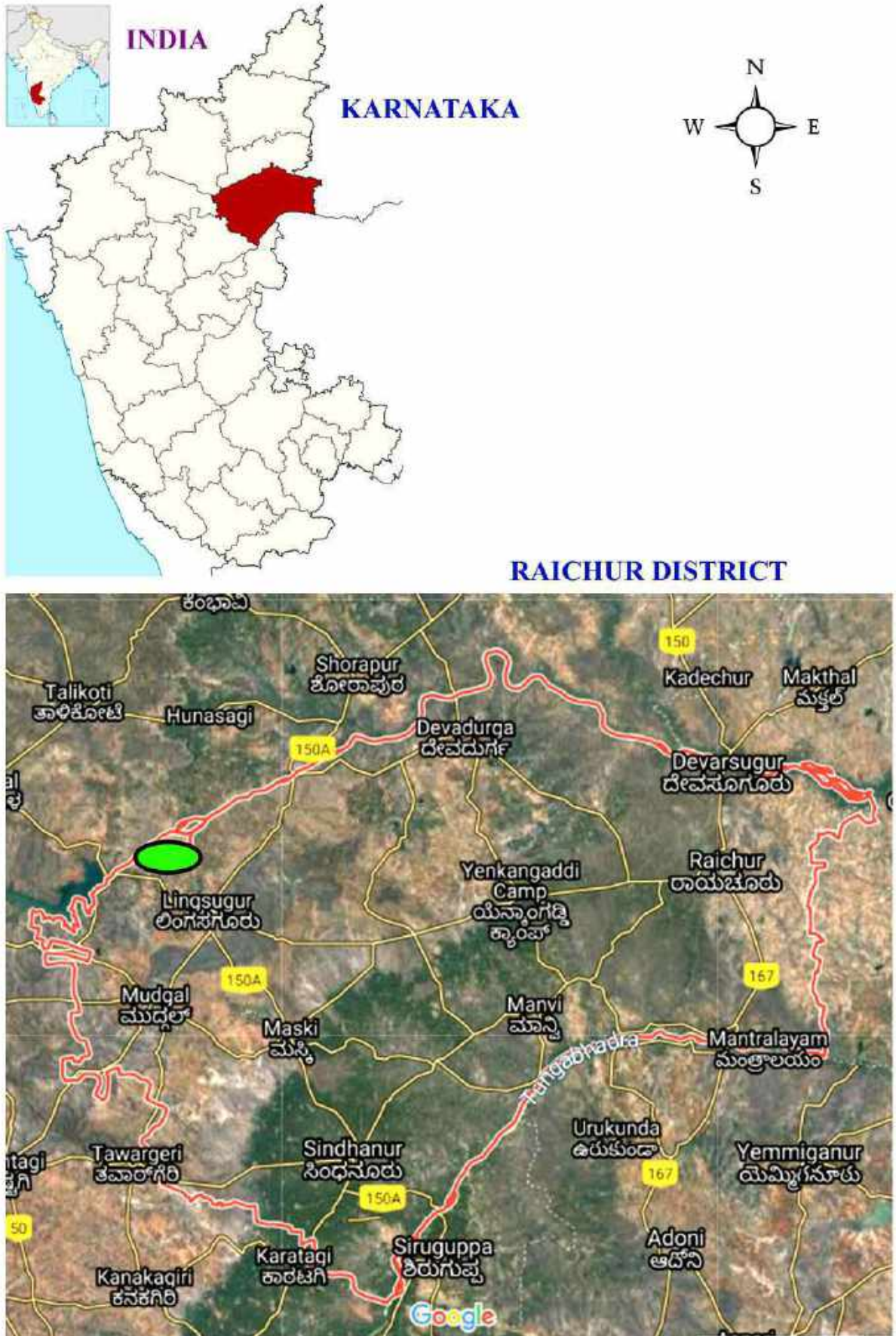


Figure 1. Location of Jaladurg fort, Lingasur, Raichur



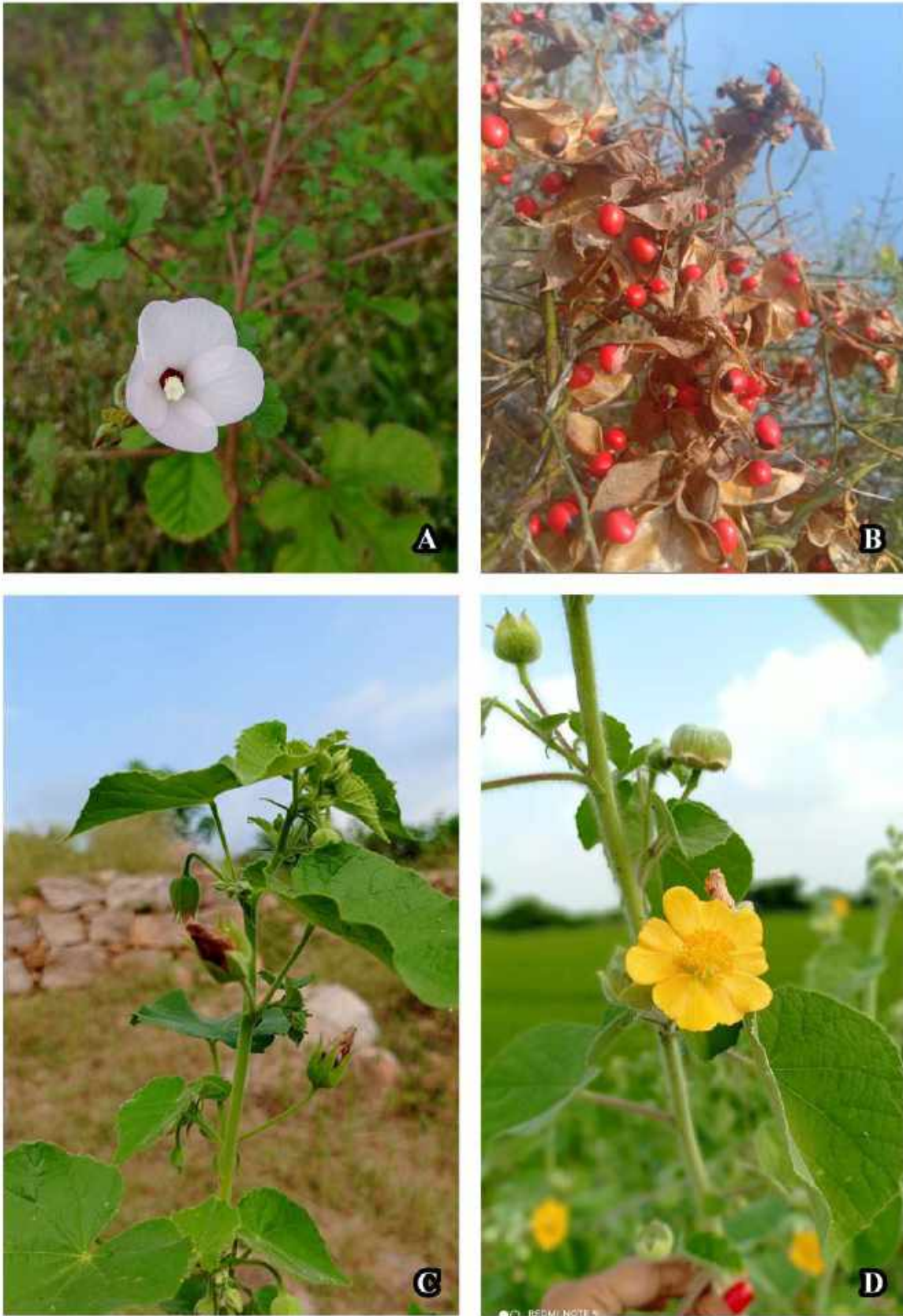
Panoramic view of River Krishna in Jaladurg Fort area



Panoramic view of Jaladurg Forest, Lingasur



Close view of River Krishna in Jaladurg Forest, Lingasur



Photoplate 1. A. *Abutilon ficulneus* (L.) Wt. & Arn., B. *Abrus precatorius* L., C. *Abutilon hirtum* (Lam.) Sweet, D. *Abutilon pannosum* (Forst. f.) Schlect.



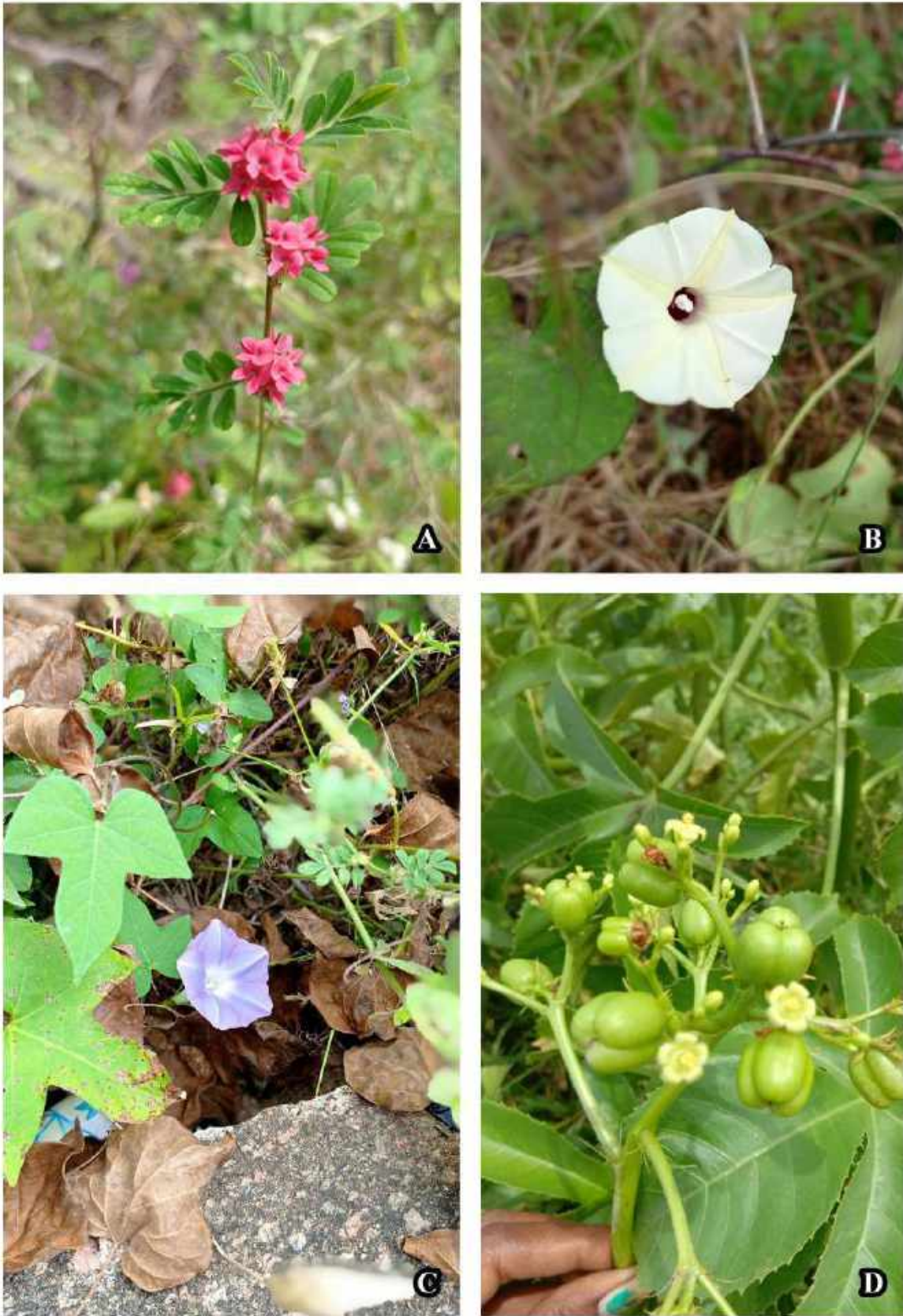
Photoplate 2. A. *Anisomeles malabarica* (L.) R.Br. ex Sims, B. *Argemone mexicana* L., C. *Barleria prionitis* L., D. *Catunaregam spinosa* (Thunb.) Tirveng.



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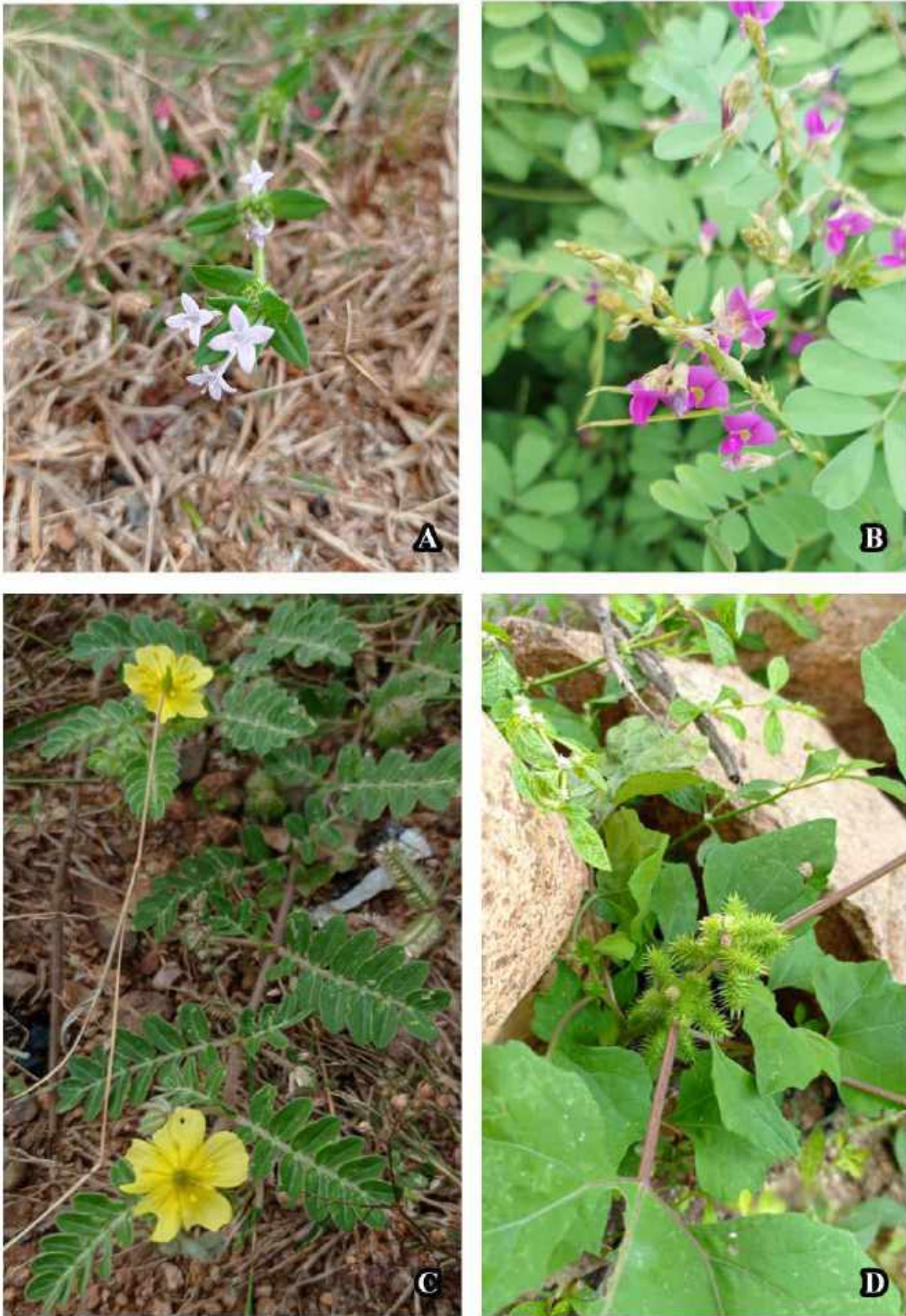
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A PROJECT REPORT ON
EFFECTS OF LEAF EXTRACTS OF *TAMARINDUS INDICA* L.
ON THE GROWTH OF CHICKPEAS



SUBMITTED TO

RANI CHANNAMMA UNIVERSITY, BELAGAVI

FOR PARTIAL FULFILMENT OF THE AWARD OF THE DEGREE OF

MASTER OF SCIENCE

IN

BOTANY

SUBMITTED BY

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UNDER THE GUIDANCE OF

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2021

RANI CHANNAMMA UNIVERSITY
BELAGAVI



CERTIFICATE

This is to certify that, this project entitled "EFFECTS OF LEAF EXTRACTS OF *TAMARINDUS INDICA* L. ON THE GROWTH OF CHICKPEAS" is being submitted here with for the partial fulfilment of award of the Degree of Master of Science in Botany, Rani Channamma University, Belagavi. The work reported here is based upon the results of the original work carried out by Miss. Gayatri Avvanni and Miss A. Priyanka under my supervision and guidance.

Place: Chikkodi

Date: 25/09/2021

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Dr. Veerabhadra Swamy A.L.

Supervisor



Co-Ordinator

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Valand
25-9-21

A.L.S.

25.9.2021

DECLARATION

We hereby declare that this project work entitled "**EFFECTS OF LEAF EXTRACTS OF *TAMARINDUS INDICA* L. ON THE GROWTH OF CHICKPEAS**" completed and written by us have not previously formed. This report is based on the results carried out by us.

Place: Chikkodi

Date: 25/09/22

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Reg. No: BT191401

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Miss. Gayatri Avvanni

Miss. A. Priyanka

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INTRODUCTION

Introduction:

Pulses play an important role in Indian agriculture for sustainable production, improvement in soil health and environmental safety. India is the largest producer and also consumers of pulses in the world and found that it is a cheaper source of protein to overcome malnutrition among human beings. Pulses contain a high percentage of quality protein nearly three times as much as cereals (Umadevi and Ganesan, 2007). Chickpea, *Cicer arietinum* L., is a member of the legume, pea or pulse family, “Fabaceae” also called Leguminosae, this family of flowering plants is one of the largest plant families and includes such important plants as beans, peas, peanuts, lupines, alfalfa, clover, and acacia, and many others.

Taxonomic Hierarchy of *Cicer arietinum* L.

Kingdom:	Plantae
Subkingdom:	Viridiplantae
Infrakingdom:	Streptophyta
Superdivision:	Embryophyta
Division:	Tracheophyta
Subdivision:	Spermatophytina
Class:	Magnoliopsida
Superorder:	Rosanae
Order:	Fabales
Family:	Fabaceae
Genus:	<i>Cicer</i> L.
Species:	<i>Cicer arietinum</i> L.

(Source:

https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=26537#null)

The chickpea is considered the third most important pulse in the world, being widely grown in many subtropical and warm-temperate regions. It is widely cultivated for its typically yellow-brown, pea like seeds. The name also is used for these edible seeds, which

form in short pods and are popular in various cuisines. The light brown coloured pulse is considered to be a good source of protein. About 90% of chickpea in the world is grown under rain-fed conditions where drought is one the major constraints limiting its production. Drought affects various morphological and physiological processes, resulting in reduced growth, development and economic yield of crop. Water stress has prominent effects on leaf number, total leaf area and secondary branches causing an invariable reduction under rain-fed conditions (Basu *et. al.*, 2007). The major characters affecting crop grain yield are number of pods and seeds per plant which reduce under drought stress (Davies *et. al.*, 2000). Several studies have shown that optimum yield can be obtained by irrigation at branching, flowering and pod formation stages (Prihar and Sandhu, 1968).

The reactions of plants to water stress vary depending upon the intensity and duration of stress as well as plant species and its stage of growth. Stress during vegetative phase reduce grain yield through reducing plant size, restricting leaf area, dry matter accumulation and limiting number of pods (Sadasivan *et. al.*, 1988). However, water deficits at the flowering and the post flowering stages have been found to have a greater adverse impact than at the vegetative stage (Cortes and Suidaria, 1986).

Tamarindus indica L., or tamarind, as it is commonly known is a medium sized tree belonging to the caesalpinceae family. It is well known that different climatic ground and growing conditions can modify quantities and qualitatively the chemical compositions of the plants. Leaves posses good levels of proteins, fat, fiber and some vitamins such as thiamine, riboflavin, niacin, ascorbic acid and β - carotene, flavonoid and other polyphenols are found in Tamarind leaves. These compounds have a proven record as antimicrobial agents in many other plants (Escalona-Arranz *et. al.*, 2010).

The allelopathic potential of the *Tamarindus indica* L. leaf was investigated through bioassay guided studies using several weed and edible crop species. Both radical and

hypocotyl growth of all the plant species tested was strongly inhibited by the tamarind leaf. The growth of weed species was reduced more than that of edible crop species. Different concentrations of tamarind leaf crude water-soluble extract exhibited a strong inhibition in all the plant species tested. The 10% concentration of the tamarind leaf crude water-soluble extract was most potent against the growth of seedlings. The inhibitory magnitude increased with an increase in the concentration of the tamarind leaf. In terms of growth inhibition, among these tested plants, weed species, particularly barnyard grasses were most sensitive to the allelochemicals exuded from blended tamarind leaves. Results clearly indicate that the tamarind leaf contains one or more strong biologically active allelochemical(s) that function as true growth regulator(s) and is involved in plant growth regulation, particularly in weed species (Parvez *et. al.*, 2003).

Taxonomic Hierarchy of *Tamarindus indica* L.

Kingdom: Plantae
Subkingdom: Viridiplantae
Infrakingdom: Streptophyta
Superdivision: Embryophyta
Division: Tracheophyta
Subdivision: Spermatophytina
Class: Magnoliopsida
Superorder: Rosanae
Order: Fabales
Family: Fabaceae
Genus: Tamarindus L.
Species: *Tamarindus indica* L.

(Source:

https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=26980#null)

Based on the above observation the present work effects of the leaf extract on chickpeas were carried out by conducting pot experiments under the greenhouse condition with the following objectives.

Objectives:

1. Literature survey was carried out to find out the status of research progress on effects of leaf extracts in the growth attributes of plants.
2. Evaluate the effects of *Tamarindus indica* leaf extract on chickpeas by conducting a pot experiment.
3. Comparative study of analysis of different leaf extracts effects on the growth of different plant species (Literature study).

REVIEW OF LITERATURE

Review of Literature:

The chickpea is the second most important pulse crop grown in Rabi season mainly under rain-fed condition. Along with pigeonpea, it is the main source of dietary protein for the majority of Indians. Chickpea remarkably predominates among other pulse crops in terms of both area and production (Patil *et. al.*, 2012). In 2017-18, chickpea was cultivated in about 106 L ha. The country harvested a record production of > 111 Lt at the ever highest productivity level of 1056 kg/ha. An MP has contributed a significant 34 % of the total gram area and 41% of total gram production in the country, thereby ranking first both in area and production. Maharashtra (18%) and Rajasthan (13%) were the next in terms of area (Department of Agriculture, Cooperation & Farmers Welfare, 2018).

Reducing the amount of using chemicals in agriculture is of great importance in the production of different crops. This reduction could be achieved by different techniques such as using bio-fertilizers by introducing recent biological and ecological methods. Allelopathy, is one of these used techniques (El-Khawas and Shehata, 2005; Zhang and Fu, 2009). Allelopathy is the phenomenon of inhibition or stimulation by chemicals released by one plant/microorganism on the growth and seed germination of other plant (Farooq *et. al.*, 2011). Some plants release chemical compounds into their environment, from their different parts, and these compounds are often referred to as allelochemicals. These are secondary metabolites secreted in very low amounts by plants, but have a very important role as plant defense against microorganisms or other abiotic factors (Reigosa *it. al.*, 2006). Many studies have been conducted to understand how the allelochemicals of some plants can inhibit the germination of other plants growing in the same area (Patil, 1994).

Chemicals that inhibited the growth of some species at certain concentrations can stimulate the growth of the same or different species at lower concentrations. Hence, it is expected that due to the perceived ambiguous nature of allelopathy, the phenomenon is

sometimes hesitantly accepted or even refuted, as an important factor in crop production. *T. indica* is also high in carbohydrate, which provides energy, rich in the minerals, potassium, phosphorus, calcium and magnesium *T. indica* can also provide smaller amounts of iron and vitamin A (Samina *et. al.*, 2008). The tamarind leaves' composition of dry crude leaf matter to subject to heavy metals and NPK. Results indicated the presence of seven heavy metals (Zn, Cu, Ni, Mn, Fe, Ca, and Mg) and N.P.K. compounds for this part of the plant (Gomathinayagam *et. al.*, 2017). Qualitative estimation of phytochemicals in leaves of *T. Indica* shows that Alkaloids, Flavonoids, Tannins, Aminoacids, Carbohydrates, Phenols, Triterpenoids, Saponins, Resins and Phytosterols are present, whereas Thiols, Glycosides, Fixed oils, fats, Steroids, Phlobatannins and Anthroquinone phytochemicals are absent (Gomathinayagam *et. al.*, 2017)

An experiment was conducted at Andalas University area to evaluate the efficacy of plant extracts on the growth and yield of maize. Results showed that application of 100 mg/L crude extract of *Gleicheni linearis* leaves was the most effective in increasing plant height and leaf area, compared to control (Nailul *et. al.*, 2018). Different parts of lantana weed have various allelochemicals such as; carbohydrates, flavonoids and tannins. Such chemicals or compounds enhance or reduce growth and yield of different crops (Khanna and Kannabiran, 2007). Aqueous plant extracts of *Malva parviflora* L. and *Artemisia ludia* L. were tested in the field on cowpea (*Vigna unguiculata*) plants. Data obtained revealed that the growth, yield and protein content of cowpea were stimulated by 10 % aqueous extract of *M. parviflora* and the mixture of 10 % *Malva* with 20 % *Artemisia*. The data also showed that the soil fertility was improved (Gamal *et. al.*, 2013). Foliar application of 2 % Moringa and Brassica water extracts at 15 days interval has the capacity to give 10 % more Canola yield and that too in a cheap and economical way. Some of the researchers reported yield advantages following application of seaweed products (and its extracts) in field crops (Russo

and Berlyn 1991, Rathore *et. al.*, 2009, Selvam and Sivakumar 2014). This particular product under investigation – WIN (Shree) Crops™- is claimed to contain extracts from 97 seaweed species. Following its spray, the crop develops stronger and healthier root system, thick and lush green foliage with greater photosynthesis and better soil nutrient acquisition (Ummed *et. al.*, 2017).

A field experiment was conducted during the rainy (kharif) season in Indian in 2006 to study the effects of foliar applications of different concentrations of seaweed extract on nutrient uptake, growth and yield of soybean (*Glycine max*) grown under rain-fed conditions without the application of chemical fertilizers. The foliar spray was applied twice at seven concentrations (0; 2.5; 5; 7.5; 10; 12.5 and 15% v/v) of seaweed extract (Rathore *et. al.*, 2009). The aqueous extracts of *Albizia lebbek* leaf caused both stimulatory and inhibitory effect on germination, root and shoot elongation and development of lateral roots of receptor plants (Hossain, *et. al.*, 2003).

The aqueous leaf extracts of *A. fruticosa*, *H. mongolicum*, and *S. vulgaris* at low concentrations (T1 and T2) showed significant promotional effects on seed germination and seedling growth indicators for *Amygdalus pedunculata* (Xiuqing *et. al.*, 2018). The effect of aloe leaf extract (ALE) at 0.0, 10, 20 and 40 ml/L on vegetative growth, yield, essential oil percentage and leaf anatomical structure of sage plants (*Salvia officinalis* L.) under sandy soil condition. Aloe leaf extract (ALE) especially at the highest concentration (40 ml/L) significantly increased the plant height, number of leaves, number of branches and essential oil percentage (Soha *et. al.*, 2016).

Similarly, Field performance of Moringa extracts at the rate of 5 ml, 10 ml, 15 ml, 20 ml, 25 ml and 30 ml was assessed on the growth and yield of cucumber. The results showed that there were significant differences among the treatment in the parameters assessed with treatment 25 ml having the superior effect of cucumber. Hence, this study recommends that

Moringa extract should be applied as foliar application and could be recommended to farmers for improved yield and production of Cucumber (Yusuff and Abiola, 2019).

So, the antioxidant and antimicrobial activity of *T. indica* leaves have been reported worldwide. The present study was an attempt to assess the potentiality of using the aqueous leaf extract of Tamarindus plant to induce a primitive effect on the growth Chickpea plant. A positive result obtained in this work will enable poor farmers to improve Chickpea growth rate without much of inorganic fertilizer, and boosts its nutritional value, generating income.

MATERIALS AND METHODS

Materials and Methods:**Literature survey:**

To find the exact status of the research progression literature survey and field survey were carried out to gather the information. An online resource was used for the selection of both plant species (*Tamarindus* and Chickpea) and other detailed information about the work.

Study location:

The present experiment was conducted at Chikodi, Belgavi districts located in Karnataka state. Chikodi Taluk enjoys semi-arid climate. The area falls under Northern transitional agro-climatic zone of Karnataka state. The normal annual rainfall in Chikodi Taluk is 716 mm. Agriculture is the main occupation in Chikodi Taluk. Major Kharif crops are Maize, Bajra, Jowar, Tur and Vegetables. The main crops of Rabi season are Maize, Bajra, Jowar and Sunflower. Water intensive crops like sugarcane and paddy are grown on 36% of total crop area. The soils of Chikodi Taluk can broadly be classified into Black cotton soils and Red soils (Central Ground Water Board, 2021).

Preparation of soil for pot experiment:

The Chickpea seeds for this study were obtained from local markets in Chikodi. The soil for this experiment was collected in KLE Basavaprabhu Kore Arts, Science and Commerce College premises and subjected to preliminary analysis like pH analysis, nutrient content NPK, electrical conductivity and organic carbon, etc. The pH of the soil is estimated using a pH meter and the soil should be treated with organic manures in a known quantity before 30 days of seed sowing.

Collection of plant and preparation of leaf extracts:

The plant was collected by conducting field visits. Plant parts (leaves) were collected during the autumn (October 2020) in Chikodi and the plant material was dried under shade at room temperature (30°C) for 2 weeks and ground into powder form. The aqueous leaf (powder)

extracts of *Tamarindus indica* were used to prepare stock solutions (10% w/v) by dissolving 100 g of powder in 1000 ml of distilled water for 48 h at room temperature. The solution was then filtered through Whatman No 1. filter paper, and the extract diluted to obtain concentrations of 5, 10, 15 and 20% and stored below 4°C in a refrigerator until further use.

Experimental design:

The experiment was laid out in a randomised block design and growth parameter was measured. The plant shoots with highest and lowest treatments and controls were analysed. The effect of each treatment on germination of chickpea plants was analyzed in greenhouse conditions. For the present work plastic pots of 10 cm diameter was used and for each pot five seeds were shown. For each treatment five pots were maintained, while, the control, use four pots. Each pot was filled with 600 gm of organic fertilized treated soil. Regular weeding was done around the base by hand picking, the plants were watered every 5-6 days once and hand sprayers were used to spray the extract. During the germination period of seeds, the following observations were recorded.

1. No. of days required for the germination of seeds.
2. Conditions of the plant in each pot (observation for disease attack).
3. No. of seeds germinated.
4. No. of primordial leaves are produce.
5. Branch length and number of branches.
6. Number of leaf and its measurements,
7. Flower (inflorescences) and fruit numbers will be counted.

Leaf extract will be applied weekly on chickpea leaves. All plants were placed randomly on the greenhouse and were moved every week at the time of spraying. Fertilizer were mixed thoroughly in required quantity (know quantity) and placed in the soil at 3-5 cm deep.

The experimental setup as follows,

T₀ = Chickpea plant without treatment (control),

T₁ = Chickpea plant sprayed with 5 % of extracts,

T₂ = Chickpea plant sprayed with 10 % extracts,

T₃ = Chickpea plant sprayed with 15 % extracts,

T₄ = Chickpea plant sprayed with 20 % extracts,

T₅ = Chickpea plant sprayed with 25 % extracts.

Spray test: Spray test were carried out from the April to the middle of May 2021 in a 28 °C climate-controlled greenhouse facility in college premises. During that period, the mean day : night temperatures in the climate-regulated greenhouse were $20 \pm 2:20 \pm 2^{\circ}\text{C}$. The light:dark ratio was $16 \pm 1:8 \pm 1$ h, the relative humidity was $30 \pm 10:40 \pm 10\%$. The cultivars used were annigeri chickpea variety. Controls were sprayed with demineralized water in a weekly basis.

Plant protection: Plant protection was carried out throughout the duration of plant life because there was a problem with either pests or diseases in the experiments.

Comparative study:

Literature analysis was conducted to find the significance or disadvantage of application of leaf extracts in different plant species.

RESULTS AND DISCUSSION

Results and Discussion:

To find out the exact status of research progression related to leaf extract effects on plant growth literature survey and field survey was carried out. An online resource was used for the selection of both plant species (*Tamarindus* and Chickpea) used in the present study and gather other information about the work related. Based on the survey, it is confirmed that the very less significant work has been done previously on the effects of the leaf extract in plant growth, especially on *Tamarindus* and Chickpea.

The present experiment was conducted at Chikodi, Belgavi districts located in Karnataka state. The geographical features illustrated in Table 1 below.

Geographical Extent (Ha)	Forest area (Ha)	Irrigatable area (Ha)	Non Irrigable area (Ha)	Latitude	Logitude
126900	547	114095	12258	16.429251	74.587769

Table 1: Geographical details of study area - Chikodi.

All the necessary materials prepared and maintained before conducting the experiments like preparation of pot, collection of seeds, leaf extract preparation, etc. as mentioned in the methodology. The Chickpea seeds for this study were obtained from local markets in Chikodi. The soil for this experiment was collected in KLE Basavaprabhu Kore Arts, Science and Commerce College premises. Each pot was filled with 600 gm of soil and soil pH is 7. Two seeds of chickpeas were planted per pot. Later, thinned into one plant per stand after one week of emergence regular weeding was done around the base by hand picking. The aqueous extraction of leaf of *Tamarindus indica* was done with a mortar and pestle. The extract was diluted with distilled water at a ratio of 1000 ml (v/v) to obtain concentrations of 5, 10, 15 and 20% and stored below 4 °C in a refrigerator until further use. The extract was used within 5 hours from cutting and extracting.

Treatments	Plant height (cm)	No. of branches/plant	Root length (cm)	Shoot length (cm)	No. of leaves
T₀	36.2	4	12.4	31.8	34
T₁	36	4	12.5	29.5	32
T₂	37.8	5	13.8	33.1	37
T₃	37.1	5	14.2	33.9	37
T₄	38	5	14.5	34.3	39
T₅	38.8	5	14.8	35.4	39

Table 2: Effects of leaf extracts of *T. indica* on the growth attributes of Chickpea.

[Note: T₀ = Without treatment (control), T₁ = Sprayed with 5 % extracts, T₂ = Sprayed with 10 % extracts, T₃ = Sprayed with 15 % extracts, T₄ = Sprayed with 20 % extracts and T₅ = Sprayed with 25 % extracts.]



Fig. 1: Seed sowing on the month of April 2021.



Fig. 2: After 2-3 days of seed sowing



Fig. 3: After 5-7 days of seed sowing



Fig. 4: During second week of seed sowing



Fig. 5: Third and fourth week after seed sowing



Fig. 6: After two to three months of seed sowing

The plant shoots with highest and lowest treatments and controls were analyzed. The effect of each treatment on germination of chickpea plants was analyzed in greenhouse conditions. The obtained data were illustrated in the table – 2. Leaf extract will be applied weekly on chickpea leaves. All plants were placed randomly on the greenhouse and were moved every week at the time of spraying. Fig 1 to Fig 6 shows the different stages of plant growth at the time of leaf extract application.

In table 2, different attributes of plant growth like plant height, number of branches per plant, number of leaves, shoot length and root length were listed. The data clearly shows that, the control plant (T₀) and 5 % leaf extract ((T₁) were produce almost similar effects i.e., very less effects recorded in this treatment (Plant height – 36 and 36.2 cm, Number of branches - 4 and 4, Root length - 12.5 and 12.4 cm, Shoot length - 29.5 and 31.8 cm and Number of leaves are 32 and 34 respectively) but leaf extract treated plant growth reduce. Meanwhile, treatment 2 with 10 % (T₂) and treatment 3 with 15 % leaf extract (T₃) produce almost similar effects (Plant height – 37.8 and 37.1 cm, Number of branches - 5 and 5, Root length - 13.8 and 14.2 cm, Shoot length - 33.1 and 33.9 cm and Number of leaves are 37 and 37 respectively). Similarly, in the next treatments (T₄) and (T₅), at the rate of 20 and 25 % of leaf extract concentration, recoded that the plant height are 38 and 38.8 cm, Number of branches are 5 and 5, Root length is 14.5 and 14.8 cm, Shoot length is 34.3 and 35.4 cm and Number of leaves are 39 and 39 respectively.

Overall, it revealed that, *T. indica* treatments show some significant changes in the growth rate of Chickpea. It is confirmed that in the given data. The growth rates were always increased from treatments to treatments. It indicates that the leaf extracts of *T. indica* is producing some positive growth effects on Chickpea.

Plant height – 36 and 36 .2cm << 37.8 and 37.1 cm << 38 and 38.8 cm,

Number of branches - 4 and 4 << 5 and 5 << 5 and 5,

Root length - 12.5 and 12.4 cm << 13.8 and 14.2 cm << 14.5 and 14.8 cm,

Shoot length - 29.5 and 31.8 cm << 33.1 and 33.9 cm << 34.3 and 35.4 cm and

Number of leaves are 32 and 34 << 37 and 37 << 39 and 39

Similar kind of work carried out by Gamal *et. al.*, in 2013. They find out that the effects of aqueous extract of *Artemisia ludia* L. and *Malva parviflora* L. on growth, yield and protein content of cowpea and soil fertility (Gamal *et.al.*, 2013). Data obtained revealed that the growth, yield and protein content of cowpea were stimulated by 10% aqueous extract of *M. parviflora*. A concentration gradient of active substances in leaf extracts had an important effect on plant growth (Einhellig, 1986; Timmerman, 2003; An *et al.*, 2015; Sitthinoi *et al.*, 2017). Boosting production by applying natural products derived from readily available plant sources to increase vegetative growth of plants could help ensure food sovereignty and security. The application of red grape skin extract and alfalfa hydrolysate to pepper plants resulted in increased leaf biomass and weight of green peppers while increasing the growth and number of red peppers (Ertani *et al.*, 2015).

Treating maize (*Zea mays* L.) with an extract derived from red grape skin (*Vitis vinifera* L., blueberry fruit (*Vaccinium vitis-ideae* L.) and hawthorn leaves (*Crataegus monogina* Jacq.) resulted in increased root and leaf biomass, chlorophyll and sugar content (Ertani *et al.*, 2016). The application of *Moringa oleifera* leaf extract increased growth and yield of tomato (Culver *et al.*, 2012), maize and common beans (Mvumi *et al.*, 2012), some growth parameters and photosynthesis rate of rocket (*Eruca vesicaria* subsp. *sativa*) (Abdalla, 2014).

Aqueous extract of arjun tree leaves (*Terminalia arjuna*) increased germination and growth of turnip and okra. Treatment of aqueous extract of *T. belerica* increased germination and growth of spinach, while aqueous extract of neem (*Azadiracta indica*) inhibited a percentage of germination (Talukder *et al.*, 2015). Extracts from fresh *Moringa* leaves could

be used to produce an effective plant growth promoter increasing yield by 25 -30% in many crops (Price, 2007).

Based on the data obtained above by comparative analysis were carried out and concluded that the leaf extract of *T. indica* was significant to the growth attributes of Chickpea.

In table 3, Fig.7, illustrated that percentage calculation of effects of leaf extracts of *T. indica* on the growth of Chickpea compared to control. The data show that, compare to control percentage plant height is very high in treatment 5 (T₅) with 107.1 %, followed by treatment 4 (T₄), 2 (T₂) and 3 (T₃) with 104.9 %, 104.4 % and 102.4 % respectively. It shows that there is a significant increase in plant height compared with control. While, in root length, highest rate of growth in T₅ with 119.3 %, followed by T₄ with 116.9 %, T₃ with 114.5 % and T₂ with 111.2 % were recorded. Similarly, related to shoot length, highest shoot length observed in T₅ with 111.3 %, followed by T₄ with 107.8 %, T₃ with 106.6 % and T₂ with 104.0 %. Due to some external physical factors in treatment 1 observe less value than control in plant height (99.4 %) and shoot length (92.7 %). There is a possibility of some factors in disease triangle were altered during the growth of the Chickpea.

Treatments	Plant height (cm)	Root length (cm)	Shoot length (cm)	% increase in plant height	% increase in root length	% increase in shoot length
T ₀	36.2	12.4	31.8	-	-	-
T ₁	36	12.5	29.5	99.44751	100.8065	92.7673
T ₂	37.8	13.8	33.1	104.4199	111.2903	104.0881
T ₃	37.1	14.2	33.9	102.4862	114.5161	106.6038
T ₄	38	14.5	34.3	104.9724	116.9355	107.8616
T ₅	38.8	14.8	35.4	107.1823	119.3548	111.3208

Table 3: Percentage calculation of effects of leaf extracts of *T. indica* on the growth attributes of Chickpea.

[Note: T₀ = Without treatment (control), T₁ = Sprayed with 5 % extracts, T₂ = Sprayed with 10 % extracts, T₃ = Sprayed with 15 % extracts, T₄ = Sprayed with 20 % extracts and T₅ = Sprayed with 25 % extracts.]

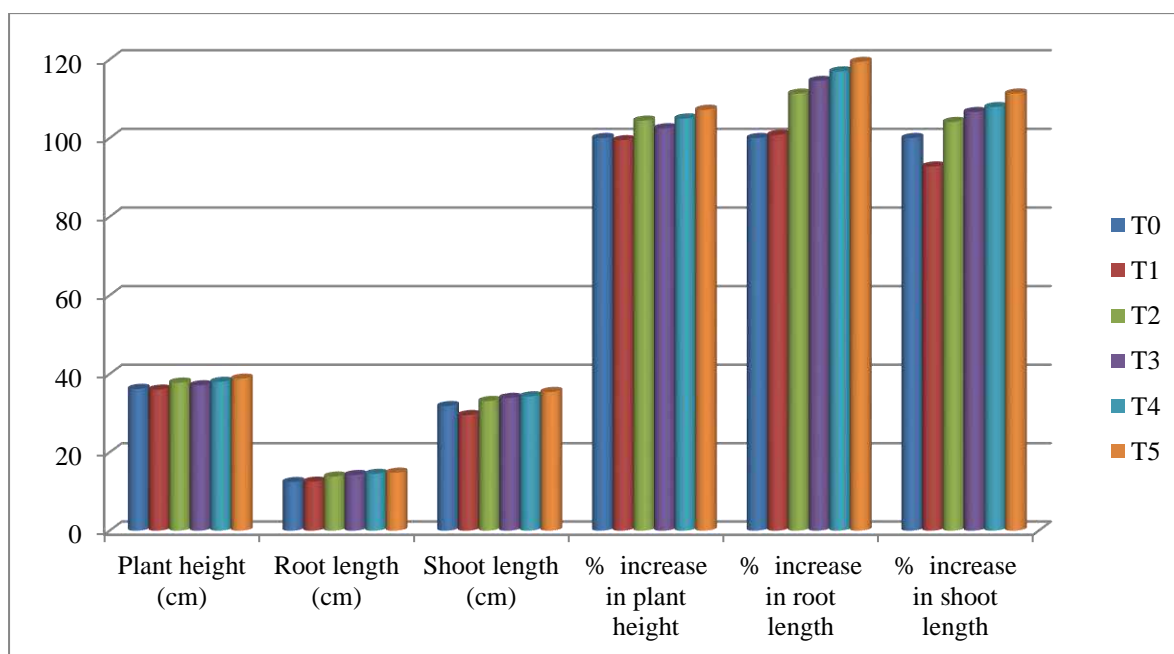


Fig 7: Graphical illustration of percentage effects in the growth of Chickpea by applying *T. indica* leaf extracts.

SUMMARY

Summary:

Many studies have shown that allelochemicals affect the activities of enzymes, malondialdehyde, chlorophyll and root activity in plants, and these physiological and biochemical indicators were important indicators of plant growth. The results of present work showed that low and high concentration crude extract of *T. indica* (5, 10, 15, 20 and 25 %) significantly increased growth of Chickpea plants. In treatment 5 the height of the plant was 38.8 cm is higher than the control (36.2 cm). Further investigations need to be conducted to determine the effect of other factors like physical and chemical factors on the growth of Chickpea. This will help in the search for an eco-friendly, commercially viable and cost effective way to improve Chickpea production in a context. Therefore, be recommended to use eco-friendly *T. indica* juice to increase crop growth rather than using expensive chemical fertilizers. So, the findings of the current study clearly showed the positive role of external treatment of aqueous leaf extract of Tamarindus with 25 % concentration is more effective on the increasing growth of Chickpea plant.

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IN

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SUBMITTED BY

MISS. ASHWINI SABALE

MISS. DHANASHREE HASURE

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2021



RANI CHANNAMMA UNIVERSITY BELAGAVI



C E R T I F I C A T E

This is to certify that; this project entitled “**Proximate Composition and Germination Study of *Vigna indica* (FABACEAE)**” is being submitted here with for the partial fulfillment of award of the Degree of Master of Science in Botany, Rani Channamma University, Belagavi. The work reported in this report is based upon the results of the original work carried out by **Miss. Ashwini Sabale, Miss. Dhanashree Hasure** under my supervision and guidance.

Place: Chikodi

Dr. Kambhar S.V.

Date:

Dr. Rahul R. Patil

Research Supervisor

Co-ordinator

Post Graduate of Department Botany

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DECLARATION

We hereby declare that this project work entitled “**Proximate Composition and Germination Study of *Vigna indica* (FABACEAE)**” completed and written by us has not previously formed. This report is based on the results carried out by us.

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We would like to mention sincere thanks to my friends, Miss Aasha bagawale, Miss Sneha Kamble for their constant help.

We extend our thanks to all our family members for providing support and putting up with us for all this time. We owe our special thanks to non-teaching staff Mr. Shivanand Patil, Mr. Venkatesh Kamble and Mr. Vinod G. from the Department of Botany whose direct or indirect co-operation during the entire course was valuable.

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Miss. Dhanashree Hasure

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CHAPTER 1

INTRODUCTION

1.1 Family Fabaceae- *sensu lato*

The Leguminosae, commonly called the bean or pea family, is currently divided into three subfamilies (Caesalpinioideae, Mimosoideae and Papilionoideae), further subdivided into 35 tribes which together comprise 751 genera containing a total of ca. 19,500 species (LPWG, 2013a). The Leguminosae is second only to the grass family in economic value, but has significantly greater habit, flower and fruit diversity. Legumes are ubiquitous throughout the main biomes and occur in nearly all vegetation types globally. Published phylogenies of legumes at the supra-generic level have been accumulating at an ever increasing rate since the beginning of the century. An international legume systematics community is now working towards producing a comprehensive phylogenetic estimate and revised classification for all Leguminosae (LPWG, 2013b; Wojciechowski, 2013).

The legume family being so important ecologically and economically, it should be no surprise that it has been a special focus of taxonomists since the time of De Candolle, (1825) and Bentham, (1865). In a landmark effort to compile the voluminous quantity of legume taxonomic work from Bentham's time onward to the early 1980s, Roger Polhill (Kew), Peter Raven (Missouri) and collaborators organized the first International Legume Conference at the Royal Botanic Gardens, Kew in 1978, and subsequently published the conference proceedings as *Advances in Legume Systematics* (Polhill and Raven, 1981). The original two volumes of *Advances in Legume Systematics* set in motion a seemingly exponential increase in interest in legume systematics that has reached to numerous publications, many of which are in the *Advances in Legume Systematics* series (eleven volumes published since 1981 to 2003). Recently, *Legumes of the World* is being developed as an online web resource for information about legume genera that can complement link to the success of the

online International Legume Database and Information Service (Bisby, 1993). This has led to the formation of the Legume Phylogeny Working Group (LPWG), which aims to develop collaborative research towards a comprehensive phylogeny and classification for Leguminosae.

1.2 Genus *Vigna*

Vigna, originally published by Savi in 1824 was named after Dominaco *Vigna*, Professor of Botany at Pisa (Baudoin and Marechal, 1988). The genus *Vigna* consists of approximately 104 species which are distributed throughout the world. (Lewis *et al.*, 2005). Initially the genus *Vigna* was divided into seven subgenera, *Ceratotropis* (Piper) Verdc., *Haydonia* (Wilczek) Verdc., *Lasiosporon* (Benth.) Verdc., *Macrorhyncha* Verdc., *Plectotropis* (Schum.) Baker, *Sigmoidotropis* (Piper) Verdc. and *Vigna* Savi (Verdcourt, 1970; Marechal *et al.*, 1978). Now the genus comprises five subgenera as subgenus *Macrorhyncha* Verdc. has been transferred to genus *Wajira* (Thulin *et al.*, 2004) and subgenus *Sigmoidotropis* (Piper) Verdc. is considered as genus *Sigmoidotropis* (Piper) A. Delgado (Delgado-Salinas *et al.*, 2011). The subgenus *Ceratotropis* has centre of species diversity in Asia. India, with 24 species of genus *Vigna* (Sanjappa, 1992), represents centre of diversity for the subgenus *Ceratotropis* (Arora, 1985; Babu *et al.*, 1985; Bisht *et al.*, 2005). Recently, *V. trilobata* (L.) Verdc. var. *pusilla* Naik and Pokle has been raised to the rank of species *V. indica* by Dixit *et al.*, (2011). One new species, *V. sahyadriana* and one new combination, *V. silvestris* from varietal status *V. mungo* var. *silvestris* were recognized by Aitawade *et al.*, (2012) and in another report, Latha *et al.*,(2014) has described a new species *V. konkanensis* from west coast of India.

1.3 Taxonomy of Asiatic *Vigna*

Twining or erect herbs, rarely subshrubs. Leaves pinnately 3-foliolate; stipules peltate or basally spurred, 2-3 lobed, cordate, or truncate. Racemes axillary or terminal, nodes of rachis often thickened and glandular. Bracts and bracteoles deciduous. Calyx 5-toothed, 2-lipped. Corolla yellow or purple; standard suborbicular, base appendaged; wings shorter than standard; keel subequal to wings, incurved, not beaked or produced into an incurved. Stamens diadelphous; anthers uniform. Ovary sessile; style filiform, upper part thickened, bearded or hirsute lengthwise inside; stigma oblique. Legumes linear or linear-oblong, terete or flat. Seeds reniform or subquadrate; hilum short or elongate, with or without aril.

1.4 Morphology of *Vigna indica* Dixit et.al.

Herbs, trailing or twining, 15–100 cm. high. Leaves pinnately 3–foliolate or deeply 3–lobed, lobes 1.5–3.0 x 1.2– 2.5 cm, ovate, subacute or retuse at apex. Flowers yellow, 5–10 in dense, terminal clusters. Pods 1.5–2.0 cm long, hairy. Seeds 5–10, brown, granulate, truncate at both ends.

1.5 Taxonomic note

Vigna indica can easily be distinguished from all other species of section Aconitifoliae by its cylindrical to subtetragonous seeds with truncate ends. It is allied to *V. aridicola* from which it differs in having smaller flowers; buff to light brown pods; ovate, non-protruding hilum and petiolate seedling leaves. *Vigna aridicola* is endemic to Sri Lanka. Among the species of section Aconitifoliae reported from India, *V. indica* is more closely related to *V. aconitifolia* from which it differs in having narrowly to broadly spatulate lobes of leaflets and ovate hilum. *Vigna indica*

is also similar to *V. trilobata* and *V. stipulacea* from which it differs in having smaller, pale yellow flowers with flattened, deltoid keel pocket; obscure style beak; non-protruding hilum and obscure aril lacking a rim. *Vigna khandalensis*, a robust species of higher altitudes with an erect habit and large foliaceous stipules is very distinct from all other species of the section Aconitifoliae mentioned above. Hence, a comparison of selected characters is made to distinguish closely related species of section Aconitifoliae excluding *V. khandalensis*.

1.6 Distributions

The plants of Rajasthan population are usually larger than those from Karnataka and Maharashtra. Variations mostly in the size and lobation of leaflets, pubescence, length of pod and number of seeds were observed in these geographical populations which do not deserve any infraspecific status. Distribution of *V. trilobata* and *V. indica* does not overlap to a greater extent. Most of the collections of *V. trilobata* are from southern and eastern India while those of *V. indica* are from western, central and northern parts of India.

CHAPTER 2

REVIEW OF LITERATURE

2.1 Family Fabaceae- *sensu lato*

Family Leguminosae, the second-largest angiosperm family with ca. 751 genera and ca. 19,500 species (Lewis *et al.*, 2005; LPWG, 2013a) has a global distribution and high ecological and economic importance. The family represents spectacular morphological and life history diversity, from giant rain forest trees and woody lianas, to desert shrubs, ephemeral herbs, herbaceous twining climbers and aquatic species (Lewis *et al.*, 2005). The Leguminosae is usually divided into three subfamilies, but there are those who continue to recognize three separate families (Steyermark *et al.*, 2001; Cullen *et al.*, 2011) despite this view being widely regarded as untenable (Lewis and Schrire, 2003; Lewis *et al.*, 2005). The subfamily Caesalpinioideae includes approximately 2250 species under 171 genera (Lewis *et al.*, 2005). Mimosoideae is the second-largest legume subfamily with ca. 3271 species (Lewis *et al.*, 2005) and reflects high species-richness in several of its 83 genera. Papilionoideae is the largest legume subfamily with 13,800 species across 28 tribes within 478 genera (Lewis *et al.*, 2005). The subfamily Papilionoideae includes tribe Phaseoleae with 1500 species across 84 genera.

2.2 Genus *Vigna*

The pantropical genus *Vigna* Savi consists of approximately 104 species which are distributed throughout the world (Lewis *et al.*, 2005). *Vigna* potentially comprises disparate New and Old World groups (Marechal *et al.*, 1978; Lackey, 1981, 1983). New World *Vigna* were more closely related to other New World genera of Phaseolinae (*Phaseolus*) than to the Old World *Vigna*. Regardless, Maréchal, (1978) comprehensive circumscription of *Vigna*, which was derived from a morphometric analysis of the *Phaseolus-Vigna* complex (Mréchal *et al.*, 1978) and a seminal

taxonomic study of *Vigna* (Verdcourt, 1970) has remained intact. Initially the genus *Vigna* was divided into seven subgenera, viz. *Ceratotropis* (Piper) Verdc., *Haydonia* (Wilczek) Verdc., *Lasiosporon* (Benth.) Verdc., *Macrorhyncha* Verdc., *Plectotropis* (Schum.) Baker, *Sigmoidotropis* (Piper) Verdc. and *Vigna* Savi (Verdcourt, 1970; Marechal *et al.*, 1978). Now the genus comprises five subgenera as subgenus *Macrorhyncha* Verdc. is transferred to genus *Wajira* (Thulin *et al.*, 2004) and subgenus *Sigmoidotropis* (Piper) Verdc. is considered as genus *Sigmoidotropis* (Piper) A. Delgado (Delgado-Salinas *et al.*, 2011).

2.3 Subgenus *Ceratotropis* (Asiatic *Vigna*)

The section *Aconitifoliae* has small flowered species and distributed in tropical areas, while section *Angulare* has large flowered species of high altitude and high rainfall locations, and section *Ceratotropis* have intermediate floral morphology and ecological adaptation (Tomooka *et al.*, 2002a). The sectional classification of subgenus *Ceratotropis* has been confirmed by several workers (Jaaska and Jaaska, 1990; Kaga *et al.*, 1996; Tomooka *et al.*, 2002a and 2002b; Konarev *et al.*, 2002 and Doi *et al.*, 2002 and Saini *et al.*, 2008).

India, with 24 species of *Vigna*, represents centre of species diversity for all the three sections of subgenus *Ceratotropis* (Sanjappa, 1992; Bisht *et al.*, 2005). More recently, *V. trilobata* (L.) Verdc. var. *pusilla* Naik and Pokle is raised to the rank of species as *V. indica* T. M. Dixit, K. V. Bhat and S. R. Yadav by Dixit *et al.*, (2011). *Vigna indica* can easily be distinguished from all other species of section *Aconitifoliae* by its cylindrical to sub-tetragonous seeds with truncate ends. Among the species of section *Aconitifoliae* reported from India, *V. indica* is more closely related to *V. aconitifolia* from which it differs in having narrowly to broadly spathulate lobes of

leaflets and ovate hilum. It is also similar to *V. trilobata* and *V. stipulacea* from which it differs in having smaller, pale yellow flowers with flattened, deltoid keel pocket; obscure style beak; non-protruding hilum and aril lacking a rim.

2.4 Crossability studies and species Hybridization

Interspecific hybridization plays an important role for transferring the desirable traits from one species to another, increasing genetic variation clarifying the taxonomic relationship by testing several interspecific combinations investigating natural selection and speciation process, being a prominent tool for theoretical and empirical studies in evolutionary biology and recently being used to construct genetic linkage map (Kaga *et al.*, 2000).

However, crossing barriers occurred which were the result of incongruity. Sexual barriers preventing interspecific hybridization have been distinguished into pre- and post- fertilization barriers (Van Tuyl and De Jeu, 1997). Pre-fertilization barrier on the stigma surface which arrests pollen germination or pollen tube entry into the stigma is one of the frequent barriers particularly in pollination with distantly related species (Barone *et al.*, 1992). To overcome pre-fertilization barriers, a range of techniques such as bud pollination, stump pollination, use of mentor pollen and grafting of the style have been applied successfully (Van Tuyl and De Jeu, 1997). The Interspecific hybridization among several cultivated species of *Vigna* has been attempted earlier by several workers in the past two decades.

A comprehensive crossing programme involving 250 crosses was attempted between different species of wild and cultivated *Vigna* species by Audi Laxmi and Chandel, (1990). In this study, the cross between *V. radiata* × *V. sublobata* was successful while reciprocal cross did not succeed. The cross between *V. radiata* × *V.*

silvestris did not produce seeds while the cross between *V. sublobata* × *V. silvestris*. produced sterile hybrids. The interspecific crosses between *V. sublobata* and *V. trilobata* which suggest that gene exchange can occur between these two wild species in the nature and *V. trilobata* together with *V. sublobata* and *V. radiate* constitute the secondary gene pool.

Therefore, in the present study the species of *Vigna indica* Dixit *et al.*, belonging subgenus *Ceratotropis* comes under section *Aconitifoliae* was recorded from Chikodi, Belagavi District, Karnataka. Previously, This *Vigna* species was placed under *V. trilobata* (L.) Verdc., as its variety (var. *pusilla*) by Naik and Pokle reported from Marathawada, Maharashtra. The same taxon has been raised to the rank of species by Dixit *et al.* This species is widely distributed in semiarid zone of Rajasthan, Gujarat, Madhya Pradesh and Maharashtra only. The present collection of this species found new distribution record for Karnataka state (Kambhar *et al.*, 2020). Therefore, the present wild collection of this species may be helpful to understand the issue of parental identification of cultivated *Vigna* species and which may be helpful to establish a new cultivated variety of *Vigna* through breeding programmes. Hence, the present work is undertaken for the following objectives.

1. To analyse the proximate composition of *Vigna indica*
2. Karyotype analysis of *V. indica*
3. Seed germination study of *V. indica*

CHAPTER 3

METHODOLOGY

3.1. Species identification

During regular floristic exploration surveys in the campus and its surroundings, a species of *Vigna* Savi was observed with good population in the B.K. College Campus as well as at foothills of Chikodi. After critical examination and reference to relevant taxonomic literature, it was identified as *Vigna indica* Dixit et al., (Dixit *et al.*, 2011) see Figure 1. The collected specimens were processed and deposited in the Herbarium, Post Graduate Department of Botany, KLE Society's, Basavaprabhu Kore Art's, Science and Commerce College, Chikodi, Belagavi, Karnataka.

3.2 Seed Sample Preparation

Seed samples were collected in one kilogram plastic bags. Similarly all the seeds were shifted from dirt and malformed kernels and stored at room temperature. One-third of the seeds were ground in the grinder and then further ground to fine particles by chopper in the laboratory for chemical analysis. Some of the seeds were kept for germination process.

3.3 Proximate Composition

Seeds of *Vigna* were analyzed for crude fat, ash and moisture by standard methods of AOAC.

Moisture Contents.

Moisture was determined by oven drying method. 1 g of each sample was accurately weighed in a Petri dish. The partially covered Petri dish was placed in an

oven at 105°C for 6 hours. After cooling the Petri dish in the desiccators for 30minutes, it was reweighed. The percent moisture was calculated as

$$\text{Moisture content (\%)} = \text{Weight loss on drying} \times 100 / \text{weight of sample}$$

Crude Fats

Crude fat was determined by ether extract method using Soxhlet apparatus. 1 g of each moisture sample was wrapped in filter paper, placed in thimble, and then introduced into extraction tube. Receiving flasks were filled up to 1/3 with hexane and fitted into apparatus. After complete extraction, the hexane from the receiving flasks was evaporated on water bath, the ether extract was dried in an electric oven, and the flasks were reweighted. The percent crude fat was determined by using the following formula:

$$\% \text{Crude Fat} = \text{Weight of ether extract} \times 100 / \text{weight of sample}$$

Ash content

The ash content was determined by heating 2g of the dried sample in a silica dish at 600°C for 6hr (AOAC, 2005). The ash content was determined by using formula:

$$\% \text{of ash} = \text{Weight of ash} / \text{Initial weight of sample} \times 100$$

Crude fibre

Extract 4gm of ground material with ether to remove fat (initial boiling temperature 35-38°C & Final temperature 52°C). Boil 2gm of dried material with 200ml of Sulphuric acid for 30 minutes with bumping chips. Filter through muslin & wash with boiling water until washings are no longer acidic. Boil with 200ml of sodium hydroxide solution for 30min. Filter through muslin cloth again & wash with 25ml of boiling 1.25% Sulphuric acid, three 50ml portions of water & 25ml alcohol. Remove the residue and transfer to ashing dish (pre-weighted dish W_1). Dry the residue for 2 h at $130 \pm 2^\circ\text{C}$. Cool the dish in a desiccator & weigh (W_2). Ignite for 30min at $600 \pm 15^\circ\text{C}$. Cool in a desiccator & reweigh (W_3). The crude fibre was determined by using formula:

$$\% \text{ Crude fibre} = (w_2 - W_1) - (W_3 - W_1) / 4 \times 100$$

Lipid content

Homogenize the sample 20g with 60ml of distilled water, 40 ml of chloroform and 80 ml of ethanol at the speed of 9500 rpm for 1 minute at 4°C. Add 40 ml of chloroform and homogenize for 30 seconds, add 40 ml of distilled water and homogenize for 30 seconds. After centrifugation of the homogenate at 2000 rpm at 4°C for 20 minutes. Transfers the supernatant into a reparatory funnel and allow to separate determine lipid content gravimetrically by measuring triplicate quotes of the chloroform layer into tared containers, evaporate the solvent and weight. Calculate the lipid content. The lipid content was determined by using formula;

% Lipid content= weight of the empty crucible – weight of the sample after drying/ weight of the sample

3.4 Karyotype Analysis

Mitosis was studied from root tips of germinated seeds. Root tips of 6–10 mm length were pretreated with saturated solution of para-dichlorobenzene for 3–4 h at $9 \pm 3^{\circ}\text{C}$ and then squashed in 2% propionic orcein. For meiotic studies, smears of developing anthers from appropriately sized flower buds were made after fixing in Carnoy's fluid (3:1ethanol and acetic acid) for 3 h using propionic orcein. Suitable mitotic and meiotic plates from freshly prepared slides were photographed with a Binocular Olympus microscope with attached camera at $1000 \times$ magnification.

Ten well-separated somatic chromosome plates were selected for karyotype analysis for each species. Chromosomes were classified according to Levan et al. (1964). Ideograms were constructed using the software Ideokar 1.2 (Mirzaghaderia and Marzangib 2015). The degree of karyotype asymmetry has been determined using intrachromosomal (A1) and interchromosomal (A2) indices (Romero Zarco 1986) and the categories of Stebbins (1971).

3.5 Methods of germination

Method 1 - Boiling water treatment

Dip the seeds in boiling water (100°C) for 5 – 10 minutes or pour boiling water on the seeds and allow them to remain in the water until it cools at room temperature.

Method 2 – Pit method

The plastic trays are filled with $\frac{3}{4}$ of coco peat, spraying some amount of water. Each pit contains one seed and it will keep for eight days with routing sprinkling of water (Figure 2a).

Method 3 – Acid treatment

Vigna indica seeds are soaking in concentrated sulphuric acid solution. It is the more effective method than boiling water. The scarification techniques require a supply of commercial grade sulphuric acid (98%).

Method 4 – Petri plate method

Wetted blotting paper is placed in a petri plates. In each petri plate contains ten seeds and it has kept for germination (Figure 2b).

3.6 Germination Percentage

Germination percentage is an estimate of the viability of population of seeds.

The equation to calculate germination percentage is:

$$\text{Germination percentage} = \frac{\text{Germinated seeds}}{\text{Total Seeds} \times 100}$$

The germination rate provides a measure of the time course of seed germination.

CHAPTER 4

RESULTS AND DISCUSSIONS

Moisture Contents*Observation:*

Weight of the empty crucible = 20.82

Weight of the sample = 1 gm

Weight of the crucible + Weight of the sample = 21.82 gm

Weight of the empty crucible + Weight of the sample after drying = 21.73

Calculation:

Moisture content = $21.82 - 21.73 = 0.09$

1 gm of sample content = 0.09 gm

100 gm of sample content = $0.09/1 \times 100$

Percentage of moisture content = 9%

Crude Fats*Observation:*

Weight of the empty crucible = 74.35

Weight of the extract = 100 ml

Calculation;

Weight of the crucible with extract = $74.76 - 74.35$

= 0.41%

% of crude fat = $\text{Weight of crucible with extract} \times 100 / \text{Weight of the extract}$

= $0.41 \times 100 / 100$

= 0.41%

Ash content

The ash content was determined by heating 2g of the dried sample in a silica dish at 600°C for 6hr (AOAC, 2005). The ash content was determined by using formula

Observation:

Weight of empty crucible = 30.35gm

Weight of sample = 1gm

Weight of crucible with sample =31.35gm

Weight of crucible with ash =30.38gm

Calculation:

Weight of ash = Weight of crucible with ash – Weight of empty crucible

$$= 30.38-30.35$$

$$= 0.03\text{gm}$$

Percentage of ash = Weight of ash/Initial weight of sample *100

$$= 0.03/1 \times 100$$

$$= 3\%$$

Crude fibre**Observation:**

Weight of the sample: 4g

Weight of the empty crucible: 69.19

Weight of the empty crucible + weight of the sample after drying = 69.19+1.86=71.05

Weight of the empty crucible + reweight of sample =70.79

Calculation:

$$\begin{aligned}
 \% \text{ of crude fibre} &= (w_2 - W_1) - (W_3 - W_1) / 4 \times 100 \\
 &= (71.05 - 69.19) - (70.79 - 69.19) / 4 \times 100 \\
 &= (1.8 - 1.6) / 4 \times 100 \\
 &= 0.26 / 4 \times 100 \\
 &= 6.5 \%
 \end{aligned}$$

Lipid content

Observation:

Weight of the empty crucible: 74.54

Weight of the empty crucible + weight of the sample after drying= 74.4

Calculation:

$$\begin{aligned}
 \% \text{ Lipid content} &= \text{weight of the empty crucible} - \text{weight of the sample after drying} / \\
 &\text{weight of the sample} \\
 &= 74.54 - 74.4 / 10 \\
 &= 1.4\%
 \end{aligned}$$

4.2 Germination percentage:-

1. Boiling Water treatment -

$$\text{Germination percentage} = \text{Seed Germinated} / \text{Total Seed} \times 100$$

Result: In this method there are no germinated seeds are found.

2. Pit Method –

$$\begin{aligned}\text{Germination percentage} &= \text{Seed Germinated} / \text{Total Seed} \times 100 \\ &= 1 / 10 \times 100 \\ &= 10\%\end{aligned}$$

Result: In this method the germination rate will be 10%.

3. Acid Treatment –

$$\begin{aligned}\text{Germination percentage} &= \text{Seed Germinated} / \text{Total Seed} \times 100 \\ &= 2 / 10 \times 100 \\ &= 20\%\end{aligned}$$

Result: In this method germination rate will be 20%.

4. Petriplate Method –

$$\begin{aligned}\text{Germination percentage} &= \text{Seed Germinated} / \text{Total Seed} \times 100 \\ &= 8/10 \times 100 \\ &= 80\%\end{aligned}$$

Result: In this method the germination rate is 80%.

4.3 Discussions

Vigna indica can easily be distinguished from all other species of section Aconitifoliae by its cylindrical to subtetragonous seeds with truncate ends. It is allied to *V. aridicola* from which it differs in having smaller flowers; buff to light brown pods; ovate, non-protruding hilum and petiolate seedling leaves. *Vigna aridicola* is endemic to Sri Lanka.

Among the species of section Aconitifoliae reported from India, *V. indica* is more closely related to *V. aconitifolia* from which it differs in having narrowly to broadly spatulate lobes of leaflets and ovate hilum. *Vigna indica* is also similar to *V. trilobata* and *V. stipulacea* from which it differs in having smaller, pale yellow flowers with flattened, deltoid keel pocket; obscure style beak; non-protruding hilum and obscure aril lacking a rim. *Vigna khandalensis*, a robust species of higher altitudes with an erect habit and large foliaceous stipules is very distinct from all other species of the section Aconitifoliae mentioned above. Hence, a comparison of selected characters is made to distinguish closely related species of section Aconitifoliae excluding *V. khandalensis*.

Proximate analysis of food is of great importance in that it accounts for the food quality and it is usually the basis for the establishment of nutritional quality of food and its acceptability by consumers (Shaheen *et al.*, 2012). The species of *V. aconitifolia* is more closely related to *Vigna indica*. The proximate composition has been compared with earlier results published by Soris and Mohan (2011). It is indicated that, *V. indica* has greater moisture content (9%) than *V. aconitifolia* which is nearly 4.8%. Similarly, the percentage of ash content has 3% in *V. indica* and 4.34% in *V. aconitifolia* from Tamil Nadu. Likewise, Opara *et al.* (2017) investigated the proximate analysis vitamins, minerals and anti-nutrients compositions of

unprocessed of *V. aconitifolia* from Nigeria and they were reported the Moisture content (12.87 ± 0.03), Crude protein (14.06 ± 0.01), Crude fibre (0.33 ± 0.01), Crude fat (3.52 ± 0.00) and ash (2.81 ± 0.00). The moisture content of the investigated *Vigna aconitifolia* compares with the value (11.25 ± 0.11) reported by Kala and Mohan (2010).

Very recently in 2019, eleven *V. aconitifolia* varieties including both pre-released and released varieties were analyzed for proximate composition and antioxidant activity from Regional Agricultural Research Station, Vijayapur (Badami *et al.*, 2019). Further, it was concluded that, among the studied eleven varieties, RMB-141 was having highest protein content (26.08 g/100 g) and KBMB-1 was having highest crude fiber content (5.16 g/100 g). In the antioxidant and polyphenol content, RMB-408 was found to be highest (13.44 percent and 2.79 mgGAE /g respectively). Therefore, the variation in the proximate composition between the varieties could be from location, varietal differences, soil and agroclimatic condition. Hence the present work was an attempt to develop the data apart from the proximate composition, such as vitamin analysis, mineral analysis, antinutrient analysis and antioxidant activity.

CHAPTER 5

CONCLUSION

India is one of the major country who domesticated several pulses. Legumes which are mainly the edible dry seeds are one of the major classes of seeds that play an important role in human nutrition. They contain 25% protein thereby serving as substitute for meat. Information on the chemical composition of these potential protein sources and their possible utilization as human food is inadequate. However, some of these species are actually consumed by several human groups.

Evaluation of nutritional and anti-nutritional compositions of the seed of *Vigna aconitifolia* has been done enormously, which is very close associate with *V. indica*. Hence the current investigation is initiated with their proximate analysis with few parameters such as moisture content shows 9%, ash content with 3%, crude fat with 0.4%, lipid content with 1.4% and Crude fibre 6.5 %. The seedling growth performances of *V. indica* were responded in petri plate method 80% of seed germination. It is indicating that, the moisture is utmost requirement for the seed germination. There are several other parameters which have not been completed (including karyotype analysis) due to COVID-19 situation in the State.

Therefore, it is recommended that to investigate the relationships between regional cultivated *Vigna* species and wild species of *V. indica* with respect their nutritional value and anti-nutritional value from the raw/unprocessed seeds. So that, such kind of assessment which may helpful in raising a new drought resistant variety to fulfill the needs of the farmers as well as society through the suitable breeding program, in particularly interspecific hybridization.

CHAPTER 6

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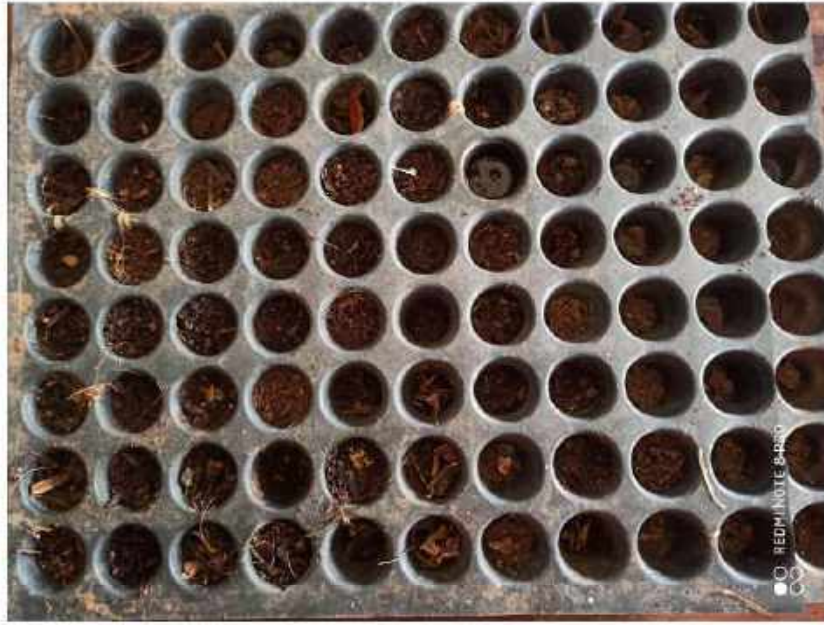


Figure 2. a. Pit method for seed germination, b. Petri plate method for seed germination.



**K.L.E. Society's
Basavaprabhu Kore Arts, Science and Commerce College,
Chikodi – 591 201.**

(Accredited at 'A' with 3.26 CGPA in 3rd Cycle of A & A)

Department of Chemistry

A PROJECT REPORT
ON
“Chocolate Analysis”

Submitted by

1. Shekhar S Sanadi
2. Sammed V Jugale
3. Santhosh R Kumbar
4. Sagar B Bhavi
5. Prajwal S Mule
6. Akshay A Kesti

Project Supervisor

Mrs.G B Jambagi



K.L.E. Society's
Basavaprabhu Kore Arts, Science and Commerce College,
Chikodi – 591 201.

(Accredited at 'A' with 3.26 CGPA in 3rd Cycle of A & A)

CERTIFICATE


Date: 19-04-2021

This is to certify that the B.Sc. VI semester students, Department of Chemistry of K.L.E S' Basavaprabhu Kore Arts, Science and Commerce College Chikodi, have successfully completed the project work titled "**Chocolate Analysis**" during the year 2020-2021.

Name of the students

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2. Sammed V Jugale
3. Santhosh R Kumbargar
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We express our profound gratitude and sincere thanks to our beloved teacher and project supervisor **Smt G. B. Jambagi**, Chemistry Department, KLE Society's Basavaprabhu Kore Arts, Science and Commerce College Chikodi. It gives us a great pleasure to acknowledge the dedicated efforts, sustained interests, affection and all kinds of encouragement that we have received from him, throughout our project work.

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We specially want to thank our dear colleagues for team work, valuable discussion and cooperation.

We thank all the non-teaching staff for their help during our project work.

We owe our special gratitude to **parents**, whose blessings sacrifices and moral support made this endeavour of our reality.

Finally, we thank all those who helped us directly or indirectly to complete this work.

Date: 19-04-2021

1. Shekhar S Sanadi
2. Sammed V Jugale
3. Santhosh R Kumbargar
4. Sagar B Bhavi
5. Prajwal S Mule
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Introduction:

Chocolate is one of the most popular food types and flavors in the world, and many food steps involving chocolate exist, particularly desserts, including cakes, pudding, , chocolate brownies and chocolate chip cookies. Many candies are filled with or coated with sweetened chocolate.

Chocolate is a highly commercialized and money making program. Chocolates are made from the seeds of COCOA trees. Spanish mythology consider these trees were grown in the garden of the PARADISE and believed that chocolate drink was divine. The cocoa tree is tropical plant, sometimes living and producing for more than 200 years. There are many varieties cultivated today and this farming is highly profitable.

Chocolates can be categorized into one of the following group.

1. Bitter
2. Bitter sweets
3. Unsweetened
4. Dark sweetened
5. Milk chocolates
6. Cocoa powder
7. Cocoa sauce/syrup.

Apparatus Required: Test tubes, water bath, iron stand, glass rod, watch glass, test tube holder etc .

Milky bar, dark chocolate, Cadbury bar Chocolate etc.

Chemicals required:

1. Sodium Hydroxide(NaOH)
2. Copper sulphate(CuSO₄)
3. Moliscli's reagent(C₁₀H₇OH)
4. Fehling's solution
5. Sulphuric acid(H₂SO₄)
6. Tollen's reagent
7. Ammonium chloride(NH₄Cl)
8. Ammonium hydroxide (NH₄OH)
9. Sodium Phospate(Na₃PO₄) etc.

Aim:

To find out the presence of

- Proteins
- Sugars
- Calcium
- Iron
- Magnesium
- Nickel

Procedure:

Organic tests and inorganic tests done to for identification of Protein, sugar and also tests for identification of calcium, magnesium, iron and nickel.

TEST FOR PROTEIN			
	EXPERIMENT	OBSERVATION	INFERENCE
1	5 ml of each sample if chocolate taken in different test tube. Add 1 pellet of NaOH to each Add 1 to 2 drops of copper sulphate solution to each.	Appearance of violet coloration	Presence of PROTEIN in the sample.

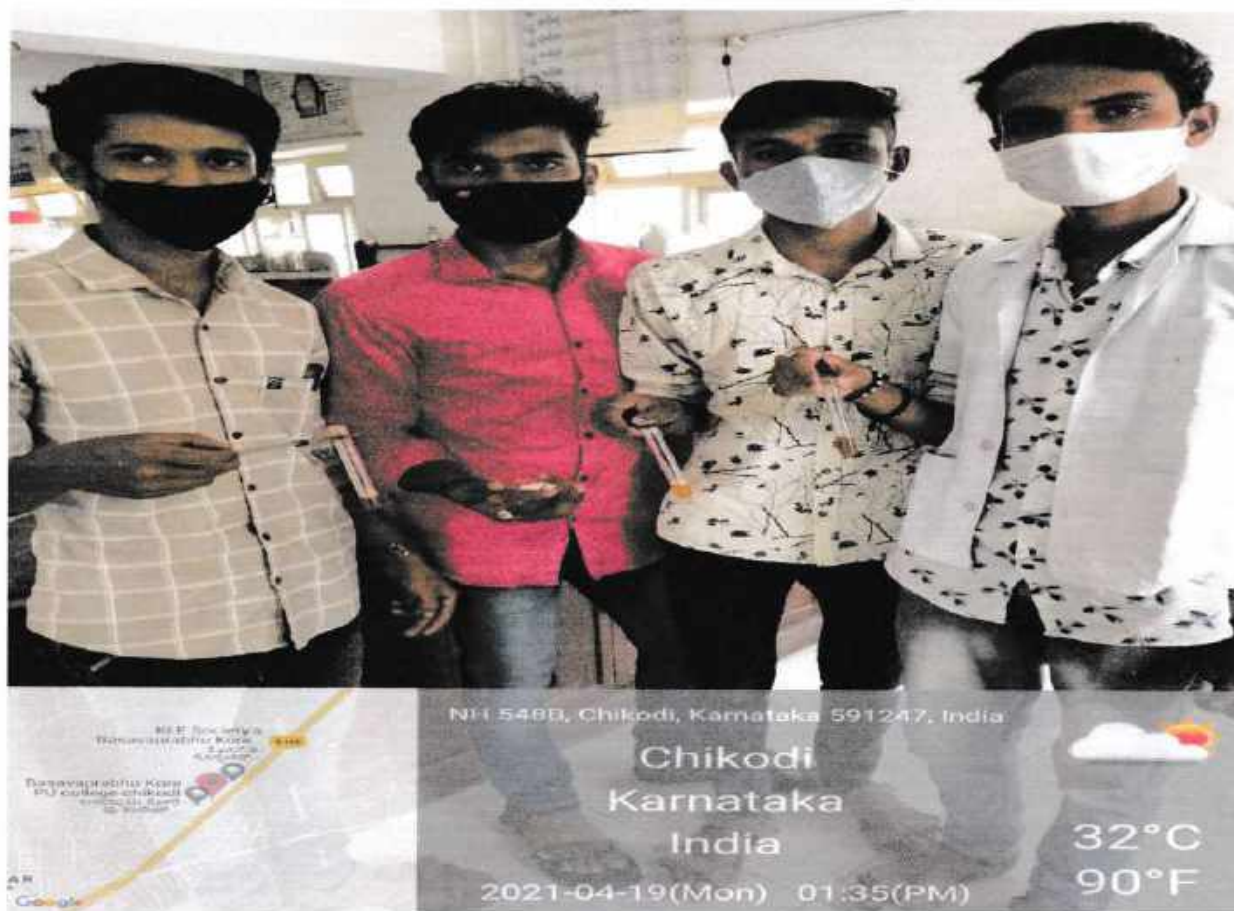
Result: All samples studied showed that they contain PROTEIN.
(Milky bar, Cadburys bar, Dark chocolate)



TEST FOR SUGAR			
	EXPERIMENT	OBSERVATION	INFERENCE
1	2 ml Tollen's reagent taken in different test tube and pinch of the chocolate into the each test tube. keep the solution in the water bath.	Silver mirror surface is formed.	Presence of SUGAR in the sample.
2	Mix 2 ml of Fehling's solution in different tet tubes. Add pinch of the chocolates into the each test tube. . keep the solution in the water bath.	Red brown precipitate obtained.	Presence of SUGAR in the sample.

Result:

All samples studied showed that they contain SUGAR.
(Milky bar, Cadburys bar, Dark chocolate)



TEST FOR CALCIUM			
	EXPERIMENT	OBSERVATION	INFERENCE
1	A mixture of $\text{NH}_4\text{Cl} + \text{NH}_4\text{OH} + (\text{NH}_4)_2\text{CO}_3$ add sample of chocolate.	A white precipitate obtained	Presence of CALCIUM in the sample
2	With help of glass rod each sample of chocolate solution placed on different watch glass. Add drop of con. HCl and a paste is made on each sample. this paste is taken on the glass rod and burned on non luminous flame.	Brick red color flame obtained.	Presence of CALCIUM in the sample.

Result:

All samples studied showed that they contain CALCIUM.

(Milky bar, Cadburys bar, Dark chocolate)



TEST FOR IRON			
	EXPERIMENT	OBSERVATION	INFERENCE
1	A mixture of $\text{NH}_4\text{Cl} + \text{NH}_4\text{OH}$ is made. This is added to each sample of chocolate solution taken in different test tubes.	No brown precipitate	Absence of IRON in the sample.

Result: All samples studied showed that they do not contain IRON. (Milky bar, Cadburys bar, Dark chocolate)

TEST FOR MAGNESIUM			
	EXPERIMENT	OBSERVATION	INFERENCE
1	A mixture of $\text{NH}_4\text{Cl} + \text{NH}_4\text{OH} + \text{Na}_3\text{PO}_4$ is made. This is added to each sample of chocolate solution taken in different test tubes.	No white precipitate	Absence of MAGNESIUM in the sample.

Result:

All samples studied showed that they do not contain MAGNESIUM.

(Milky bar, Cadburys bar, Dark chocolate)

TEST FOR NICKEL			
	EXPERIMENT	OBSERVATION	INFERENCE
1	A mixture of $\text{NH}_4\text{Cl} + \text{NH}_4\text{OH}$ is made. This is added to each sample of chocolate solution taken in different test tubes. Pass H_2S gas to the solution.	No black precipitate	Absence of NICKEL in the sample.

Result:

All samples studied showed that they do not contain NICKEL.

(Milky bar, Cadburys bar, Dark chocolate)

Conclusion:

Sl.No	Substance	Present/Absent
1	Proteins	Present
2	Sugars	Present
3	Calcium	Present
4	Iron	Absent
5	Magnesium	Absent
6	Nickel	Absent

References:

www.foodhealthinnovation.com

Internet

Vogel's qualitative analysis



K.L.E. Society's
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DEPARTMENT OF CHEMISTRY

REPORT

On

INDUSTRIAL VISIT

To

**Chidanand Basaprabhu Kore Sahakari Sakkare Karkhane
Niyamit Chikodi, Examba Nanadi Road, Nanadiwadi,
Belagavi, Karnatak State, India**

On

25/08/2021

Arranged for
B.Sc. VI Semester Students

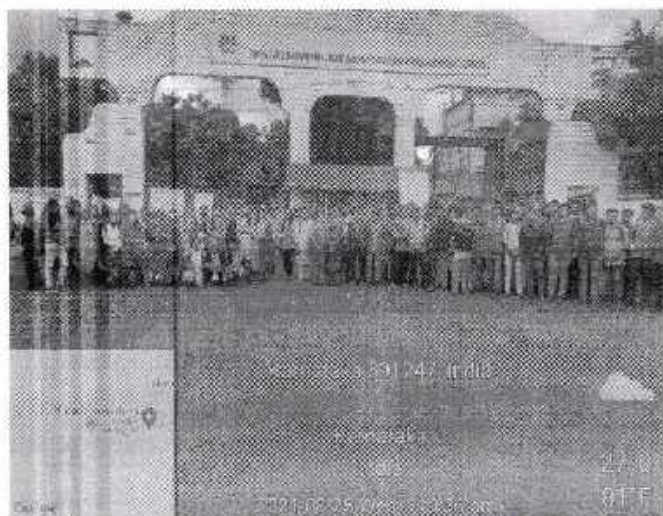
INDUSTRIAL VISIT REPORT

One Day Educational Industrial Visit To **Chidanand Basaprabhu Kore Sahakari Sakkare Karkhane Niyamit Chikodi, Examba Nanadi Road, Nanadiwadi, Belagavi-591247, Karnatak State, India.**

Our college arranged one day Educational visit to **Chidanand Basaprabhu Kore Sahakari Sakkare Karkhane Niyamit Chikodi, Examba Nanadi road, Nanadiwadi**, on 25th August 2021 for B.Sc final year (VI semester) students of Chemistry Department . This industrial tour was helpful to impart the practical knowledge of sugar production amongst the students and the faculty members.


Name of Company	Chidanand Basaprabhu Kore Sahakari Sakkare Karkhane Niyamit Chikodi.
Address of Company	Post: Chikodi, Examba Nanadi road, Nanadiwadi, Belagavi-591247, Karnatak State , India.
Chairman of Company	Shri. Bharatesh Banavane
Established year	1974
Nature of business	Producing sugar , Spirits(alcohol).
Capacity	5500 TCD TO 10000 , 30 KLPD Ethanol & Cogeneration Power Plant 20.5 MWhr to 50 MWhr.
Date of visit	25 th August 2021
Branch involved	Department of chemistry (B.Sc. PCM And CBZ VIsem)

Concerned subject	B. Sc. VI sem Chemistry Paper –II Practical Curriculum
Total students	167
Transport facility	College bus
Faculty coordinators	1.Prof. U. R. Rajput 2.Prof. S. S. Patil 3. Dr. S. M. Patil 4. Mrs. G. B. Jambagi 5.Mr. S. S. Latte 6. Miss. S. D. Kotabagi 7.Mrs. D. S. Kanagali 8.Mr. S. S. Kumbar 9.Mr.V. B. Kole
Objectives	<ul style="list-style-type: none">• Study tour is considered as a part of college curriculum and objectives of industrial visit is to provide students an insight regarding internal working of industries.• Industrial visit provides student a practical perspective on the world of work and an excellent opportunity for the students to interact with industries and know more about industrial environment.• Main objective of industrial visit is to provide an exposure to students about practical working environment.

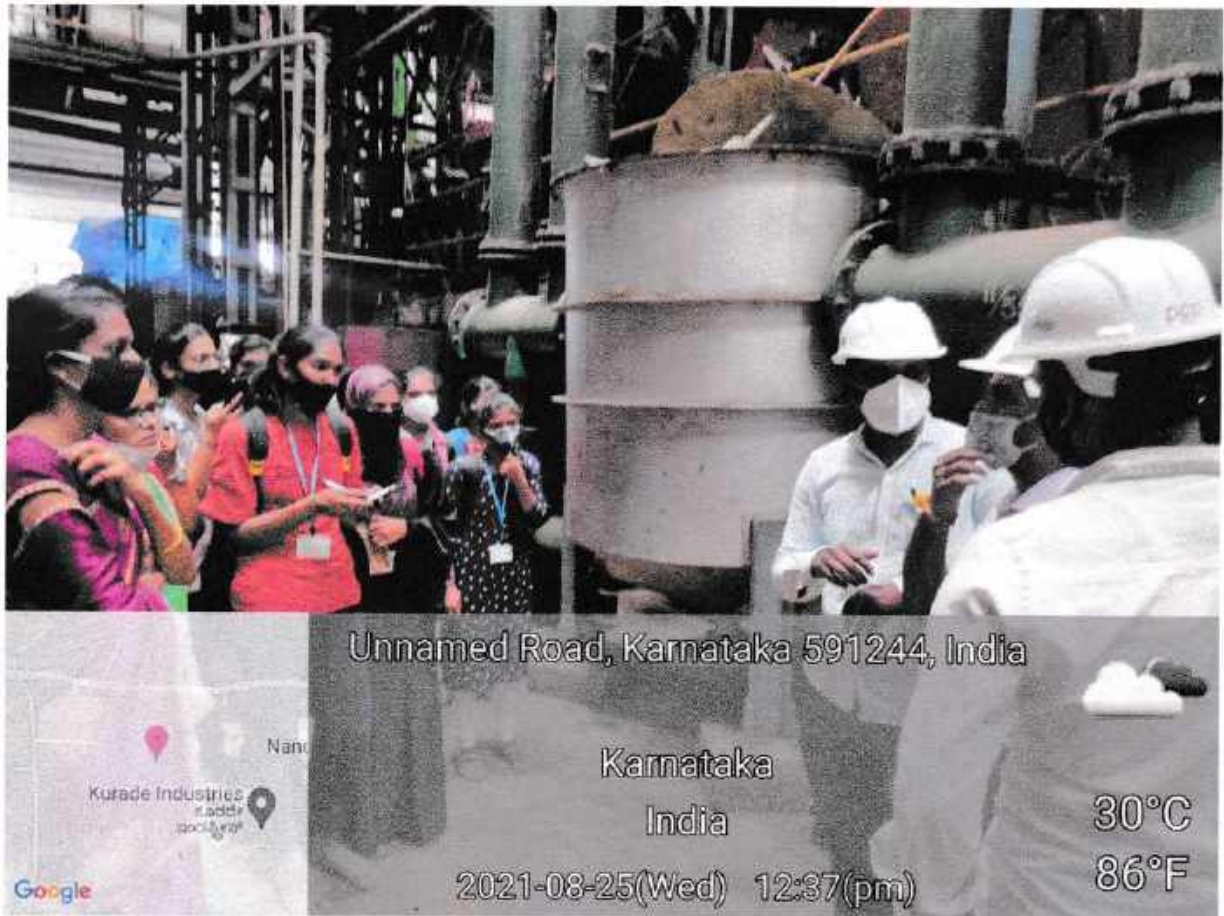


<p>Outcome</p>	<ul style="list-style-type: none"> • Industrial visit helps students in reinforcing the theoretical knowledge with practical knowledge. • Industrial visit helps students in recognizing different process units such as Boiler, Crusher, Steam turbine, Distillery plant, Power generator etc. • Industrial visit helps students in identifying input and output for the process and experience the importance of working safety.
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Photos taken during Industrial visit:






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KLES'S Basavaprabhu Kore
Arts, Science and Commerce College
CHIKODI - 591 201



(Accredited at 'A' Grade by NAAC with CGPA Of 3.26 In 3rd Cycle)

Date:25/08/2021

Department of Chemistry

Industrial visit for B.Sc Final year students

Name of Industry: Chidanand Basaprabhu Kore Sahakari Sakkare
Karkhane Niyamit Chikodi.

Student list

	Roll No	Reg. No	Name
1.	206	S1816603	ADARSH KAMANI
2.	180	S1816604	ADESH KULKARNI
3.	02	S1816605	ADITYA PIRAJI
4.	49	S1816606	AISHWARYA BYALE
5.	50	S1816612	AKSHATA BADAGAVE
6.	181	S1816613	AKSHATA BADANIKAI
7.	05	S1816615	AKSHATA METRI
8.	207	S1816616	AKSHATA A PATIL
9.	246	S1816617	AKSHATA B PATIL
10.	06	S1816618	AKSHATA RAJAPUT
11.	52	S1816619	AKSHATA SAMBHAJI
12.	51	S1816620	AKSHATA TARADALE
13.	54	S1816621	AKSHAY KESTI
14.	182	S1816622	AKSHAY KUDACHE
15.	53	S1816624	AKSHAY PATIL
16.	208	S1816625	AMAR BABANNAVAR
17.	57	S1816628	AMASIDDA BIRADAR
18.	07	S1816631	AMRUTA SHINDE
19.	59	S1816632	ANAND BHAGAI
20.	08	S1816634	ANKITA CHOUGULE
21.	209	S1816635	ARCHANA BAGATI
22.	09	S1816636	ARPITA PATIL
23.	61	S1816639	ASHWINI PATIL
24.	62	S1816640	BHAGYASHREE PARASHETTI
25.	210	S1816642	BHIMAPPA HOSATTI
26.	63	S1816643	CHANDRAGOUDA PATIL
27.	183	S1816644	CHANDRAKANT KATKAR


29.	65	S1816646	CHETAN SHINDHE
30.	67	S1816648	DAREPPA BILAGE
31.	68	S1816649	DEEPA DESAI
32.	11	S1816651	DEEPAK JAKATE
33.	12	S1816652	DIVYA PATOLE
34.	211	S1816653	DIVYANI MAGADUM
35.	14	S1816656	GAYATRI DUNDAGE
36.	15	S1816658	HARSHADA LOKURE
37.	69	S1816660	JAYARAM KOTRE
38.	72	S1816663	KADAMBARI BABANNAVAR
39.	73	S1816664	KALLAPPA KAMATE
40.	16	S1816665	KARAN JADHAV
41.	74	S1816666	KAVERI PATIL
42.	75	S1816668	KEERTI KORE
43.	17	S1816669	KENCHANNAVAR MEGHA
44.	255	S1816670	KIRAN HANCHINALE
45.	247	S1816671	KIRAN NALAVADE
46.	76	S1816672	KIRAN PATIL
47.	184	S1816673	LAXMI JAINAPURE
48.	78	S1816674	MAHADEV SHIRAGANVE
49.	77	S1816675	MAHANTESH PATIL
50.	256	S1816677	MAHESH MATHAPATI
51.	82	S1816679	MALLIKARJUN HANJYANATTI
52.	83	S1816683	MANJUNATH NAGANURI
53.	257	S1816684	MARTAND PANNALE
54.	185	S1816685	MAYURI KHOT
55.	248	S1816688	MOHMEDYUSUF KALAWANT
56.	186	S1816690	MURALI MANJAREKAR
57.	18	S1816691	NAGARAJ BARAGE
58.	213	S1816692	NAJMUSSAQIB SAYYAD
59.	85	S1816693	NAMRATA PATIL
60.	214	S1816694	NANDA SHINGADI
61.	86	S1816695	NANDINI MANGAJ
62.	87	S1816698	NAVALU SANAMORE
63.	89	S1816700	NAVEENKUMAR HIEMATH
64.	19	S1816701	NEETA BILLURE
65.	20	S1816702	NILESH BAKALE
66.	90	S1816703	NINGAWWA KANKANAWADI
67.	91	S1816704	NIVEDITA DHANAGAR
68.	21	S1816706	OMKAR POTADAR
69.	216	S1816707	OMKAR SHINDHE
70.	217	S1816708	PALLAVI HIEMATH
71.	187	S1816709	PANKAJ GAYAKWAD
72.	92	S1816710	POOJA AINAPURE
73.	188	S1816711	POORNIMA MADIWAL
74.	239	S1816712	POORNIMA MORE
75.	93	S1816713	POORNIMA NIDAGUNDI
76.	22	S1816714	PRADEEP POTADAR
77.	218	S1816715	PRADNYA A HANDAGE
78.	23	S1816716	PRAGATI BENURAKAR
79.	219	S1816717	PRAGATI N BOLAWADE

80.	240	S1816718	PRAJWAL MULE
81.	94	S1816720	PRAMODINI DEVKAMBALE
82.	220	S1816721	PRATIBHA CHOUGALE
83.	221	S1816722	PRATIKSHA KAMBLE
84.	95	S1816725	PRIYANKA JAGADAL
85.	190	S1816726	PRIYANKA SHINGAI
86.	189	S1816727	PRIYANKA SHIRAGAVE
87.	222	S1816728	PRIYANKA TERADALE
88.	97	S1816730	PUSHPA HUCHHANNAVAR
89.	191	S1816731	RADHA GHATAGE
90.	25	S1816734	RAHUL SAVANT
91.	26	S1816735	RAJAT BAHADDURI
92.	223	S1816736	RAJENDRA MARASARAKAR
93.	100	S1816738	RAKESH NAIK
94.	102	S1816740	RAKESH S PATIL
95.	104	S1816743	RAVI PIRAJI
96.	224	S1816744	RAVINA PUJARI
97.	225	S1816746	ROHINI KABBURE
98.	28	S1816747	ROHINI PANAKE
99.	105	S1816748	ROOPALI DHANAGAR
100.	29	S1816750	RUTUJA MANGAVE
101.	106	S1816753	SACHIN BAGI
102.	107	S1816754	SACHIN KORE
103.	226	S1816755	SACHIN MANTOOR
104.	227	S1816756	SACHIN SUBBANNAVAR
105.	108	S1816757	SAGAR BHAVI
106.	192	S1816760	SAKSHI AINAPURE
107.	109	S1816761	SAMIKSHA KHEMALAPURE
108.	110	S1816762	SAMMED JUGALE
109.	31	S1816763	SAMPATTA BHOSALE
110.	112	S1816766	SANDEEP KOLI
111.	193	S1816770	SANIYA GOUNDI
112.	113	S1816772	SANTOSH KUMBAR
113.	32	S1816774	SARVESH SHITOLE
114.	114	S1816775	SAVITA BELAKUD
115.	115	S1816776	SAVITA KAMBLE
116.	33	S1816777	SAVITA SAMAJE
117.	231	S1816778	SAVITRI PATIL
118.	241	S1816779	SEVANTA NAIK
119.	232	S1816780	SHAMBHAVI SHIRALAKAR
120.	116	S1816781	SHAMEENA MUJAVAR
121.	34	S1816784	SHASHIKANT BHOSALE
122.	233	S1816785	SHASHIKIRAN P K
123.	118	S1816786	SHEETAL UDAGATTI
124.	119	S1816787	SHEKHAR SANADI
125.	234	S1816788	SHILPA BEDADURGE
126.	235	S1816792	SHIVANAND GIDDALI
127.	36	S1816794	SHIVANI RATHOLE
128.	121	S1816797	SHRUTIKA BIRADAR
129.	38	S1816798	SHRUTIKA BORAGANVE
130.	40	S1816799	SHUBHAM CHOUGALE

131.	39	S1816800	SHUBHAM MANE
132.	196	S1816803	SNEHA YARANALE
133.	41	S1816804	SNEHAL PATIL
134.	42	S1816805	SOMANATH VADAGAVE
135.	197	S1816809	SOURABH SHINDE
136.	198	S1816810	SOURABHA ARAGE
137.	43	S1816811	SOURABHA TAKALE
138.	123	S1816812	SRUSHTHI PATIL
139.	44	S1816813	SRUSHTI BELASHETTI
140.	199	S1816814	SUCHITA GAYAKAWAD
141.	45	S1816815	SUCHITRA UPADHYE
142.	124	S1816816	SUDHARANI BADAOKAR
143.	125	S1816817	SUJATA GHEVARI
144.	126	S1816818	SUMIT BUBANALE
145.	127	S1816819	SUNIL KAMBAR
146.	46	S1816820	SUPREET KARAJAGE
147.	128	S1816821	SUPRITA MALAWAD
148.	200	S1816822	SUPRIYA CHAVAN
149.	201	S1816823	SUPRIYA R LATE
150.	129	S1816824	SURAJ CHOUGALA
151.	130	S1816825	SUSHANT M PATIL
152.	131	S1816826	SUSHANT N PATIL
153.	242	S1816827	SUSHMITA DAMOJI
154.	47	S1816828	SUSHMITA PATIL
155.	132	S1816830	SWATI BAMANE
156.	202	S1816834	TEJASHRI SARWAD
157.	236	S1816836	TEJASHWINI TOPUGOL
158.	134	S1816837	TYAGARAJ MALI
159.	203	S1816839	UMMEHANI JAKATI
160.	204	S1816841	VAISHNAVI CHAVARE
161.	237	S1816842	VAISHNAVI PANCHAM
162.	135	S1816845	VIDYA TELI
163.	136	S1816846	VIDYASHRI SADALAGE
164.	137	S1816847	VIJAY SAPTASAGAR
165.	138	S1816848	VIJAYA MORE
166.	139	S1816850	VINAYAK PIRAJI

167. 83 S1816719 Pramod Todkar

Total number of students: 166


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