



ACHARYA INSTITUTE OF TECHNOLOGY

(Affiliated to Visvesvaraya Technological University, Belagavi, Approved by AICTE, New Delhi and Accredited by NBA and NAAC)

Date: 19/05/2018

CERTIFICATE

This is to certify that **Mr. Naveen Subray Naik** bearing USN **1AY16MBA45** is a bonafide student of Master of Business Administration course of the Institute 2016-18 batch, affiliated to Visvesvaraya Technological University, Belagavi. Project report on “**A Study on Effective Asset Liability Management**” at **Bhatkal Agriculture and Rural Development Co-operative Bank Ltd. Bhatkal** is prepared by him under the guidance of **Dr. Ramanaiah G** in partial fulfillment of the requirements for the award of the degree of Master of Business Administration, Visvesvaraya Technological University, Belagavi, Karnataka.

Signature of Internal Guide

Signature of HOD

**Head of the Department
Department of MBA**

**Acharya Institute of Technology
Soldevanahalli, Bangalore-560 107**

Signature of Principal

PRINCIPAL

**ACHARYA INSTITUTE OF TECHNOLOGY
Soldevanahalli Bangalore-560 107**



ಭಟ್ಟಕ ಕೃಷಿ ಹಾಗೂ ಗ್ರಾಮೀಣ ಅಭಿವೃದ್ಧಿ ಸಹಕಾರಿ ಬ್ಯಾಂಕ್ ನಿಯಮಿತ.,

ಪ್ರಧಾನ ಕಛೇರಿ : ಭಟ್ಟಕ (ಉ.ಕ) ಫೋನ್ : 227559, 222248

BHATKAL AGRIL & RURAL DEVELOPMENT CO-OP. BANK LTD.,

H.O. BHATKAL - 581 320. (U.K.)

ಶಾಖೆಗಳು : ಮುಖ್ಯಶಾಖೆ : 226558; ಶಿರಾಲಿ : 258286; ಮರದೇಶ್ವರ : 260462; ಬಜಾರ : 222546; ವಾಲ್ಮೀಕಿ : 257926; ಜೊನ್ನಾವರ : 221598; ಕುಮಟಾ : 220158; ಸರ್ಕಾರಿ : 279248; ಸಿ.ಬಿ.ಐ.

ಉಲ್ಲೇಖ ಸಂಖ್ಯೆ : DR/2018/19

| 2018-19




ದಿನಾಂಕ : 02/05/2018

CERTIFICATE

This is to Certify that **Mr. NAVEEN SUBRAY NAIK, USN NO : 1AY16MBA45** Student of MBA final year in **ACHARYA INSTITUTE OF TECHNOLOGY, Bangalore**. He has undergone the project work on **A Study On Effective Asset Liability management of Bhatkal Agriculture And Rural Development Co-Op Bank Ltd., Bhatkal (U.K)**. From **15th January 2018 to 24th March 2018. (10 weeks)** under the guidance of **Shri V.M.Naik, General Manager of BARDC Bank** for the partial fulfillment of requirement for the award of Degree In Master Of Business Administration.

Communicated to :

Mr. NAVEEN SUBRAY NAIK
ACHARYA INSTITUTE OF
TECHNOLOGY, BANGALORE


GENERAL MANAGER
BARDC BANK LTD.
H.O. BHATKAL

ACKNOWLEDGEMENT

I take this opportunity to extend my profound thanks and deep sense of gratitude to Mr. Vasu M General Manager of Bhatkal Agricultural and Rural Development Co-operative bank limited. for giving me the opportunity to undertake this project work in their esteemed organization. I thank the employees of the organization for their support to my project.

My sincere thanks to the principal of our college, HOD Dr. Nijaguna and my Project guide Dr G Ramanaiah for the kind encouragement constant support extended in the completion of this project work.

I also thank all those who helped me, through their valuable guidelines, cooperation and support during the completion of the project work.

Naveen Subray Naik

(1AY16MBA45)

DECLARATION

I **Naveen Subray Naik** hereby declares that the project report entitled “**A study on effectiveness of asset liability management with reference to Bhatkal Agriculture and Rural Development Co-Operative Bank**” in Bhatkal prepared by me under the guidance of **Dr. G. Ramanaiah** of M.B.A Department **Acharya Institute Of Technology** and external assistance by **Mr. Vasu M General Manager BARDC Bank Limited**. Also, declares that this project work is towards the partial fulfilment of the university regulations for the awards of degree of Master of Business Administration in Visveswaraya Technological University Belgaum. I have undergone a project for the period of four weeks. I further declare that this project is based on the original study undertaken by me and not has submitted for the award of any degree/ diploma from any other university/institution.

Place: Bangalore

Date: 29/05/2018



Signature of the student

TABLE OF CONTENT

Chapter No	CONTENT	Page No
	Executive Summary	i
1	Introduction	1
i.	Industry Profile	1
ii.	Company Profile	4
2	Theoretical Background and Literature Review	
i.	Conceptual Background	21
ii.	Literature review	28
3	Research Design	
i.	Statement of the Problem	29
ii.	Need of the study	29
iii.	Objective of the study	29
iv.	Significance of the study	30
v.	Scope of the study	30
vi.	Research Methodology	30
vii.	Limitations	31
4	Data Analysis and Interpretation	
i.	Time series Analysis	32
ii.	GAP Analysis	43

iii.	Ratio Analysis	48
iv.	Correlation	51
5	Findings Suggestions and Conclusions	
i.	Findings	53
ii.	Suggestions	54
iii.	Conclusions	55
	Bibliography	56

LIST OF TABLES

Table No	Particulars	Page no
1.1	Table showing Board of directors of the bank	8
1.2	Table showing Types of loans provided by bank	11
1.3	Table showing types of Deposits of the bank	11
1.4	Table showing Balance sheet	15
1.5	Table showing Profit and loss Account of the bank	16
4.1	Table showing Share capital of the bank	33
4.2	Profits of the bank in different periods	35
4.3	Table showing Loan recovery statement of the bank	36
4.4	Table showing Agricultural Loan recovery statement of the bank	38
4.5	Table showing Non-Agricultural Loan recovery statement of the bank	39
4.6	Table showing NPA Reserves of the bank	40
4.7	Table showing Deposits of the bank	41
4.8	Tables showing Investment of the bank	42
4.9	Table showing GAP Analysis	43
4.10	Table showing Relative gap of the bank	45
4.11	Table showing NII of the bank	46
4.12	Table showing NIM	47
4.13	Table showing Net Profit to Shareholders fund ratio	48
4.14	Table showing Return on Assets	49
4.15	Table showing Interest income on Loans	49
4.16	Table showing Total Expense to Total Income	50
4.17	Table showing Correlation between net profit and total assets	51
4.18	Table showing Correlation between net profit and total assets	52

LIST OF FIGURES AND CHART

Chart No	Particulars	Page no
1.1	Types of banks in India	2
1.2	Types of Co-Operative banks in India	4
1.3	Agricultural loans provided by the bank	10
2.1	Asset Liability management	17
2.2	Reasons of Asset Liability Management	20
4.1	Graph showing Share capital of the bank	33
4.2	Graph showing Percentage increase in share capital of the bank	34
4.3	Graph showing profit detail	35
4.4	Graph showing Loan Recovery Management of the bank	36
4.5	Graph showing Loan Recovery Performance of the bank	37
4.6	Graph showing Agricultural Loan Recovery by the bank	38
4.7	Graph showing Non-Agricultural Loan Recovery by the bank	39
4.8	Graph showing NPA Reserves of the bank	40
4.9	Graph showing Deposits of the bank	41
4.10	Chart showing Investments of the bank	42
4.11	Graph Showing GAP of the bank	44
4.12	Graph showing Relative gap of the bank	45
4.13	Graph showing NII	46
4.14	Graph showing Net Interest Margin of the bank	47

EXECUTIVE SUMMARY

The current study relates to effective management of Asset liabilities in Bhatkal Agriculture and Rural Development Co-operative Bank Limited. The management of assets and liabilities is one of the risk managing technique used in the banking sector to increase profitability and improve their performance. The RBI administrative body has established some of the standard rules for controlling banks when lending and receiving deposits. But, the Cooperative bank is regulated more by Cooperative act 1965, the banking regulation act 1949 and the state Apex Bank. The asset and liability management regulation are differing between commercial bank and cooperative banks. They are free from certain Standard rules prescribed by the RBI.

In this study, the part of the literature is studied to understand the cooperative bank's operation and liabilities and the assets of the bank. The Co-operative Bank for Agriculture and Rural Development in Bhatkal is managed by the National Bank Co-operative Bank of Karnataka State Agricultural and Rural Development (KASCARD) and Agriculture and Rural Development (NABARD). This study provides details about the bank's assets and liabilities. How the bank maintains the its liabilities and assets. How it is refinanced by the KASCARD Bank and NABARD.

The tools used for the study are time series analysis of the balance sheet of the bank, Ratio analysis, GAP analysis and Correlation test to study the effective asset and liability management of the Bank. The secondary data is collected from the bank final reports, Wikipedia, RBI guidelines etc.

CHAPTER -1

INTRODUCTION

1.1 INTRODUCTION ABOUT PROJECT

This Project paper is based on “**A study on Effectiveness of asset liability management in Bhatkal agricultural and rural development cooperative bank**”. The project is very important for a student to understand the real practical knowledge of the concepts. It also provides the knowledge about the company on which the project work is made. A statistical and theoretical knowledge are used to study the topics in project.

Project work is very useful to understand the real problem of the company and find a solution to the existing problem. Her the researcher will study the problem in deep and find the solutions to a problem. Whenever people interact in organization many factors come into play. A project studies attempt to understand and model these factors. A research study is essential to any MBA graduate as it helps them to connect theory with practice. And develop his own theory and knowledge towards a particular concept.

1.2 INDUSTRY PROFILE

Introduction to bank

The Indian economy is becoming one of the strongest economies in the world. The growth rate of GDP is increasing every year. A strongest Banking industry is needed for the country for the economic development through competent financial services. Banks play a significant role in overall development of the country.

Meaning of bank

A bank is a financial institution engaged in borrowing and lending of money. It's an intermediary which deals with Others money for both their advantage and its profit.

Definition of banking

According to section 5 (b) of Indian banking regulation act 1949 Defines “Banking” as “Accepting for the purpose of lending or investing, of deposits of money from the public, repayable on demand or otherwise withdrawal by check, draft, order or otherwise”

Banks in India

In India Banking is broadly classified as into Nationalized bank, Private Bank and special bank. In India RBI is the Banker for every bank it was started in the year 1935. It regulated all the banking activities in India. All the banks India needs to follow the rules and regulations of RBI. The nationalization of banks in India took place in India in 1955. It gave growth to Prominent role of Public Sector Banks in India. The 1990’s LPG Policy has given foreign banks to operate in India and the old and new Private banks have re-emerged. The banks in India also classified as Scheduled banks and non-scheduled bank. The scheduled banks are further classified into Commercial banks and cooperative banks. Commercial banks are of following types,

1. Private sector banks
2. Nationalized banks (Public sector)
3. Foreign Banks
4. Regional rural banks

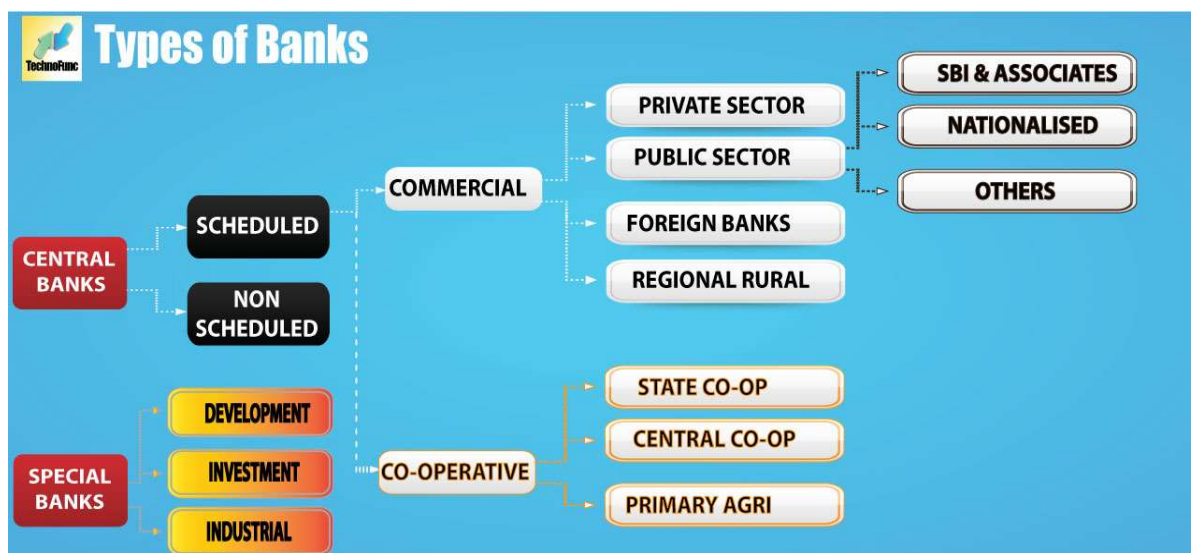


Fig 1.1. Types of banks in India (Source: www.technofunc.com)

INTRODUCTION TO CO-OPERATIVE BANKING

Co-operative banks in India have become a major factor in the success of the Indian economy. They have achieved several milestones since their creation and have helped a normal rural Indian to be empowered and protected. The philosophy of equality, equal health, equity has given way to think of self-responsibility and self-administration which resulted in the birth of cooperatives. Co-operative banks existed in India under the Agreement of Agricultural Credit Co-operative societies Act, 1904. Due to the demand increase in cooperative credit, a new Act was introduced in 1912. Central Co-operative Banks from the Union and Persons of the Primary Credit Services.

The RBI has established a Central Committee for Co-Training in 1953 to set up Regional Training Centers. Rural Credit Survey Committee, 1954 First Committee to Research Rural People's Rural Loans and Other Financial Issue. The cooperative program and banking structures quickly spread and resounded with the unexpressed requirements of the rural India and small-scale businesses. Later, 1950s, they have come a long way to funding and help with activities like credit, banking, manufacturing, processing, distribution/marketing, housing, warehousing, irrigation, transport, fabrics, dairy, sugar etc. to households.

The Co-Operative banks India is registered under the Co-Operative society act. They are also regulated by RBI, Banking regulation Act 1949 and Banking Laws (Co-operative Society) Act, 1965.

Meaning of co-operative bank

A cooperative is a voluntary association of groups of people having common interest coming together and working for each other for both their and others benefits.

“A Co-Operative bank, as its name indicates is a financial institution consisting of a number of individuals coming together to pool their surplus money for the purpose of earning profits of the banker or lenders with a view to distributing the same amongst the depositors and members.”

Structure of Co-Operative Banks in India

The Co-Operative System is divided into 2 broad categories in India -

1. Urban Co-operative Bank
2. Rural Co-operatives

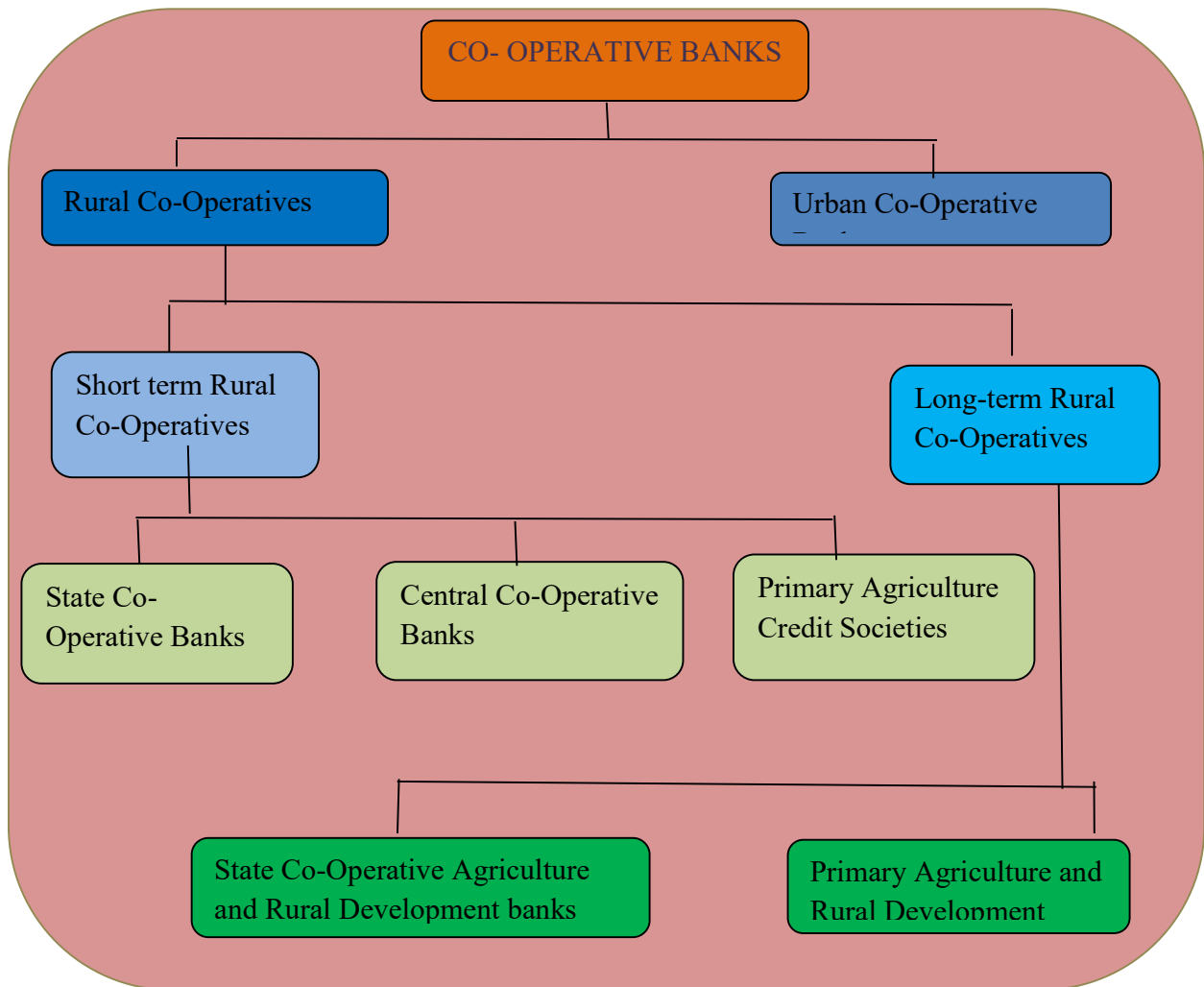


Fig 1.2. Types of Co-Operative banks in India

1.Urban Cooperatives: These banks are also referred as Primary cooperative banks by Reserve Bank of India. It caters services mainly to Non-Agricultural purpose. These banks are established for catering services to Rural middle classes. Banking actions of Urban Cooperative Banks are governed by RBI. Registration, administration activities are accomplished by Registrar of Cooperative Societies (RCS).

2. Rural Cooperatives: Rural cooperatives are playing important role in providing credit facility to rural people. they Provides institutional credit mainly for Agriculture and rural sector. These Co-Operatives are further separated into short-term and long-term structures.

The Short-term Co-Operative banks are three-tiered operating in different states. Those are-

- 1. State Co-Operative Banks-** They operate at the top level in states. Delivers mainly short term and medium-term finance. Additionally, they receive loan from RBI and NABARD
- 2. Central Co-Operative Banks-**They operate at the district levels. NABARD is the supervisory authority of Central Co-Operative bank.
- 3. Primary Agricultural Credit Societies-**They operate at the village or grass-root level. They directly deal with individuals. The provides short-term and medium-term loans.

The Long-term Co-Operatives are further divided into –

- 1. State Co-operative Agriculture and Rural Development Banks (SCARDS)-** These function at state-level. The main objective of these bank is to finance Primary Agriculture and Rural Development Co-Operative banks. They can take small portion of deposits from public.
- 2. Primary Co-operative Agriculture and Rural Development Banks (PCARDBS)-** They function at district level. The rural banking co-operatives have a composite monitoring structure as they have a multiple control which has led to many difficulties. They are mainly operating in rural areas and provides long term credit for both agriculture and rural development.

Scope of Co-operative Banks

Indian co-operative structures are one of the world's leading networks with over 200 million memberships. It has about 67% of the villages in the villages and has a 46% of total rural deposits. It is 36% of the total supply of rural fertilizers and 28% of rural fair price shops.

Functions of Co-Operative banks

Following are the functions performed by cooperative banks

1. **Agricultural finance:** Cooperative banks provides loans mainly to agriculture and rural sector. they are the main sources of Agricultural finance.
2. **Creation of market for products:** It creates market for Agricultural products of the farmer.so as to increase the sales by creating for the product.
3. **Irrigation Facility:** They provide loan for the irrigation of the agriculture and information about the latest irrigation methods.
4. **Technological Transfer:** Cooperative banks provides he information about the new technology prevailing in the market for Agriculture and they finance for the implantation of the project.
5. **Intermediator Function:** They act as intermediaries between govt, NABARD and the society. they transfer the finance from govt to beneficiary. All the Agricultural finance are provided to individuals through cooperative bank.
6. **Government subsidy management:** Government provides loan ton to farmers at subsidies interest rate Co-operative banks.

Regulatory bodies of cooperative banks

Co-operative bank and NABARD:

NABARD was established in 12 July 1982 to expand the National agricultural and rural Development act 1981. It is the one of the institution regulating cooperative banks. They provide financial support to cooperative bank. They frame the rules and protocols for governing the cooperative banks

Co-Operative Society act

The Co-Operatives in India are registered under the cooperative act 1965. They are regulated by banking regulation act 1949 and Reserve Bank of India.

1.3 COMPANY PROFILE

BHATKAL AGRICULTURE AND RURAL DEVELOPMENT CO-OPERATIVE BANK LIMITED (BARDCBL)



The bank was established in 4 October 1972. by the cooperative society act. The bank is regulated and controlled by KASCARD bank and NABARD. It started banking business in the year 1994 by providing Agricultural Loans. The primary objective of the bank is to provide loans and advances to customer on cooperative membership basis. The bank provides loans to its members as per cooperative rule. It provides loans only to the people which covers the Bhatkal taluka. It has grown its nosiness it is the one of the successful cooperative bank in the state. The bank has total 8 branches out of which 5 are in Bhatkal Taluka, 2 are in Honnavar and 1 branch in Kumta. it has got permission open new 3 branches different areas, the management has done all the preparations.

Branches of the bank:

Following are the number of branches of the bank and contact detail

1. Head office Bhatkal : 08385-226558
2. Shirali Branch : 08385-258286
3. Murdeshwar Branch : 08385-260462
4. Bazar Branch : 08385-222546
5. Manki Branch : 08385-257926
6. Honnavar Branch : 08358-221598
7. Kumta Branch : 08385-220185
8. SarpanakatteBranch : 08385-279248

Current Board of directors of the bank:

Sl no	Name of the Director	Position
1	Mr. Devidas N	President
2	Mr. Mahesh N	Vice-President
3	Mr. Ishwar N	Director
4	Mr. Madev K	Director
5	Mr. Sunil BN	Director
6	Mr. Vittal H	Director
7	Mr. Damodhara N	Director
8	Mr. Suresh J N	Director
9	Mr. Ishwar S	Director
10	Mr. Manjunath D	Director
11	Mrs. Masthamma M	Director
12	Mrs. Gayathri Vijayakumar	Director
13	Mr. Vasu M Naik	General Manager

Table 1.1. Table showing Board of directors of the bank

1.3.1 Promoters

The BARDCB Ltd. is promoted and Regulated by National bank for Agriculture and rural Development (NABARD) and Karnataka state cooperative Agricultural and Rural development (KASCARD) bank. All the Agricultural Finance and Rural Development Loans are Refinanced by these banks.

1.3.2 Vision, Mission and Quality Policy

Vision

Humble and Honest service to the customers is the Ultimate goal of the bank

Quality Policy

- Quick Service
- Easy Processing of Loan and Less Documentation

1.3.3 Products and Services of the Bank

The bank is providing good services to its customers through different Products it offers. They are offering Different types of loans to its customers and different types of Accounts in the bank. All the NABARD and KASCARD Bank schemes are Made available to the rural people. Following are the different variety of products and services Provided by bank are as follows,

1. Types of loans provided by the BARDCBL

Agricultural loan:

The bank provides loans to the farmers under govt schemes as instruction given by KSCARD bank and NABARD. the bank provides loans at lower rate supported by govt subsidy. the interest rate ranges between 3% to 6%. but the farmers unable to get the full advantage of this loan. the bank is in good condition and it is collecting the loans properly.

Bank Provides Agricultural loans and Advances for the following purposes:

- Cashew
- Jasmine
- Irrigation
- Shawl low
- Water storage tank
- Power tiller
- Land improvement and Purchases
- Boat
- Dairy, etc.



Fig 1.3. Agricultural loans provided by the bank

Non-agricultural loan:

The bank is also providing non-agricultural loans to its member to facilitate standard of living and rural development. The Bank providing loans under following types and interest rate fixed by the banks.

Details of Loan	Interest rate
• Personal loan	16%
• Vehicle loan	13%
• Gold Loan	13%
• Home need loan	16%
• Mortgage loan	14-15%
• Industrial loan	16%
• Housing loans	14-15%
• Cash Credit	15-16%

Table 1.2. Table showing Types of loans provided by bank

2. Deposits Accounts offered by the bank to its customers:

The has provided the different types of deposits facility to its customer, following are the types of deposit accounts the customers can have in the bank.

Deposits Detail	Interest rate
1. Savings Account	3%
2. Fixed Deposit	5 to 9.5%
3. Cash certificate	(Doubled in 8 Years)
4. Recurring Deposit	4 to 6%
5. Security Deposit	
6. Pigmy Deposit	3%

Table 1.3. Table showing types of Deposits of the bank

1.3.4 Infrastructure Facilities

The bank has got with fully secured and Furnished building in the area. electricity, water rest room facilities are available to the staff. The employees have good parking facility for their vehicles.

1.3.5 Competitors information

The bank is facing huge competition in the society from different banks and cooperative societies in the area. following are the some of its competitors,

1. Janatha Cooperative Society Limited Bhatkal
2. Abhyudhara Women's Credit Cooperative Society Limited
3. Grameen Cooperative Bank
4. Akshaya Credit Cooperative Bank
5. Bhatkal Urban Credit Cooperative Bank
6. Sirsi Urban Cooperative Bank
7. Shamarao Vital Cooperative Bank

1.3.6 Awards and Recognitions of the bank

1. First PCARD(Primary co-operative agricultural and Rural Development) bank in the state to get National Award from NABARD
2. IN 200-11 Award from KASCARD(Karnataka State Co-operative Agricultural Development bank) Bank for its Overall Development.
3. In 2011-12 Award from KASCARD (Karnataka State Co-operative Agricultural Development bank) Bank for its Overall Development

1.3.7 Future growth and prospectus

The banking industry in India is growth stage and is increasing year by year. And the customer awareness towards the banks are increasing and people more transact with bank nowadays as compared to past. The bank has got good refinance facility from NABARD and KASCARD Bank for Agricultural rural development sector lending. Central govt and RBI giving more importance to micro finance it is a good opportunity to the bank.

1.3.8 SWOT Analysis

STRENGTH

- Strong financial stability
- Hard working Staff
- Increasing Revenue
- Strong goodwill
- Affordable rate of Interest on Loans and Deposits

WEAKNESS

- Lack of professionalism
- Lack of coordination among the workers
- Small Areas of operation
- Lack of Technological knowledge
- Lack of infrastructure facility in operations

OPPORTUNITIES

- Increasing banking awareness to the customer
- Refinancing opportunity from NABARD and KASCARD
- Increasing banking needs of the people

THREATS

- Competition from other financial institution
- Increasing NPA
- Increase in microfinance company
- Changing needs of the customers

1.3.9 Financial Statement

Statement showing Assets and Liabilities of the bank

Balance sheet				
(in Rs)				
Liabilities	2014	2015	2016	2017
1. Share capital	43256879	49546339	56632649	65611029
2. Reserves and Surplus	118523724	141304064	163582834	178322529
3. Deposits	406434006	468951524	578224979	678719928
4. Borrowings	79735958	76262137	89851397	121787349
4. Current liabilities	75643576	79783882	79430773	97156140
5. Other Liabilities	404	146266	0	278000
Total Liabilities	723594547	815994212	967722632	1141874974
Assets				
Cash balance	25789273	26468792	21371154	30003219
Balance with bank and money at short notice	972394	1631760	1932957	2888466
Investments	99738480	125191894	191487608	240527163
Loans and Advances	575287733	635467658	725740384	839194064
Fixed Assets	3224132	3235132	3235132	3235132
Other Assets	18582535	23998976	23955397	26026930
Total assets	723594547	815994212	967722632	1141874974

Table 1.4. Table showing Balance sheet

2. Profit and Loss statement of the bank

Statement showing Profit and Loss of the Bank				
	(in Rs)			
Particulars	2014	2015	2016	2017
Revenue				
Interest Income	93679246	98987619	116597325	119498053
Interest expenses	8641101	9130753	9875405	12128699
Net interest income	85038145	89856867	106721920	107369354
Non-interest Income	5545992	5860258	6290216	6586071
Total revenue (A)	90584137	95717125	113012136	113955425
Expenses				
Provisions made during the year	51255071	54159461	64055624	68375372
Non-interest expenses	22649239	23932667	30004182	31428105
Total Expenses (B)	73904310	78092128	94059806	99803477
Income Before Tax (A-B)	16679827	17624997	18952330	14151947
Tax paid	0	0	79230	53200
Net Income	16679827	17624997	18873100	14098747

Table 1.5. Table showing Profit and loss Account of the bank

CHAPTER-2

CONCEPTUAL BACKGROUND AND LITERATURE REVIEW

2.1. THEORETICAL BACKGROUND OF THE STUDY

ASSET LIABILITY MANAGEMENT



Fig 2.1. Asset Liability management

The asset liability management is the risk management technics used by the banks. The asset and liabilities include all deposits, loans, provisions, capital, interest payment, working capital of the bank. The ALM is the decision taken by the banks in payment of interest to the deposits held, loan recovery procedures, fixing of interest rates on deposits as well as loans, Investments in other banks and diversified securities. It is a strategy framed by the bank management to minimize the risks involved in a business-like liquidity, Maturity and interest rate. It asset liability mix used by bank to minimize the risk and maximize its profit.

ALM was invented by financial institutions, but companies now also apply ALM measures. Traditionally, banks and insurance companies have essentially used accrual accounting for their assets and liabilities. They take their responsibility (Deposits, Borrowings etc.) and manage the risk by investing them in different portfolio Assets (Real Estates, mutual funds, Lending etc.). By doing this the risk arising from their activities minimized accordingly.

Asset Liability management is very much important for a bank. Banks are making profit from various services provided to their customers. Banks profit is result of revenue earned from the assets and the cost incurred for the liability that has occurred for acquiring funds for funding the assets. Appropriate management of bank assets and liabilities can increase the productivity of the bank. The lending of these loans and advances and investments comes from liability.

So, the earnings of a bank ultimately depend on liabilities. Banks must incur costs for its liability. For example, they must give interest to the public and to the lending institutions. So, bank's liability is not cost free. Efficient use of liabilities depends on effective liability management. Effective liability management indicates that the cost of the liability will be less, and it will be less volatile. But less cost and less instability are inversely correlated. If we give our attention only to less cost funds, then the funds will be unstable. Again, if we give our consideration only to less volatility, then the cost of fund will be high since, only the fixed deposit has the features of less volatility. So, we must make coordination among least costs fund and least volatile fund.

ALM has mainly two components. One is an asset management and the other one is liability management. Asset management deals with how a manager can properly manage the bank's assets and effectively use that in profitable opportunities. On the other hand, liability management deals with balance sheet liabilities. The profit or spread of a bank is the difference between the revenues generated mainly by the assets of the business and the expenses generated mainly by the liabilities of the business. The goal of liability management is to take control of the bank's sources of funds. Almost every moment of our lives, we face different types of risks. The human mind is programmed to learn how to manage risks.

Managing risk is unique and fundamental in the banking industry, because unlike other industry, it is exposed to multi-dimensional risks. No banking industry in the world is isolated from

the risks, and in this project paper my efforts should concentrate on understanding and appreciating these risks specially managing asset and liability so that I can learn more how can manage them efficiently, appropriately and in a timely manner.

The major risks that a bank encounters in its business are as follows:

- 1) Asset Liability Management Risk
- 2) Credit/ Lending, Risk
- 3) Foreign Exchange Risk
- 4) Internal Control and Compliance Risk
- 5) Money Laundering Risk

To manage the above risk effectively and to ensure sustainable performance and good governance of the banking company, the following requirements must be fulfilled:

- o An effective regulatory framework
- o A sound operation system to support the regulatory framework.
- o A socio-ethical standard to protect the people involved in the organization is committed to their stakeholders in a meaningful way.

Given that an appropriate asset and liability management system was essential to better manage risk.

Significance/Importance of Asset Liability management

Management of assets and liabilities are very important for a bank because of following reasons.

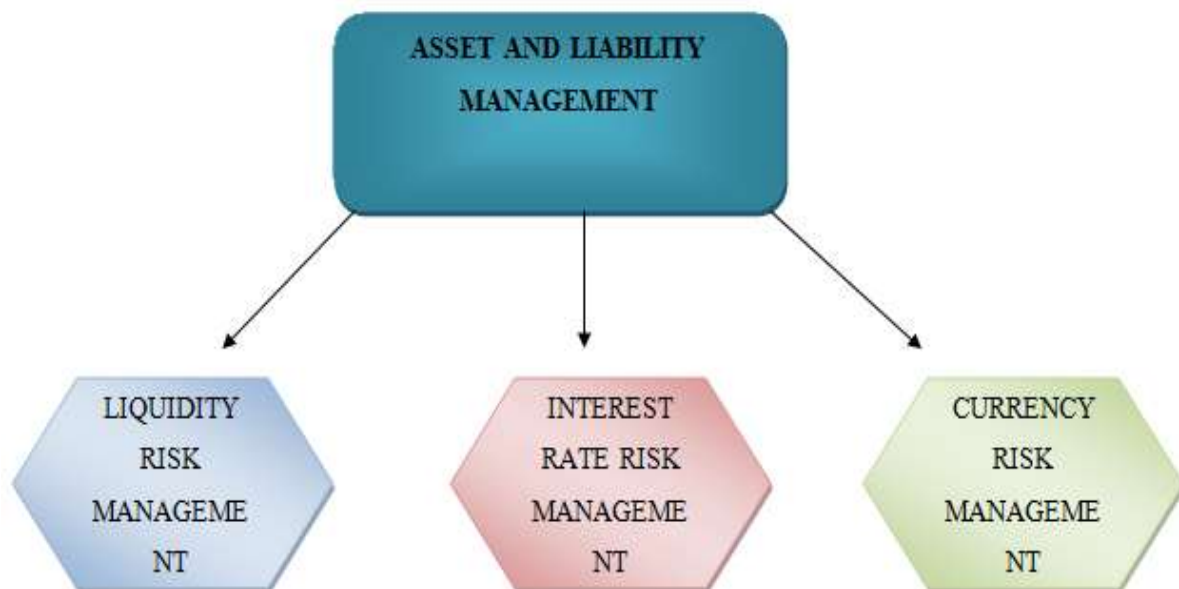


Fig 2.2. Reasons of Asset Liability Management

- **Liquidity Risk:**

Liquidity of an assets is very important to the bank. Banks needs to pay the liabilities like Deposits collected from the customers as and when they demand or the maturity of the deposits. the risk arising from not meeting the obligations may affect the banks financial conditions. The effective asset liability technique can reduce these risks by identifying the current and future cash flow. Effective Asset Liability Strategy reduces this risk by identifying current and future cash flows. Interest rate risk Banks may have influenced future cash flow assets and liabilities in interest rates. Banks need to manage some Gap to meet the costs on incoming. This is only possible when correcting interest rates for their assets and liabilities

- **Interest Rate Risk:**

Banks future cash flow may have affected by changes in Interest rates of the Assets and liabilities. Banks needs to maintain certain margins to meet the expenses over Incomes. This is only possible when they fix proper interest rates for their assets and liabilities. The one of the Main mismatch is the interest rates between Deposits and Loans.

- **Currency Risk Management:**

Because of changes in currency exchange rates banks assets and liabilities are mismatched. the cashflow assets and liabilities are denominated in different currencies.

- **Funding and Capital Management:**

To maintain sufficient capital required on continuous basis banks should know the status of their assets and liabilities. It's a ongoing process as it considers both short term and long-term capital needs and coordinated with strategic decision of the bank.

- **Profit Planning and Growth:**

Banks need to know their current status and needs to estimate their future cashflows and forecast profits to estimate their performance.

- **Credit risk:**

The banks are Facing credit risk arising from nonpayment of loans and advances. It entirely effects in the credit portfolio of the bank. The credit risk on loan portfolio are directly handled by ALM team.

Objectives/Purpose of Asset Liability management

Following are the main objectives of the asset and liability management

1. The ALM technique objective is to manage the volume, risk, maturity, rate sensitivity, liquidity and quality of Assets and liabilities to achieve the predetermined risk/reward ratio.
2. It aims to stabilize the short-term risk, Long term earnings.

Parameters to Ascertain ALM system are:

- Net Interest Income (NII)
- Net Interest Margin (NIM)
- Economic Equity Ratio

Prerequisites of ALM

The bank should have certain basic fundamentals for managing the Assets and liabilities. following are the requirements of ALM

1. All levels of staff, Helpful management and ALM team should have Awareness about ALM
2. Bank should have strong Management Information system.
3. Computerization of its Banking Activities.
4. It should link its ALM to Risk management policies
5. Awareness about Banking operations, computerization, investment credit and Economic forecasting

Asset Liability Management Policy

Assets Liability Management is an essential part of the Bank Management. So, it's important to have a structured and systematic balance sheet. Bank should have a committee comprising of senior management and professionals to make important decisions and efficient management of the balance sheet. The committee is called as Asset Liability management committee(ALCO). This committee Should meet once in a month to evaluate, Analyze and take corrective measures to formulate the strategies to manage the balance sheet. the key points should be discussed for the better position of bank balance sheet.

Asset and Liability Committee(ALCO)

The ALCO committee of the bank consisting of following people and role of ALCO Committee,

- Bank senior manager (CEO) is responsible for Safeguarding the adherence to the limit set by the board.
- ALCO is responsible for Planning of balances sheet from risk return perspective and strategic management of interest rates and liquidity risk.
- ALCO Also fixes the price of Loans, Advances and Deposits and also decides the desirable maturity period of Assets and Liabilities.
- It must review the result to see the progress in implementation of the policies.

2.2. LITERATURE REVIEW

1. **Dash. M., (2013)** describes Asset liability management guarantees liquidity through the strategic management of assets and liabilities that improve profitability and risk protection. Their study examines the impact of property liability management on the benefit of 35 public and private sector banks. The results indicate that the banks are facing a short-term risk of 1-4 days in a negative maturity match in the bracket. Public sector banks are facing this type of risks. But, there is an advantage of this short-term maturity mismatch as, it improves the profitability.
2. **Jack Clerk Francis (1978)** his paper studies the Commercial Banking Organization Analysis based on the Marquitz Portfolio Analysis. He treated the bank as five portfolio assets and three banking liabilities. Their study estimates the average risk and benefit of each category practically for banks of three groups of small, medium and large banks. The rate of return of equity on equity is defined as the average asset return that is less than the average of the liabilities of the return. Quadratic program (QP) is used to draw efficient banking capital. Everyone with a maximum return on each level of equity risk.
3. **Lende, Arun D** studied Cooperation Requirements in Society. Co-operative banks play an important role in the development of human beings in society. Co-operative societies are the key components of society. The values of cooperative outcome for "everyone, to everyone". The main concern of the Self-Help Services Co-Operative Organization for its members.
4. **Dr. V Alagappan and V. Rengasamy** studied the factors affecting the Profitability of Tamil Nadu Sate cooperative bank. He studied 11 Years Financial statements of the bank. He concluded the result by using Linear Multiple Regression. His study Reveals that the 99% Variation in profit of the banks is due to interest rate spread, Salary and other expense of state cooperative bank.

5. **Dr. Abdul Noor Basha, K V Krishna Rao and J.V. Suba Rao** studied the case study of Vijayavada Central Cooperative bank. The study related to Emphasis on Factors affecting deposits, advance and Profit. They used Multiple regression technique to specific model to find the solution. In this study their objectwas to find the strong and weak factors affecting the deposits, advance and profit, their impact on it.
6. **Dr D.M Basavaraja. and Dr B Ganesh** Study on importance of cooperative banks in India. In this study they explain India is a country of villages around 5,76,000 villages are there in India and every four out of five villagers and every five out of six persons dependent on agriculture. the cooperatives are the back bone to agricultural finance. But they are facing problem in debt recovery, sufficient profit.
7. **Katerina Simons (1995)** explains Participation of Banks in the Product Market. They study us commercial banks. The participation of banks in the current market has increased. This study uses quarterly call report data for us to study the products used by the Commercial Bank. He found that the bank had less than \$ 5 billion in assets. The larger bank uses a more severe interest rate exchange. And There is no clear relationship between the bank's size and the interest rate products.
8. **Prof. dr. Kanhaiya Singh (2013)** Describes about Asset liability is not compatible with the Commercial Bank. Commercial banks are facing serious challenges following the recording assets and liabilities of traditional methods in the value of the book. Banks' operations are influenced by interest rate risk, liquidity risk, exchange risk and operational risk. The country's central bank advised these banks. Take steps to reduce the inability to asset liability composition.
9. **M I Kushi and W T Ziemba (1986)** studied Managing property liability management in cash flow uncertainty, funding costs and investment on investment. The bank must decide the best balance between risk, return and liquidity. In this study, he used a multi parade possible linear program model. This model was developed for a five-year plan

- 10. Ms. S. P. Shreekala** studied the Asset liability management in Saleem Cooperative bank. Her study shows that Banks should improve the customer service and technology. She used ratio analysis, least square analysis to his study. The net profit of the bank was expected to increase next five years.
- 11. C.V. Nair**, prior director, RBI, studied the challenges of cooperative banks before the “Favored treatment to the RRB sector”. The commercial banking system that opposes all possibilities for the formation of a National Cooperative Bank has asked for a reliable silence on the new Economic Policy (NEP) on Co-operative Societies without any discounts or RBI regulations. The Committee on Economic Improvement on Co-operative Banking should take the government's objective to show a return to cooperation in the emerging system under the new economic policy "
- 12. Ganti Subrahmanyam**, Professor, NIBM, Pune, in his study on “ALM for banks in deregulated environment” stated that the purpose of liability management is to allow adjustments in the assets, so earnings growth becomes cogent and risk remains low in all facets”. He focused “The basic objective of all bank managements is to maximize income and control risk exposure of their activity. Assistant to ALM is liquidity management as a means of risk control. The outlook of for the banking environment in India in the 1990s and beyond was filled with many challenges. In such an environment, the greatest risk lies in the accessibility of funds that ensures a reasonable and consistent return.
- 13. Jonathan Amballa**, BMC, Bombay in his paper “Cooperative urban should brace up to Competition” stated that with the changing scenario, it is imperative for cooperative banks to venture into some other activities, so as to strengthen their bottom line. It is high time the urban cooperative banks too joined the bandwagon and start merchant banking so as to maximize profits.”
- 14. Suresh P. Prabhu**, former chairman, the Saraswati Cooperative bank in his study of the problems faced by UCBs in their function of treasury operation narrated, “ the function off-and has become increasingly important in the recent years. The margins on loans have

decreased dramatically, the interest rates being flexible. There has been increased volatility in exchange and interest rates, making function of ALM all the more important. The banks' assets are namely loans, cash, bonds, bills, certificates of deposit and the banks' liabilities are primarily current and deposit accounts, time deposits, long term debt and equity."

- 15. A. V. Rajwade**, consultant in F.E. Management and International Finance, says, "While on the general subject of ALM, one ironic feature of the regulatory regime in India is worth noting. While the supervisory authorities have always been very conscious and controlled tightly the gap in the foreign exchange book, an equal emphasis has never been placed in the gaps in the rupee book-whether by the supervisory authorities or by bank managements. The major problem here is the mismatch between relatively short term liabilities and the long maturity asset held, particularly in the SLR portfolio.
- 16. B.S. Murty**, narrating the role of Managers in ALM system stated, "Managers shall feed forward the treasury on clearing positions, especially huge positive and negative positions on huge time basis to facilitate tactical ALM. Deposit acceptance and asset creation are no longer passive dynamic activities. Proposal for large deposit/advances should be put to the ALM test of interest rate risk, liquidity risk that stems from maturity mismatch. Managers ultimately must learn to live with budgets for mismatch not just deposits and advances budget as they are used to know. That is the ultimate role of Managers in the emerging scenario".
- 17. Pavan Sukhdev**, putting the techniques for structure prices of assets And liabilities in a deregulated market describe that "possible and impending deregulation in the Indian context would lead to greater interest rate volatility and lower NIM (net interest margin). Under the changed circumstances, if the banks are to maintain their profitability, efficient techniques of structuring prices of Assets and Liabilities assume significance".
- 18. Dheeraj Vasishth**, describes the cost and benefit of an ALM program. The direct costs associated with ALM are those involving-purchases of development of a software model, hardware cost, and employees cost of the ALM staff. Indirect costs include the time spent

by ALCO (asset-liability committee) and the cost incurred in retrieving data for ALM. The benefit would far offset the other cost as absorbed ALM allows the banks to plan for risks well in advance. The ALM functions if applied properly, would aid the bank management to improve the quality of its earning by conveying stability to its interest margins.

19. Dr. Jayantilal Jain and K. Balachandran, in their study about managing financial risk in banking wrote “the risk dimensions facing the Indian commercial banks have multiplied and magnified with the liberalization of the economy in general and the financial sector. Banks, which were familiar only with credit risk relating to non-payment earlier, are now facing multiple financial risks in the form of credit risk relating to both non-payment and non-performing, risk, interest rate risk, exchange risk, maturing gap risk, technology risk, to only a few vital risks.

20. Dr. Navin Chandra Joshi, describing the need of bank risk management says, “Banks need to deal with credit by fixing' prudential limits on exposure to specified regions, Industry groups, corporate houses and so on so as to have well-diversified portfolio of loan assets. The truly successful banks will be those which in a timely and prudent manner, embracing developments in risk management techniques.”

21. Dr. Jayantilal Jain, General Manager, Indian Banks, Chennai in the research paper on ‘Strategic planning for ATM’ says, “ALM in commercial banks continue to pose serious challenges world over. Going by the spate of bank failures in the United States and Japanese banks facing operating losses due to excess exposure to real estate related lending indicate how far the banks today are vulnerable to changes in market environments and operating environments within the banks. The -picture in India is not very different as there are several banks incurring losses and other under profit pressures. Bankers world over have innovated new financial instruments as a hedging tool.

CHAPTER 3

RESEARCH DESIGN

3.1. Problem statement

Today's era banking has a good opportunity and it is one of the essential part of the society. The NPA of the bank is increasing Because of Miss management of its assets and liabilities, to reduce the NPA and increase the profit, the one of the risk management technique is Asset liability management. The banks in India are not performing well and they are Frauded by its employees only. The cooperative banks in India are the best medium to transfer finance to small customers and poor section of the society. But there is a huge gap in the Bank and rural customer. The Banks should know where they are making mistakes, what are their problems by analyzing their financial statements.

3.2. Need and importance of the study

- Today's market is so competitive that it's important to see its present performance of the bank. This study helps the bank in managing its assets and liabilities and increase its profit.
- This study helps the bank in allocating its resources and how to increase profit.

3.3. Objectives Of the study

- To understand the asset liability management Procedures of the Bank.
- To examine the impact of Asset Liability management on the profitability of the Bank.
- To Know the monitoring control structure of Bank over Asset Liability management.
- To know the present status of Asset liability management of bank.
- To suggest measures for the improvement of Bhatkal Agricultural and Rural Co-Operative Banks.
- To study the Correlation between assets and liabilities of the bank.

3.4. Scope of the study

The study covers the Overall techniques used by the banks to handle its assets and liabilities properly. and the various bodies governing the activities of the cooperative bank. this also covers the what all are the types of assets and liabilities that a bank manages. A commercial bank and cooperative banks are the same, but the functions and the services provided by them are different. so, this study helps to determine the differentiation between these two banks.

3.5. Methodology of the study

Research design the method used in this study is analytical in nature since the data collected are past data and a formulas and equations are used to draw a conclusion. Some statistical tools are used to draw a conclusion.

3.7. Types of data

Primary data

The fresh information collected from the manager and the employees if the bank while doing the project.

Secondary data

The information gathered from company yearly report, magazines websites for the analysis.

3.8 Sources of Data

The research is primarily grounded on secondary data, with addition information gathered from the finance department. The main sources are company's previous year's annual reports and schedules. The data is also collected from various websites like NABARD and previous Reports and literatures.

Data collection method

Secondary Data

- The secondary data has been gathered from the Annual Reports of the BARD Co-operative Bank.
- Data collected from websites
- Data collected from books, Previous project reports, literatures and papers presented by authors.

Statistical tools Used:

1. Time series Analysis
2. Ratio Analysis
3. GAP Analysis
4. Correlation Coefficient
5. SPSS test

3.9 Limitations of the study

1. The project is conducted based on past performance. As the Past performances may not be the indicator of the upcoming Results.
2. The study I have done in BARDC Bank LTD (Head office) at Bhatkal and the existing material in the branch is restricted to the above center only.
3. Performance of the Bank mainly depends on the Government policies in respect of investment and Infrastructure development
4. Privacy of the bank (confidential maintained by the bank)

CHAPTER 4

ANALYSIS AND INTERPRETATION

Data Analysis and Interpretation

4.1. Time series analysis of the Assets and Liabilities of the Bank.

1. Analysis of interest rates fixed by the bank for its deposits

1. 15 to 45 Days : 5.00%
2. 46 to 90 days : 7.00%
3. 91 to 180 days : 8.00%
4. 181 to 365 days : 9.00%
5. 366 days to 2 years : 9.50%
6. More than 2 years : 9.00%
7. For Senior citizen
more than 366 days : 0.50% More

Source: Annual report of the bank

Analysis and Interpretation:

From the above evidence we can say that, the bank gives more importance to median term and short-term deposits. As it is giving more interest to deposits bellow two years and the interest provided by the bank is higher than the commercial banks and nationalized bank. The bank giving 0.5% more interest to senior citizen for the deposits made for more than one year.

2. Analysis of share capital of the bank

Share capital of the bank (in Lac Rs)		
Year	Share Capital	% Increase
2013	372.29	76.23 (overall 5years)
2014	432.57	16.19
2015	495.46	14.54
2016	566.33	14.30
2017	656.11	15.85

Table 4.1. Table showing Share capital of the bank

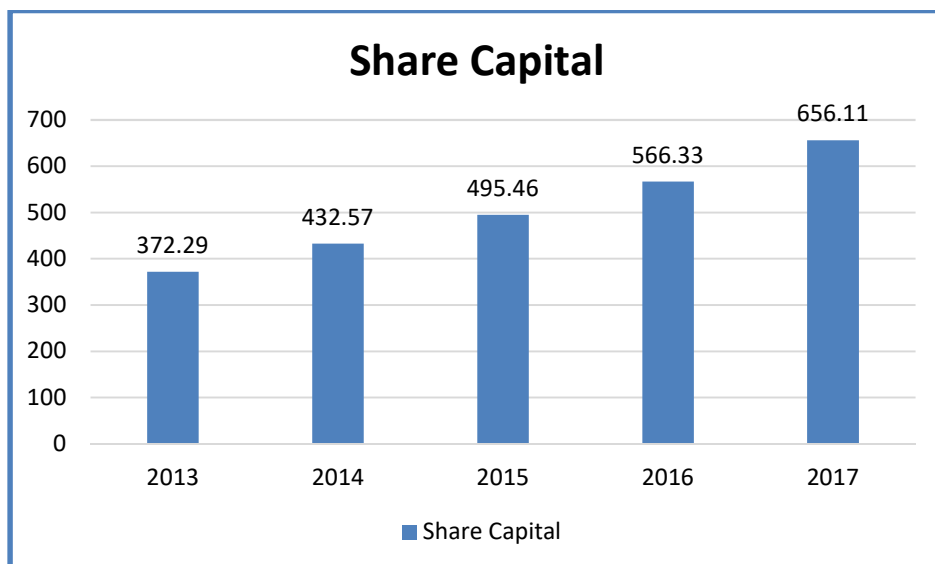


Fig 4.1. Graph showing Share capital of the bank

Analysis:

From the above information is known that the Share capital of the bank has increased from Rs. 372.29 lac in the year 2013 to Rs. 656 lac in 2017. A total overall increase in the share capital is 76.23%.

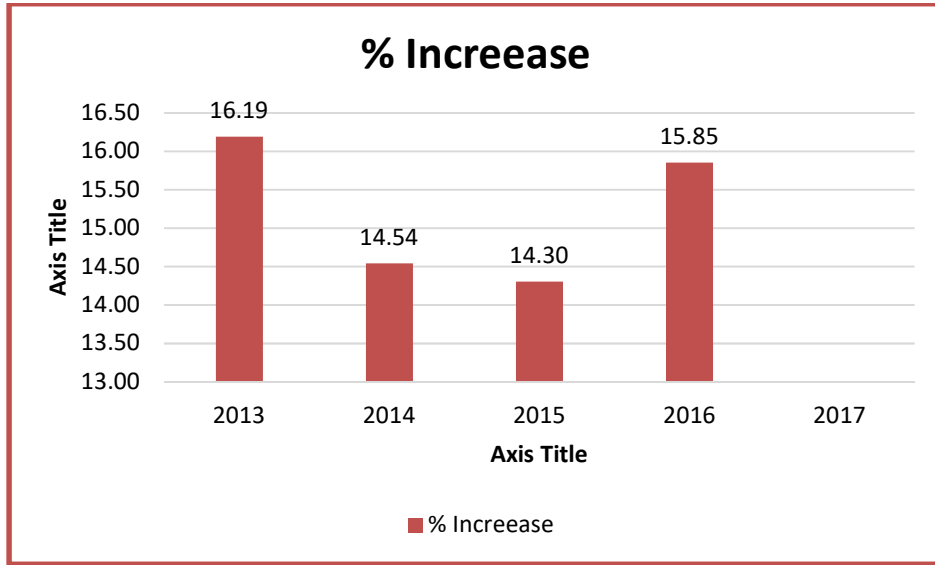


Fig 4.2. Graph showing Percentage increase in share capital of the bank

Source: Annual Report

Interpretation:

The share capital of the bank is increasing year by year. It shows that bank able to get sufficient fund by issuing shares. The percentage increase in the share capital is between 14-16% are constant so it's a good sign for the bank. Bank has managed its share capital efficiently.

2. Year wise profit details of the bank

Year wise profit details of the bank (in Lac Rs)					
Year	2013	2014	2015	2016	2017
Profit	150.20	166.80	176.25	188.73	140.99

Table 4.2. Profits of the bank in different periods

Analysis:

The above information shows that the profit of the bank has increased from Rs. 150.20 lac to Rs. 188.73 lac in the year 2016. but in last year 2017 the profit decreased to Rs. 140.99 lac

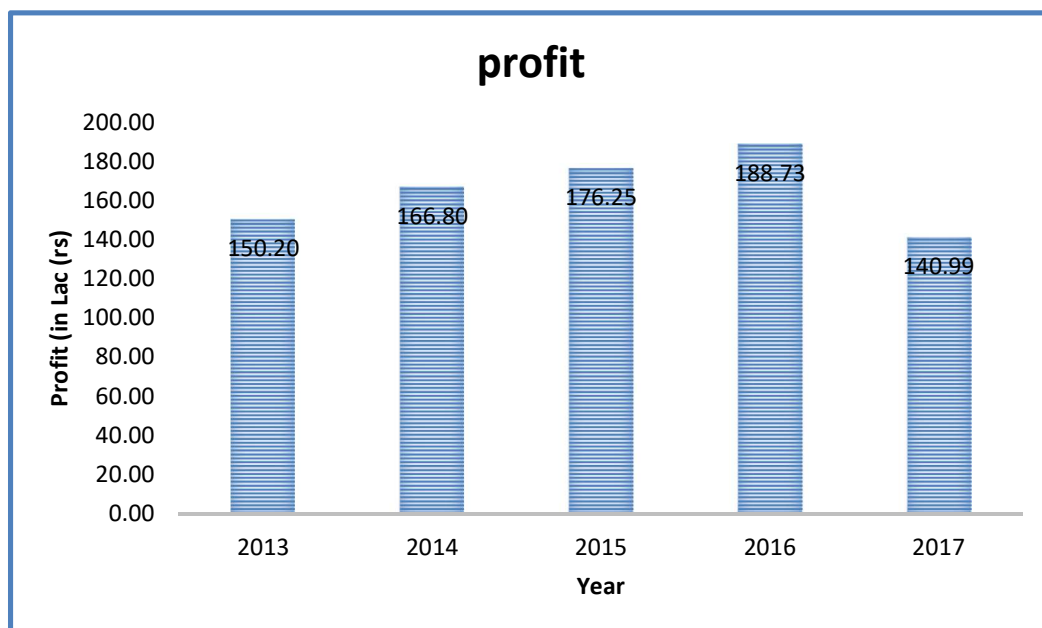


Fig 4.3. Graph showing profit detail

Source: Annual Report

Interpretation:

From the above table up to the year 2016 the profit has good growth but in the last year 2017 the profit decreased. It is not good sign for the bank. it is facing problem in managing the assets.

3. Overall Loan recovery statement of the bank

Year	Sanctioned Amount	Recovered Loan	Remaining Loan	Recovery in %
2013	4635.44	3410.67	1224.77	73.58
2014	5810.96	4532.23	1278.73	77.99
2015	6612.86	5059.3	1553.56	76.51
2016	7019.32	5197.73	1821.59	74.05
2017	7659.59	5063.58	2596.01	66.11

Table 4.3. Table showing Loan recovery statement of the bank

Analysis:

The loan sanctioned by the bank is increasing year by year. In 2013 it was 4635.44 Lac in it increased to Rs. 7659.59 Lac. But the Loan Recovery Performance of the is decreasing year by year.

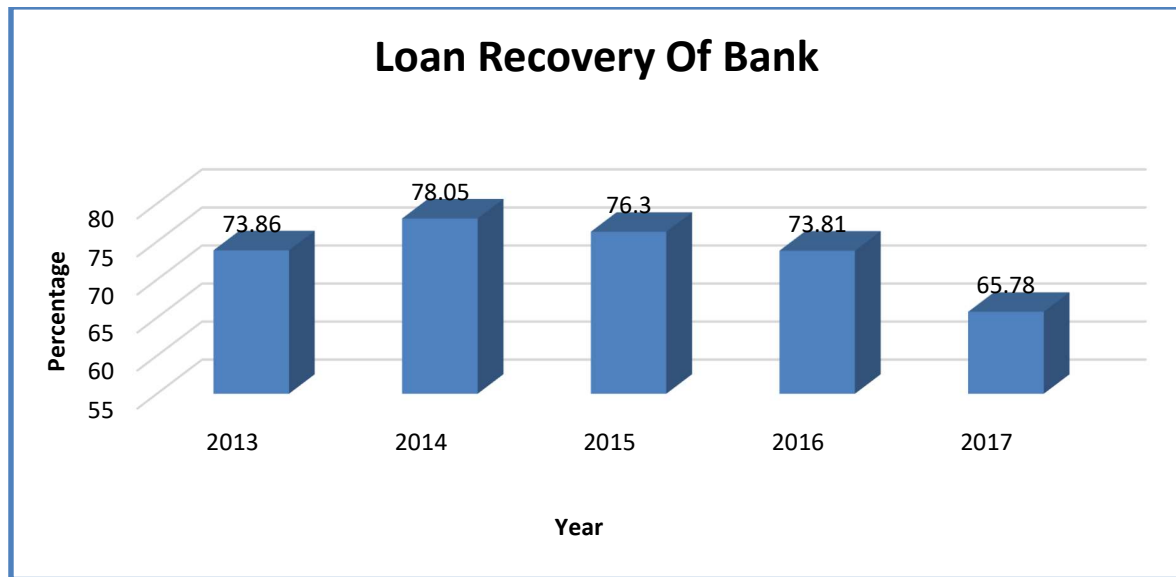


Fig 4.4. Graph showing Loan Recovery Management of the bank

Interpretation:

The bank lending more and more year by year. but the loan recovery performance decreasing year by year. we can say that it is not managing its recovery department effectively.

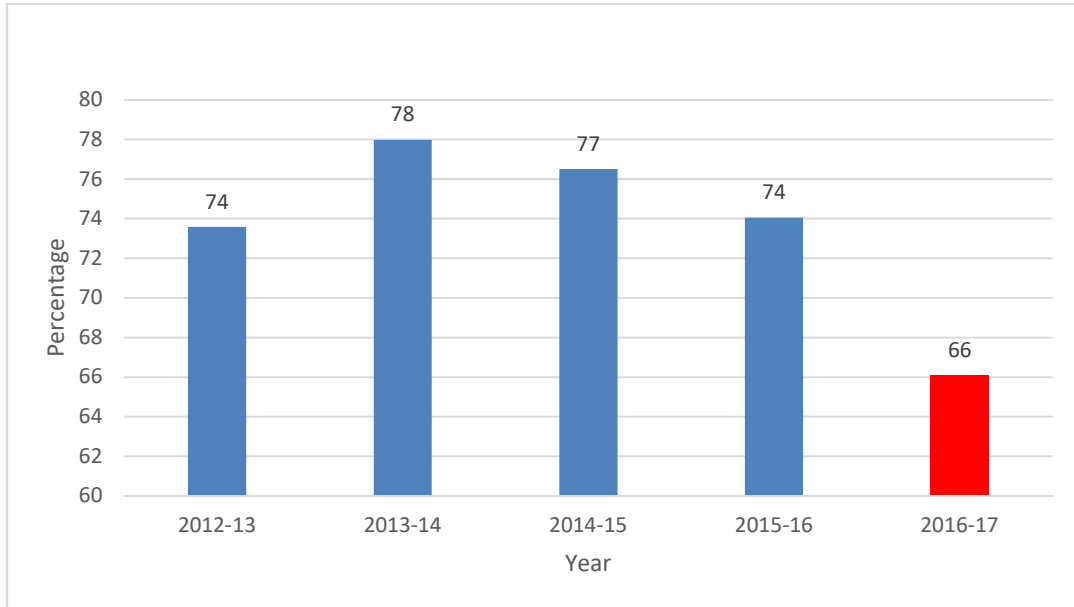


Fig 4.5. Graph showing Loan Recovery Performance of the bank

Source: Annual Report

Interpretation:

The graph says the loan recover capacity of the bank decreasing year by year. In last year 2016-17 it is 66% it is the lowest recovery compared to previous years. The bank need to take corrective actions to recover its loan effectively

4. Agricultural Loan recovery statement of the bank

Year	Sanctioned Amount	Recovered Loan	Remaining Loan	Percentage of Recovery
2013	380.94	268.48	112.46	70.48
2014	393.92	304.02	89.9	77.18
2015	363.31	291.02	72.29	80.1
2016	212.14	173.42	38.72	81.75
2017	373.25	270.92	102.33	72.58

Table 4.4. Table showing Agricultural Loan recovery statement of the bank

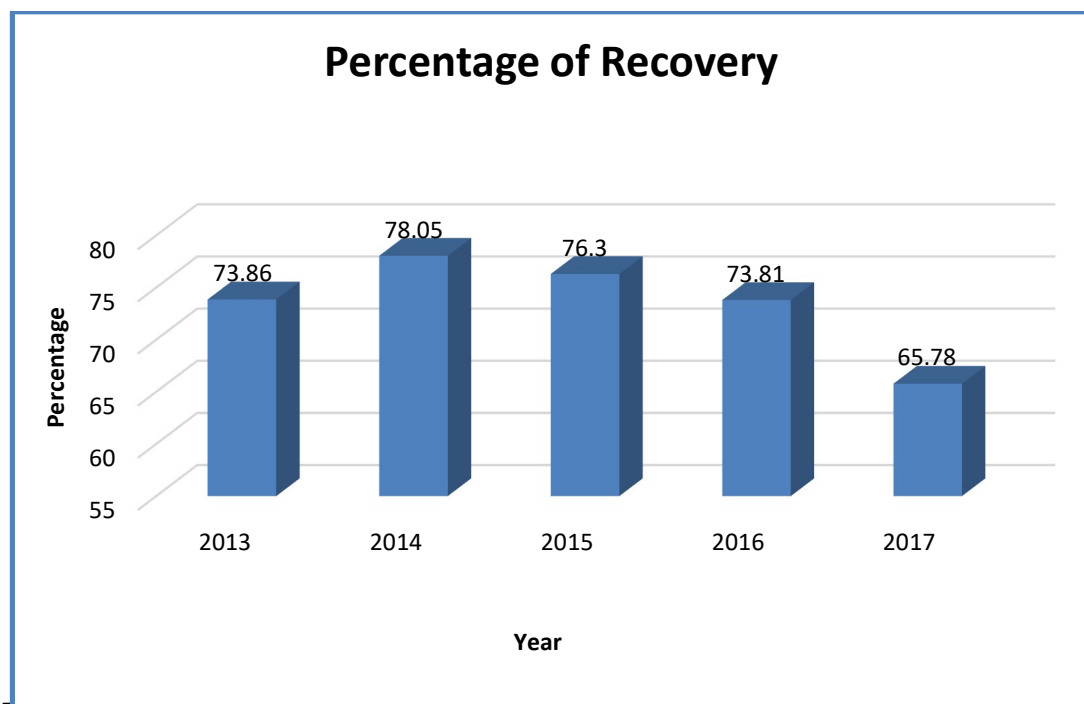


Fig 4.6. Graph showing Agricultural Loan Recovery Management of the bank

Analysis and Interpretation:

From the above details we can say that bank maintaining constant rate of lending to agricultural sector its ranging between Rs 300 lac to rs 400 lac , but only in the year 2016 the lending amount is Rs 212.4 lac. The recovery percentage also good it ranges between 70-80%.

4. Non-Agricultural Loan recovery statement of the bank

Year	Sanctioned Amount	Recovered Loan	Remaining Loan	Percentage of Recovery
2013	4254.5	3142.19	1112.31	73.86
2014	5417.04	4228.21	1188.83	78.05
2015	6249.55	4768.28	1481.27	76.3
2016	6807.18	5024.31	1782.87	73.81
2017	7286.34	4792.66	2493.68	65.78

Table 4.5. Table showing Non-Agricultural Loan recovery statement of the bank

Analysis:

The above table shows that bank has increasing its lending to Non-Agricultural sector year by year. from Rs. 4254.5 lac in the year 2013 to Rs 7286.34 Lac in 2017. but the its going back in the recovery of loan.

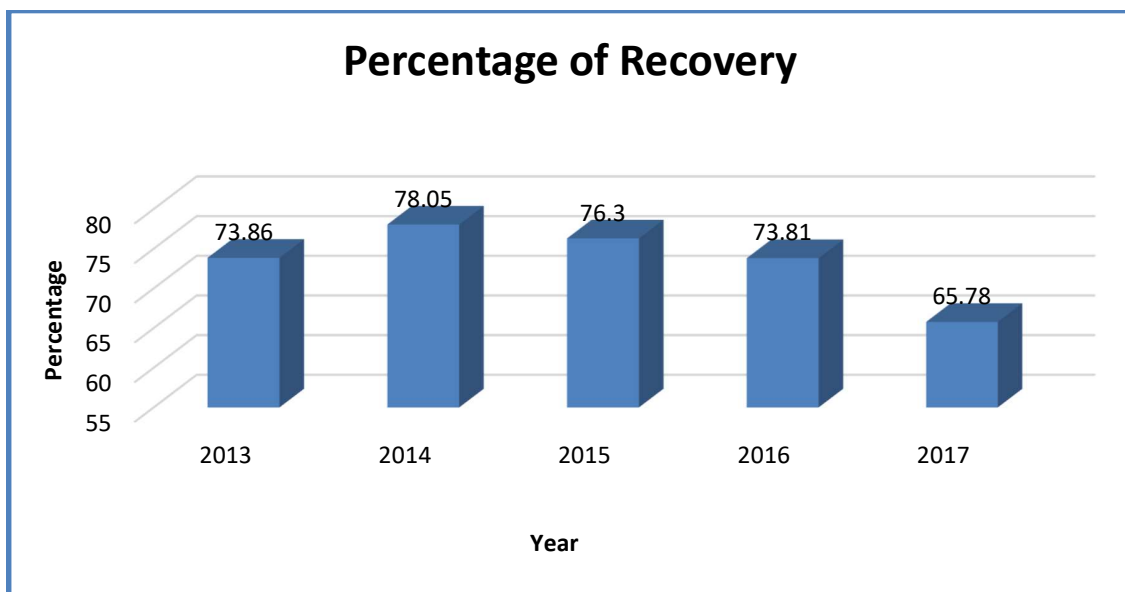


Fig 4.7. Graph showing Non-Agricultural Loan Recovery Management of the bank

Interpretation: From the above details we can say that bank maintaining constant rate of lending to agricultural sector its ranging between Rs 300 lac to rs 400 lac , but only in the year 2016 the lending amount is Rs 212.4 lac. The recovery percentage also good it ranges between 70-80%.

4. Statement of NPA reserves maintained the Bank

Statement of NPA reserves maintained the Bank (in lacs Rs)						
Year	2013	2014	2015	2016	2017	Total NPA Reserves
NPA Reserves	48.09	94.69	102.54	48.54	66.48	662.66

Table 4.6. Table showing NPA Reserves of the bank

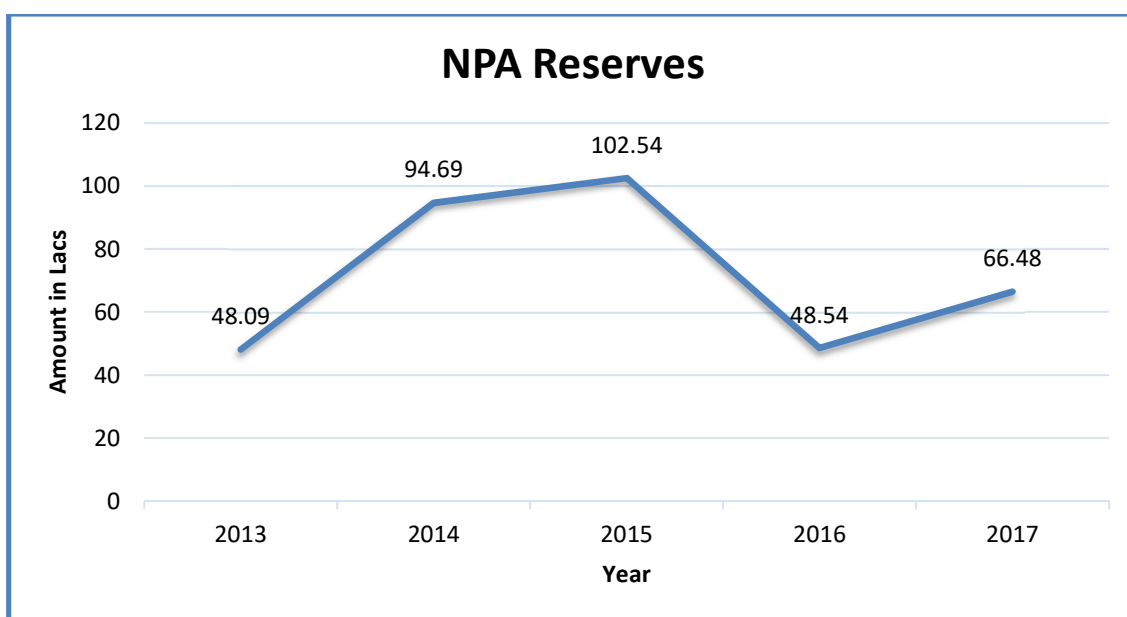


Fig 4.8. Graph showing NPA Reserves of the bank

Source: Annual Report

Analysis and Interpretation: -

NPA is not a good sign for the banks but it is necessary to maintain NPA reserves to meet future Uncertainties. Here we can see that that banks NPA Resaves increasing year by year so it is conceding that bank had bad NPA but, it is managing By Maintaining the Reserves Prescribed by the RBI.

5. Analysis of Deposits collected by bank

Deposits of the bank (in lac Rs)		
year	Deposits	% increase or Decrease
2013	3268.63	89.26
2014	4062.14	24.27
2015	4687.32	15.39
2016	5781.24	23.33
2017	6186.19	7.00

Table 4.7. Table showing Deposits of the bank:

Analysis:

The above tale shows that deposits from customers is increasing year to year. But in last year bank has backward in collecting the deposit it only able to collect 7% of the previous deposits.

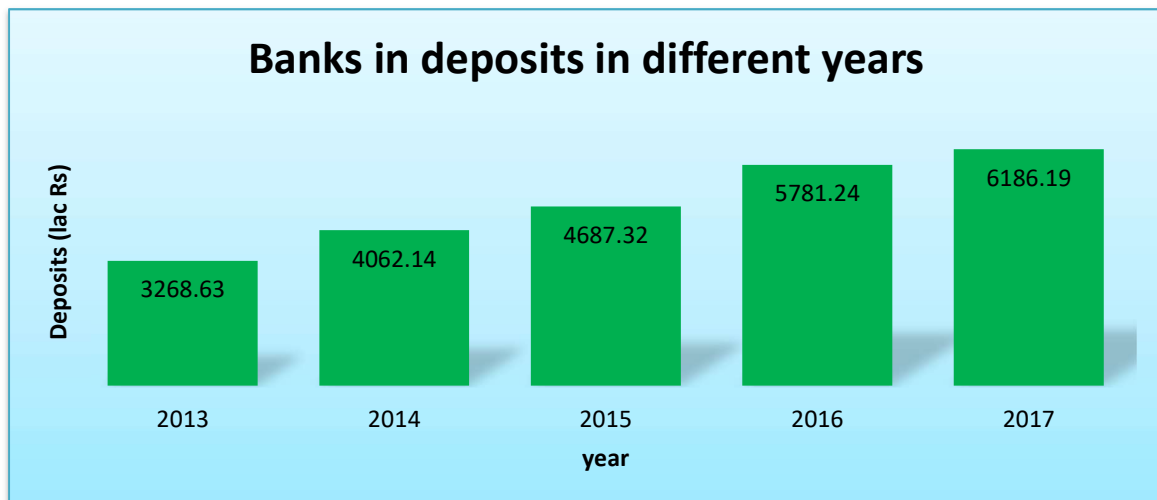


Fig 4.9. Graph showing Deposits of the bank

Source: Annual Report

Interpretation:

The bank's Deposits growing year by year and bank attracting the deposits from the public by giving higher interest.

6. Analysis of Investment made by the bank

Investment made by the bank (in lac Rs)		
Year	2014	% Cange
2014	944.01	
2015	1186.49	25.68617
2016	1834.48	54.61403
2017	2311.84	26.02154

Table 4.8. Tables showing Investment of the bank

Analysis:

The investment of the bank has increased from rs944.01 lac in the year 2014 to rs2311.84 lac. band has good investment policy

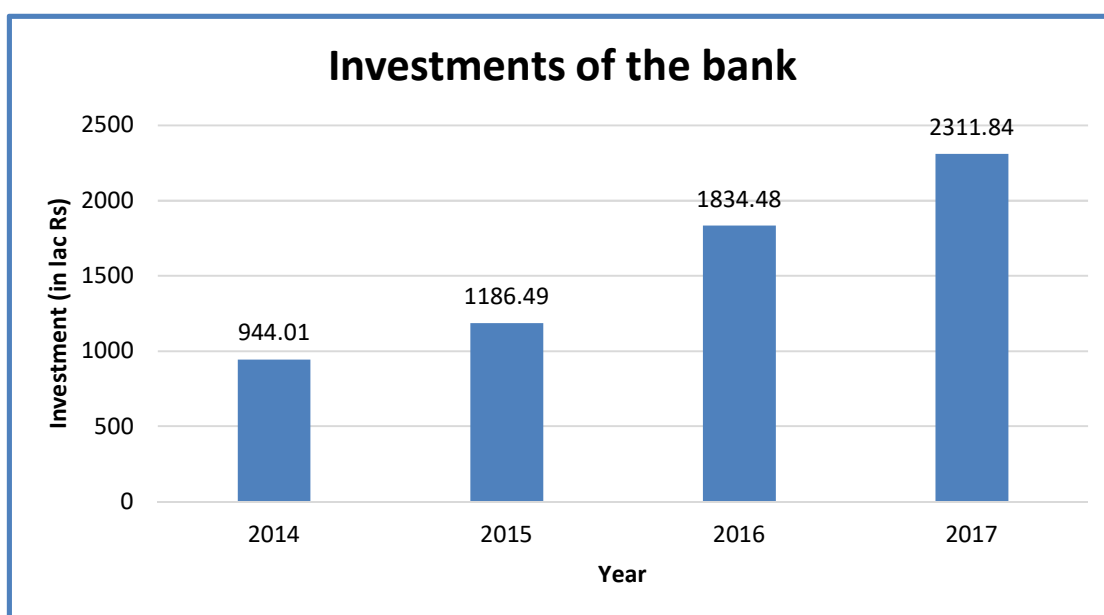


Fig 4.10 Chart showing Investments of the bank

Source: Annual Report

Interpretation:

As we can see that the investment made by the bank in other banks and securities are increasing year by year. Bank has managed its investment effectively.

4.2 GAP Analysis:

Gap management techniques require management to perform a study of the maturities and re-pricing opportunities connected with the bank's interest sensitive assets, money market borrowings and deposits. A bank can hedge itself by making sure for each time period that—

Rate Sensitive Assets (RSA) = Rate Sensitive Liabilities (RSL)

GAP= Rate sensitivity Assets (RSA) - Rate Sensitivity Liabilities(RSL)

GAP analysis of the bank

GAP			
Year	RSA	RSL	GAP
2014	694581142	529426843	165154299
2015	786290288	594760000	191530288
2016	943116346	724709025	218407321
2017	1108636623	866118305	242518318

Table 4.9. Table showing GAP Analysis

Analysis:

The above gap table shows the positive gap. the gap increased from rs 165154299 in 2014 to rs 242518318 in the year 2017.

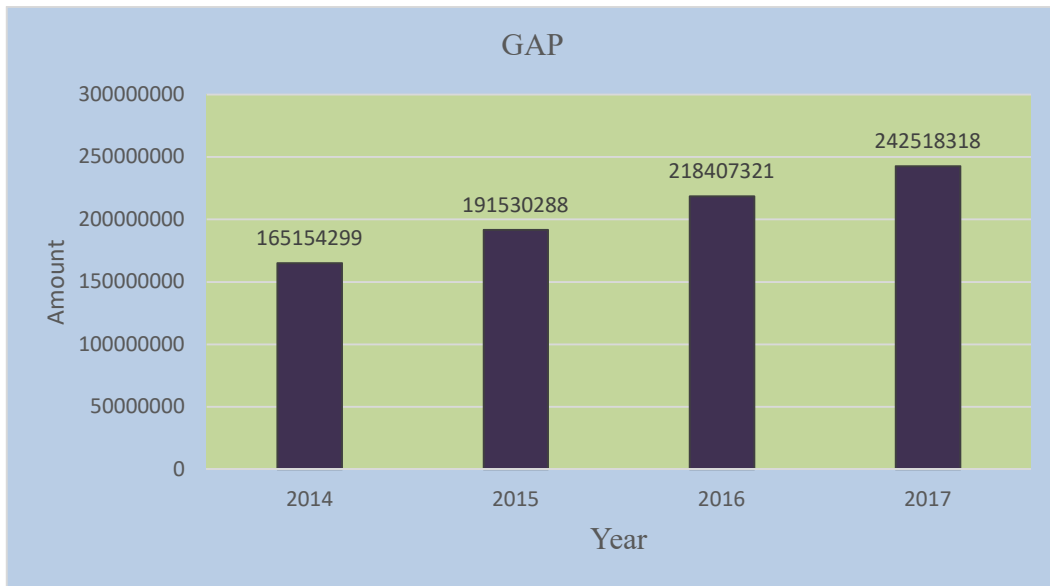


Fig 4.11. Graph Showing GAP of the bank

Source: Annual report

Interpretation:

As we can see there is a positive gap between Assets and Liabilities of the bank. the GAP is increasing year by year. It is a good sign for the bank.

Relative GAP

$$RG = \text{GAP} / \text{Total Assets}$$

Relative GAP			
Year	GAP	Total Assets	RGAP
2014	165154298.7	723594546.7	0.23
2015	191530288.3	815994212.3	0.23
2016	218407320.6	967722632	0.23
2017	242518318	1141874974	0.21

Table 4.10. Table showing Relative gap of the bank

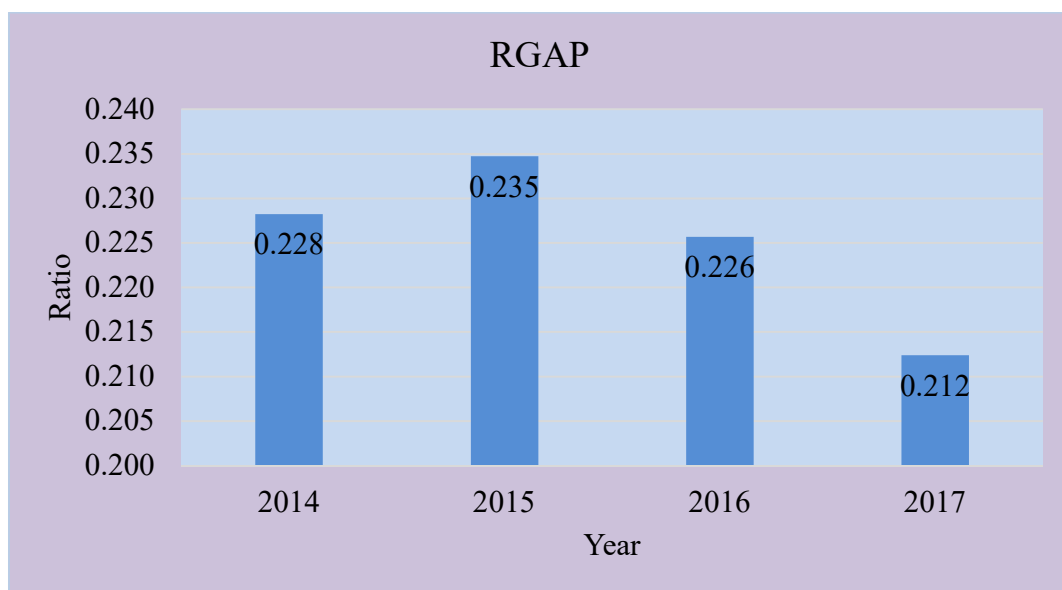


Fig 4.12. Graph showing Relative gap of the bank

Source: Balance sheet

Interpretation:

The ratio between total assets and GAP is Constant over year to year and the bank is maintaining good ratio between its asset and liability.

Net Interest Income(NII)

$NII = \text{Interest Income} - \text{Interest Expended}$

Net interest income			
year	Interest income	Interest expended	NII
2014	93679246	8641101	85038145
2015	98987619	8641101	90346518
2016	116597325	9875405	106721920
2016	119498053	12128699	107369354

Table 4.11. Table showing NII of the bank

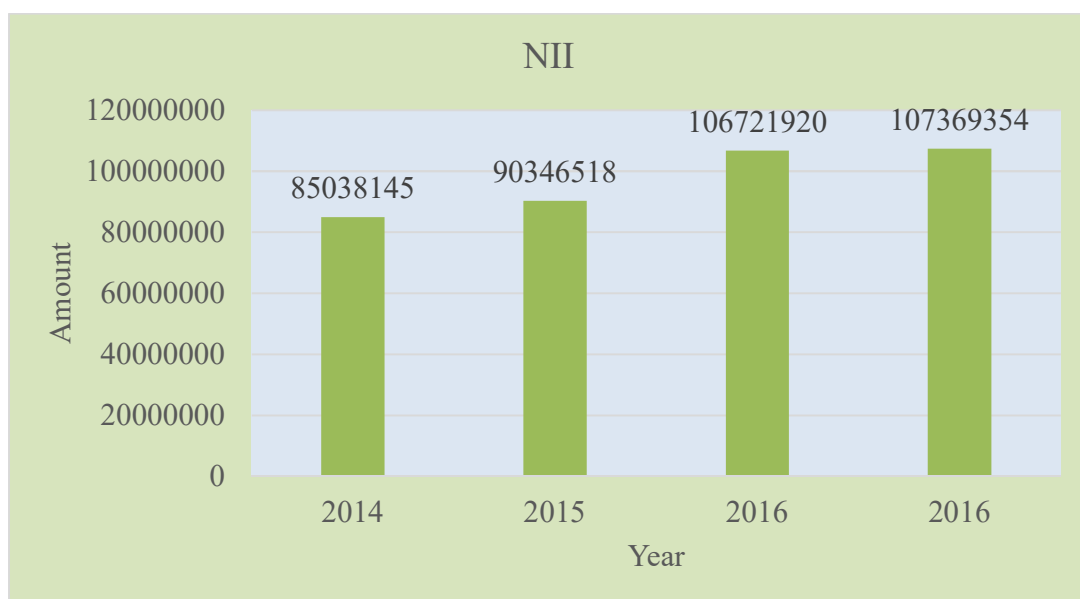


Fig 4.13 Graph showing NII

Source: Profit and Loss account

Interpretation:

Bank has maintained positive gap between Its interest payment and interest earnings and its increasing year by year.

Net Interest Margin (NIM)

$$\text{NIM} = (\text{NII} / \text{Earning Assets}) * 100$$

Net interest margin			
Year	Net Interest Income	Earning assets	NIM
2014	85038145	675998607	12.57
2015	89856867	762291312	11.78
2016	106721920	919160949	11.61
2017	107369354	1082609693	9.91

Table 4.12. Table showing NIM

Analysis:

The NIM of the bank is good but the NIM is decreasing year by year.

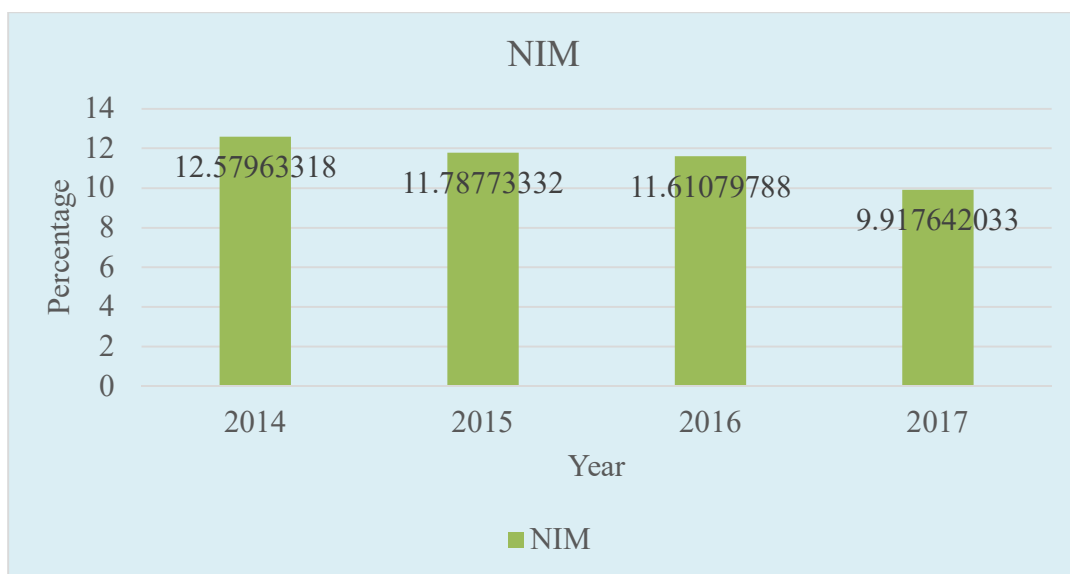


Fig 4.14. Graph showing Net Interest Margin of the bank

Source: Profit and Loss account

Interpretation:

The Earning Assets and earnings of the company if managed by the bank properly. It is a good sign for the bank

4.2 Ratio Analysis

1. Profitability ratio

1. Net Profit to Shareholders fund ratio

Net Profit to Shareholders fund ratio			
Year	Net Profit	Net worth	Ratio
2014	16679827	43256879	0.39
2015	17624997	49546339	0.36
2016	18873100	56632649	0.33
2017	14098747	65611029	0.21

Table 4.13. Table showing Net Profit to Shareholders fund ratio

Source: Annual Report

Interpretation:

Though profit making is not a main objective. it is necessary to survive in the business. The net profit to Net worth ratio of the bank is positive but it is decreasing year by year so bank need take corrective actions

2. Return on Assets

Return on Assets			
Year	Net Profit	Total Assets	Ratio
2014	16679827	723594547	0.02
2015	17624997	815994212	0.02
2016	18873100	967722632	0.02
2017	14098747	1141874974	0.01

Table 4.14. Table showing Return on Assets

Source: Annual report

Interpretation:

The ROA is decreasing year to year. Bank not managing its assets properly as the return decreasing, but the assets are increasing.

3. Interest income on Loans

Interest income on Loans			
Year	Interest income	Loans	Ratio
2014	93679246	575287733	0.16
2015	98987619	635467658	0.16
2016	116597325	725740384	0.16
2017	119498053	839194064	0.14

Table 4.15. Table showing Interest income on Loans

Source: Annual report

Interpretation: The interest earned by the bank is Constant year to year. but in the previous year the interest earning decreased.

2. Efficiency Ratio

Total Expense to Total Income

Total Expense to Total Income			
Year	Total Expenses	Total Income	Ratio
2014	82545411	99225238	0.83
2015	87222881	104847877	0.83
2016	103935211	122887541	0.85
2017	111932176	126084124	0.89

Table 4.16. Table showing Total Expense to Total Income

Source: Annual report

Interpretation:

From the above table we can say that the bank earning more than its expenditure and its increasing year to year.

4.3 Correlation Analysis

1. Correlation Between Net Profit and Total Assets

Correlation Between Net Profit and Total Assets					
Year	Profit (X)	Total Assets(Y)	X ²	Y ²	XY
2014	16679827	723594547	278216639091422	523589068028450000	12069432081580500
2015	17624997	815994212	310640505855011	665846554556057000	14381895234255800
2016	18873100	967722632	356193912669088	936487092388235000	18263926237309000
2017	14098747	1141874974	198774678530982	1303878457069650000	16099006837301900
Total	67276672	3649186365	1143825736146500	3429801172042390000	60814260390447200

Table 4.17. Table showing Correlation between net profit and total assets

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n(\sum x^2) - (\sum x)^2} \sqrt{n(\sum y^2) - (\sum y)^2}}$$

$$r = -0.505$$

Interpretation:

The correlation between Net profit and Total assets are negatively Correlated (-0.51) they are moving in opposite direction. As the Assets decreases the profit increases. The bank should achieve its assets to earn maximum profit.

4.4 Correlation Between Net Profit and Total Assets

Correlation between Net worth to Total Assets					
Year	Net worth (X)	Total Assets(Y)	X ²	Y ²	XY
2014	161780603	723594547	26172963413210900	523589068028450000	117063561884413000
2015	190850403	815994212	36423876451223700	665846554556057000	155732824538126000
2016	220215483	967722632	48494858763538000	936487092388235000	213107506388780000
2017	243933558	1141874974	59503580708782000	1303878457069650000	278541625263956000
Total	816780047	3649186365	170595279336755000	3429801172042390000	764445518075275000

Table 4.18. Table showing Correlation between Net worth and Total Assets

Source: annual report

$$r = 0.98$$

Interpretation:

The correlation between Net worth and Total assets are positively Correlated. They are moving in same direction.

CHAPTER 5

FINDINGS, CONCLUSION AND SUGGESTIONS

5.1 FINDINGS OF THE STUDY

- i. The rate of interest fixed by the bank for its deposits is competitive compared to commercial bank.
- ii. Banks has managed its capital fund effectively. It able to increase capital through shares
- iii. The profit of the bank is also increasing year by year but previous year its profit is less compared to other year.
- iv. Bank is lacking in recovering loans year by year.
- v. Bank is keeping good reserves for NPA to meet future needs.
- vi. Bank has managed deposits effectively. its deposits growing year by year.
- vii. It has good investment procedures. Its investments increasing year by year.
- viii. There is a positive GAP in between the Assets and Liabilities. This is a good sign on the incomes of the bank.
- ix. Bank is making good Net Interest Income and its increasing year by year.
- x. It has good margin on its Assets. It is earning good return on its assets.
- xi. The profitability ratio of the bank is decreasing year by year.
- xii. The interest income earned by the bank on its loan is decreasing year by year
- xiii. The bank has good income ratio over expenditure.
- xiv. The correlation between Net profit and total assets are negative (-0.505)
- xv. The correlation between Net worth and Total Assets are positive

5.2 SUGGESTIONS

Following are the suggestion given to the bank based on the data analysis done through its annual reports.

1. It is recommended that bank should manage the liability [Deposit collected from the customer] By proper distribution into the asset [Loans and advances] of equal maturity
2. The PCARD banks over dependent on external funding agencies has weakened its profitability and stability. The bank should be strengthened financially by mobilizing the deposits from the public.
3. Bank need to have proper loan recovery section as the loan recovery decreasing year to year
4. It should check its outstanding liabilities and assets in every point to manage its liquidity position.
5. The Bank should have proper asset liability management committee, to reprise its assets and liabilities According to the situation.
6. The bank's profitability ratio is decreasing, the banks should take corrective measures to increase the earnings of the proprietor.
7. The bank should adopt the modern banking technologies to face the competition effectively.
8. The product rage of the bank is less so it must introduce new products like locker facility, internet banking etc.

5.3 CONCLUSION

PCARD banks are very important for the overall growth in rural areas and agricultural segment of the country. The BARDCBL has well managed its assets and liabilities from year to year. The bank should increase its employee's knowledge and skills to pastern its activities. There is a massive gap in the farmers and the bank, that's why the farmers not getting an adequate loan and the bank not able to lend agricultural loans to the farmers.

Considering the importance of rural development for the economic growth of the nation, there is a huge need for revising, revitalizing and reviving the organizational and financial frame of the PCARD bank.

Profit is not the core objective of the PCARD bank. They are operating in the rural and agricultural development of the country, they are mainly financed by NABARD and KASCARD Banks.

BIBLIOGRAPHY

i. Articles

1. "A study on Asset liability management on the profitability of banks in India" Author: Dash. M (2013) p15
2. "Portfolio Analysis of Asset and liability management in Small, Medium and Large Sized Banks"
3. "Asset liability management A study of selected urban cooperative banks in Gujarat". Author: Lende, Arun D
4. "A role of primary cooperative Agricultural and Rural Development bank in the context of Inclusive Growth -A Special Study of Sagar taluk in Shimoga Dist in Karnataka" Author: DR D M Basavaraj and Dr. B Ganesh
5. "Interest rate derivatives and asset -liability management by commercial bank" Author: Katerina simons, New England Economic Review, Jan-Feb.1995, p.17+
6. "Asset-Liability Management in Banks: A Dynamic Approach11" Author: Prof. Dr. Kanhaiya Singh, AIMA Journal of Management & Research, May 2013, Volume 7, Issue 2/4, ISSN 0974 – 497
7. "A Bank Asset and Liability Management Model" Author: M I Kusi and W T Ziemba, Published Online: June 1, 1986 VOLUME NO.1, ISSUE NO.10 ISSN 2277-1166
8. Role of co-operative bank in agricultural credit a study based on Chhattisgarh
9. "A study on Asset liability management in Aleem Co-Operative Bank" Author: Ms. S.P Shreekala
10. C.V. Nair, "New economic policy and cooperative banking system", The Cooperator, July 1994, p 8.
11. Ganti Subrahmanyam, "ALM for banks in deregulated environment", Prajnan, VoLXXXIII, NO 1,1994-95.
12. Janardhan Amballa, "Cooperative urban should brace up to Competition" The Cooperator, February 1995, p 454.
13. Suresh P. Prabhu, "The Treasury operations and the problems faced by the UCBs in their function of treasury operation", The Cooperator, August 1996, p 43.

14. A.V. Rajwade, "International banking and asset-liability management", The Journal of Indian Institute of Bankers, October-December 1996, pl69.
15. B.S. Murty, "ALM and Managers Role", The Journal of Indian Institute of Bankers, October-December 1996, pl74.
16. Pavan Sukhdev, "Techniques for structure prices of assets and liabilities in a deregulated market", The Journal of Indian Institute of Bankers, October December 1996, pi77.
17. Dheeraj Vasishth, "Asset liability management in banks", The Journal of Indian Institute of Bankers, October-December 1996, p 179.
18. Dr. Jayantilal Jain and K.Balachandran, "Managing financial risk in banking", The Banker, August 1997.
19. Dr. Navin Chandra Joshi, "Bank risk management is need of the Hour", The Banker, April 1998, p 30.
20. Dr. Jayanti lal Jain, "Strategic planning for ALM environment", Journal of National Federation of Urban co-operative Banks, 2000, p 173.
21. Dr. Mrs. P.P. Koli, "Emerging Environment and urban cooperative banks", Cooperative in new millennium, 2001, p 13.
22. Dr. P. Rajendran, "Developing in cooperative banking", Cooperative in new millennium, 2001, p 141.

ii. BOOKS:

1. Credit Risk Management - A Practical Approach, Arundeeep and N.S. Toor, Skylark Publications, New Delhi, First edition 2002.
2. Cost Management of Deposits-A study of Urban Banks, Dr. Shirish R. Kulkami, Anmol Publications Pvt. Ltd., New Delhi, first edition 2000.
3. Banking in the New Millennium - Issues, Challenges and Strategies, S. Gurusawmy, Kanishaka Publications, 2001 New Delhi.
4. Management of Banking and Financial Institutions by P Mohan Rao and T.K. Jain, deep & deep publications, 1999.
5. Managing Indian Banks - The Challenges ahead, Vasant C. Joshi and Vinay V. Joshi, 1999.













**ACHARYA INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MBA**

INTERNSHIP WEEKLY REPORT (16MBAPR407)

Name of the Student : Naveen Subray Naik
Internal Guide : Prof. Dr. G Ramanaiah
USN No : 1AY16MBA45
Specialization : Core Finance
Title of Project : A study on “Effective Asset Liability management of Bhatkal Agriculture Rural Development Cooperative Bank Limited”

Company Name: Bhatkal Agriculture and Rural Development Cooperative Bank Limited


Week	Work undertaken	External Guide Signature	Internal Guide Signature
15-01-2018 to 19-01-2018	Introduction about BARDCL Bank and its operation		
22-01-2018 to 26-01-2018	Learning about different operations and Products by BARDCL Bank Limited		
29-01-2018 to 02-02-2018	Orientation and Gathering Information about the company		
05-02-2018 to 09-02-2018	Analysis of Market Position of the company		
12-02-2018 to 16-02-2018	Research problem Identification		

19-02-2018 to 23-02-2018	Preparation of the research instrument for data collection		
26-02-2018 to 02-03-2018	Theoretical background of the study		
05-03-2018 to 09-03-2018	Data collection and Data analysis		
12-03-2018 to 16-03-2018	Interpretation of the data gathered during the survey		
19-03-2018 to 23-03-2018	Final report preparation and submission		




Company seal

GENERAL MANAGER
B.A.R.D.C. BANK LTD.
H.O. BHATKAL


Head of the Department
Department of MBA
College seal
Acharya Institute of Technology
Hebbalahalli, Bangalore-560 1

