

**UNIVERSITY GRANTS COMMISSION  
WESTERN REGIONAL OFFICE  
GANESHKHIND, PUNE – 411 007.**

**PROFORMA FOR SUBMISSION OF INFORMATION AT THE TIME OF SENDING  
FINAL REPORT OF THE WORK DONE ON THE PROJECT**

- |  |           |   |
|--|-----------|---|
| <b>1. NAME AND ADDRESS OF THE<br/>PRINCIPAL INVESTIGATOR</b>                       | <b>:-</b> | <b>Mr. Jhala N. K.</b>  |
| <b>2. NAME AND ADDRESS OF THE<br/>INSTITUTION</b>                                  | <b>:-</b> | <b>Shri M. P. Shah Commerce College,<br/>Surendranagar</b>  |
| <b>3. UGC APPROVAL NO AND DATE</b>   | <b>:-</b> | <b>23-099/12(WRO), Dtd. 05.02.2013</b>  |
| <b>4. DATE OF IMPLEMENTATION</b>   | <b>:-</b> | <b>05.02.2013</b>   |
| <b>5. TENTURE OF THE PROJECT</b>   | <b>:-</b> | <b>5<sup>TH</sup> February'2013 to 31<sup>st</sup> March'2014</b>   |
| <b>6. TOTAL GRANT ALLOCATED</b>  | <b>:-</b> | <b>Rs. 84,000/-</b>   |
| <b>7. TOTAL GRANT RECEIVED</b>   | <b>:-</b> | <b>Rs. 64,000/-</b>   |
| <b>8. FINAL EXPENDITURE</b>  | <b>:-</b> | <b>Rs. 65,677/-</b>   |
| <b>9. TITAL OF THE PROJECT</b>   | <b>:-</b> | <b>“A Study of Non-Performing Assets of<br/>Co-Operative Banks of Surendranagar<br/>District (Gujarat)”</b> |
| <b>10. OBJECTIVE OF THE PROJECT</b>  | <b>:-</b> | <b>As Per Attached Details</b>  |
| <b>11. WHETHER OBJECTIVES WERE<br/>ACHIVED (GIVE DETAILS)</b>                      | <b>:-</b> | <b>Yes (As Per Attached Details)</b>  |
| <b>12. ACHIEVEMENTS FROM THE<br/>PROJECT</b>                                       | <b>:-</b> | <b>As Per Attached Details</b>  |
| <b>13. SUMMARY OF THE FINDINGS<br/>(IN 500 WORDS)</b>                              | <b>:-</b> | <b>As Per Attached Details</b>  |
| <b>14. CONTRIBUTION TO THE SOCIETY<br/>(GIVE DETAILS)</b>                          | <b>:-</b> | <b>As Per Attached Details</b>  |
| <b>15. WHETHER ANY PH.D ENROLLED/<br/>PRODUCED OUT OF THE PROJECT</b>              | <b>:-</b> | <b>No</b>   |
| <b>16. NO. OF PUBLICATIONS OUT OF<br/>THE PROJECT<br/>(PLEASE ATACH RE-PRINTS)</b> | <b>:-</b> | <b>No</b>   |

**(PRINCIPAL INVESTIGATOR)**

**(REGISTRAR/PRINCIPAL)**

## **10. OBJECTIVES OF THE PROJECT :**

### **❖ Main Object :**

To analyze the NPA and its impact on profitability of selected Co-operative banks in Surendranagar District, Gujarat (India).

### **❖ Sub ordinate Objectives :**

- a) To know the banking industry in India.
- b) To know the concept of NPA.
- c) To know the reasons for NPA.
- d) To know the impact of NPA.
- e) To know NPA standards of RBI.
- f) To evaluate NPA ( Gross NPA & Net NPA ) of selected Banks .
- g) To evaluate the comparative ratios of the selected banks with concerned to the NPA.
- h) To give suggestions to overcome the problem of NPA.

## **11. WHETHER OBJECTIVES WERE ACHIEVED:**

Objectives of the Project were achieved. It also analyze and achieved as under: .

Analyze the NPA and its impact on profitability of selected Co-operative banks in Surendranagar District, Gujarat (India).

- a) Get an overview of the banking industry in India.
- b) Get the whole concept of NPA and attempted to know the reasons for NPA.
- d) know the impact of NPA.
- e) know NPA standards of RBI.
- f) Evaluate NPA ( Gross NPA & Net NPA ) of selected Banks .
- g) Evaluate the comparative ratios of the selected banks with concerned to the NPA.
- h) Made suggestions to overcome the problem of NPA.

## **12. ACHIEVEMENTS FROM THE PROJECT:**

:

1) Both the Co-operative banks should adopt the modern methods of banking like internet banking, credit cards, ATM, etc.

2) Both the co-operative banks should plan to introduce new schemes for attracting new customers and satisfying the present one.

4) The co-operative banks should improve the customer services of the bank to a better extent.

5) More careful and responsible scrutiny and appraisal is required among the cooperative Banks while sanctioning loans to different sectors.

6) There is a need of regular and effective follow up with borrowers about loan recovery

## **13. SUMMARY OF THE FINDING:**

### **INTRODUCTION:**

The study as to come out with important findings drawn on the basis of the research work. As such this work, major findings and conclusions drawn based on the research work are as under

Many banks are facing the problem of nonperforming assets which hampers the business of the banks. Due to NPA the income of the banks is reduced and the banks have to make the large number of the provisions that would curtail the profit of the banks and due to that the financial performance of the banks would not show good results. The main aim behind making this report is to know how Public Sector Banks are operating their business and how NPA play its role to the operations of the Public Sector Banks. The report NPA are classified according to the sector, industry and state and district wise. The present study also focuses on the existing system in Surendranagar District in Gujarat(India) to solve the problem of NPA and comparative analysis of to understand which Co-operative bank is playing what role with concerned to NPA.

The present research work has been presented in various eight chapters. The summary of each chapter has been given below.

### **Chapter 1**

#### **“An Overview of the Banking Sector in India”**

This chapter presents Introduction, Origin of the word Bank, Definition of Bank, Features of Banking, History of Indian Banking System, Banking System India, Overview of Indian Banking System, Growth of Banking Industry, Types of Banks in India, Role of Banks in India, Functions of modern Bank, Future of Indian Banking, Services of Indian Bank, E- Banking, Problems & Prospects of Indian Banks, Conclusion.

### **Chapter 2**

#### **“Conceptual frame work of NPA management”**

This chapter presents Introduction, Meaning and definition of NPA, Factors contributing to NPA, Reasons for NPA, Early warning signals for NPA, Impact of NPA, Management of NPA, Remedies Available for NPA, Recommendations of the Narsimham Committee, RBI Guidelines for NPA Recognition, Why and How does an account become an NPA Treatment of account as NPA, Income Recognition, Provisioning norms for NPA, conclusion.

## **Chapter 3**

### **"Research Methodology"**

This chapter presents Introduction, The title of the study, Relevance of the study, Scope of the study,

#### **Objectives of the study**

Objective is a base for any work. No work is started without any objective. The present research work has been undertaken keeping in view the following objectives.

##### **❖ Main Object :**

To analyze the NPA and its impact on profitability of selected Co-operative banks in Surendranagar District, Gujarat (India).

##### **❖ Sub ordinate Objectives :**

- a) To know the banking industry in India.
- b) To know the concept of NPA.
- c) To know the reasons for NPA.
- d) To know the impact of NPA.
- e) To know NPA standards of RBI.
- f) To evaluate NPA ( Gross NPA & Net NPA ) of selected Banks .
- g) To evaluate the comparative ratios of the selected banks with concerned to the NPA.
- h) To give suggestions to overcome the problem of NP

## **Chapter 4**

### **❖ “ Analysis of Non-Performing Assets of Selected Banks”**

This chapter is completely based on the secondary information collected through published annual reports of the selected banks. The collected data is analyzed by preparing tables and ratios has used to know nonperforming assets of the selected banks during the study period. Ratios like gross NPA ratio, Net NPA ratio, problem assets ratio, total provision ratios, doubtful assets ratio, loss assets ratio, and depository safety ratio etc.

### **❖ "Comparative Analysis of nonperforming assets "**

This chapter is also based on secondary data collected through published annual reports of the selected banks. Comparative analysis of different ratios related to NPAs of selected banks has been done with line chart. It covers the broader hypothesis testing and conclusions have been drawn on the basis of the analysis.

### ❖ “Impact of NPA on Profitability”

This chapter includes introduction, Correlation of NPA with ROA of Selected banks, Correlation of GNPA with ROA of selected Banks, Correlation of NNPA with ROA of selected Banks. It covers the broader hypothesis testing and conclusions have been drawn on the basis of the analysis.

## Chapter 5

### ❖ "Summary, Findings and Suggestion"

This chapter includes summary of each chapter and findings of the study and at last suggestions for improvement in accounting practices in business.

## MAJOR FINDINGS OF THE STUDY:

1) The growth of The Dhrandhra People’s cooperative bank and The Limbadi Vibhagiya Nagarik cooperative has increased significantly. For example, Surendranagar district is having more number of Co-operative banks.

2) The growth of membership has increased significantly for the period 2005-06 to 2012-13 in Surendranagar Districts as specially for two Coopearative banks like as The Dhrandhra People’s cooperative bank and The Limbadi Vibhagiya Nagarik cooperative bank. Higher growth rate of membership is found in The Dhrandhra People’s cooperative bank This clearly indicates the growth of membership in all the sample co-operative banks is numerically high, which would shed on the economic benefit to the members.

3) The size of the loans and advances of Co-operative Banks of The Dhragandhra People’s cooperative bank and The Limbadi Vibhagiya Nagarik cooperative bank in Surendranagar district is also increased consistently for the study period.

4) The total deposits of sample The Dhragandhra People’s cooperative bank and The Limbadi Vibhagiya Nagarik cooperative bank increased significantly for the study period in Surendranagar districts. For example, The Dhragandhra People’s cooperative bank recorded highest growth of deposits (31.86%) compared to The Limbadi Vibhagiya Nagarik cooperative bank. Deposits mobilization is fairly good and moving an upward trend year by year. This clearly indicates that all sample Co-operative banks better performed in the deposit mobilization.

5) The share capital of sample co-operative banks is increased consistently during the study period in the district. The annual Growth rate in share capital of The Dhragandhra People's cooperative bank and The Limbadi Vibhagiya Nagarik cooperative bank in Surendranagar district for per cent, 12.65 per cent and 12.76 per cent , respectively during the period 2005-06 to 2011-12.

6) The working capital among sample co-operative banks are increased significantly in the study area.

7) The reserve and own funds of sample co-operative banks is increased consistently in the study area.

8) The loans and advances recovery is satisfactory. Hence, Both the co-operative banks are gaining net profit during the study period. The Loans and advances are found highest average in The Dhragandhra People's cooperative bank, Dhrangandhra. Both the sample of Co-operative Banks has experienced a continuous growth in their Loans and advances.

9) The net profit of both the sample co-operative banks is increasing during the study period. For example, the high growth rate of net profit earned by the Lambadi Vibhagiya Nagarik Co-operative bank is 78.23% in year 2005-06 to 2011-12 and the lowest growth rate found in The Dhragandhra People's Co-operative Bank in year 2005-06 to 2011-12.

10) There is a very simple procedure followed by sample co-operative banks for advancing loans to the members.

11) Easy repayment and less formality are the main factors determining customer's selection of loans.

12) Quality of services provided by the staff of both sample co-operative banks is satisfactory because bank is catering to a small segment only and the customers are properly dealt with them.

13) Customers are satisfied with the mode of repayment of installments.

14) Average time for processing of loan is less which is normally seven day.

15) The members of both sample Co-operative banks would like to refer the bank to their friends and relatives which shows that they are satisfied from the services and lending practices of the bank.

## **SUGGESTIONS:**

The suggestions emerging out of the present study are given as under:

- 1) Both the Co-operative banks should adopt the modern methods of banking like internet banking, credit cards, ATM, etc.
- 2) Both the co-operative banks should plan to introduce new schemes for attracting new customers and satisfying the present one.
- 3) Both the co-operative banks should plan for expansion of branches.
- 4) The co-operative banks should improve the customer services of the bank to a better extent.
- 5) More careful and responsible scrutiny and appraisal is required among the cooperative Banks while sanctioning loans to different sectors.
- 6) There is a need of regular and effective follow up with borrowers about loan recovery.
- 7) More detailed information about the borrowers is to be obtained in terms of family background.
- 8) It is necessary for reviewing the advances in time and taking appropriate immediate action.

## **CONCLUSION**

The co-operative banking sector is nurtured in a manner that deposit or interest and the public interest at large are protected. The role of Reserve Bank of Indian could, thus, be to frame a regulatory and supervisory regime that is multilayered to capture the heterogeneity of the sector adequate implement policies that would provide adequate elbowroom for sector to grow in a non-disruptive manner.

They should recognize the systematic impact that the inefficient functioning of the entities in the sector could have. Consequently, it would be in the interest of the sector if they support, facilitate and empower the Reserve Bank of India to put in place mechanisms and systems that would enable these co-operative banks. These banks operate mainly for the benefit of rural areas, particularly the agricultural sector. They are the main source for the institutional credit to farmers, cottage and small scale industries and the public.

#### **14. CONTRIBUTION TO THE SOCIETY:**

(a) The researcher had attempted to make aware of N.P.A.to the stakeholders of the co-operative sector of Surendranagar Distict's Tehsil area.

(b) Useful hints and kind suggestions provided to small investors.

(c) Trustworthiness is lifeline of co-operative banks.

(d) Securitisation Act for recovery of advances be well inform and implemented to loan borrower.

**Annexure-III**

**FINAL REPORT**



**Minor Research Project: Title of Project:**

**“A Study of Non-Performing Assets of Cooperative Banks of Surendranagar District” (Gujarat State)**

U.G.C Minor Research Project F.No.23-099/12(WRO), Dated. 05-02-2013

**Work Done : 05-02-2013 to 05-02-2015**

**Principal Investigator**

**Name:Mr. Jhala N. K.**

**Designation: Associate Professor**

**Qualification: M.Com**

**Sex: Male Category: General**

**Title of Project:**

**“A Study of Non-Performing Assets of Co-operative Banks of Surendranagar District” (Gujarat State)**

**Institute:**

**Shree M.P.Shah Commerce College  
Surendranagar Dist. Surendranagar State: Gujarat (India)**

**To**

**UGC: Western Regional Office  
Deputy Secretary  
Ghaneskind, Poona University Campus  
Poona – 411007 (MAHARASHTRA)**

# Minor Research Project: **Final Report**

## **Project title “A Study of Non-Performing Assets of Cooperative Banks of Surendranagar District” (Gujarat State)**

### **1. Introduction**

The word NPA is not something new to the bankers. It is regular but disguised loan asset. As everyone knows, a portion of assets may become NPA .An asset becomes non-performing when it ceases to generate income for the bank. The serenity of the incidence of nonperforming assets in Indian public sector banks, noted in the early 1990s, raised a severe hue and cry in various quarters. In fact the problem started much earlier , which became evident from continued recapitalization of many PSBs since 1985-86.chaterer by the root cause, malfunctioning of the PSBs increased by the end of the 1980s.This led to the setting up of the Narasimbham Committee (1991) which in fact identified NPA as one of the possible cause of the malfunctioning of the PSBs .In order to quantify the NPA problem, Narasimham committee (1991) made it mandatory on the part of the banks to publish annually the magnitude of NPA. NPA are those categories of assets (advances, bills discounted , overdraft, cash credit etc.) For which any amount remains due for a period of 180 days. Accordingly, as from the march, 31st 2004, NPA is an advance where:

1. Interest and/or installment of principal remain overdue for a period of more than 90 days in respect of term loans.
2. The account remains out of order for a period or more than 90 days, in respect of an overdraft/ cash credit(OD/CC)
3. The bill remains overdue for a period of more than 90 days ,in case of bills purchased and discounted.
4. Interest and/or installment of principal remain overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purpose and
5. Any amount to be received remains overdue for a period of more than 90 days.

In Gujarat state since last decade number of cooperative banks went into liquidation due to heavy amount of Non Performing Assets. The lack of trust from the public for

cooperative banks are really a solid matter for Cooperative Financial Sector. The same infection is also affected to cooperatives banks in Surendranagar District of Gujarat. In Surendranagr district leading cooperative banks such as people cooperative bank of surendranagr also went into liquidation. In the context rest cooperatives banks in Surendranagr district like dhrangdhrapeople s cooperative banks and NagarikSahakari Bank of Limbdi, the study of NPA of both banks would be a very interesting and useful research work for Cooperative banking sectors.

## 2. Review of Literature

Many studies have been conducted by researchers on NPAs in banking Industry. The researcher has made attempts to present a brief review of literature available, which are published in the form of research articles and technical papers published in the journals, magazines and websites in the related area.

**Amandeep (1991)** attempted to estimate profit and profitability of Indian Nationalized banks and to study the impact of priority sector lending, credit policies, geographical expansion, industrial sickness, competition, deposit composition , establishment expenses, ancillary income, s[read and burden on bank profitability. For this purpose trend analysis, ratio analysis and regression analysis were used.

**Swamy (2001)** studied the comparative performance of different bank groups since 1995-96 to 1999-2000 . An attempt was made by researcher to identify factor which could have led to changes in the position of individual banks in terms of their share in the overall banking industry. He analysed the share of rural branches, average branch size , trend in bank's profitability , share of public sector assets , share of wage in expenditure , provision and contingencies, net NPA in net advances , spread , has been calculated . He conducted that in many respects nationalized public sector banks much better than private banks, even they are better than foreign banks.

**Rituparna Das (2002)** performed a research on Managing the Risk of NPA in the Small Scale industries in India. IN this article the researcher tries to Seek a solution to the problem of NPA in the small Scale industries under the present circumstances of banking and insurance working together under the same roof. What is stressed in this article is pressing need of the small scale enterprenear for becoming aware and educated in modern business management holding a professional attitude rational decision making and banks have to facilitate that process as a part of the credit policy sold by them.

**Prashanth K. Reddy (2002)** in his research paper on the topic , “ A Comparative Study of NPA in India in the Global context “ examined the similarities and dissimilarities , remedial measures. Financial Sector reform in India has progressed rapidly on aspects like interest rate deregulation , reduction in reserve 78 requirements , barriers to entry,

prudential norms and risk – based supervision. The study reveals that the sheltering of weak institutions while liberalizing operational rules of the game is making implementation of operational changes difficult and NPA problem would have to span the entire gamut of judiciary, polity and the bureaucracy to be truly effective. This paper deals with the experiences of the reforms on the level of NPA and suggests mechanisms to handle the problem by drawing on experiences from other countries.

- **Dr. Amitabh Joshi (2003)** conducted a survey on “ Analysis of NPA of IFCI ltd.” The study found that profitability and viability of development financial institutions are directly affected by quality and performance of advances. The basic element of sound NPA management system is quick identification of Non- performing advances their containment at minimum levels and ensuring that their impingement on the financial is at low level . Excessive reliance on collaterals has led institutions to long drawn litigations and hence it should not be sole criteria for sanction. Banks should manage their exposure limit to few borrowers and linkage should be placed with net owned funds for developing control over high leverages of borrower level. Study also revealed that exchange of credit information among banks would be immense help to them to avoid possible NPAs. Management information system and market intelligence should be utilized to their full potential.
- **Chandrashekhar and Ray (2005)** show that PSBs have increasingly opted for investment in risk- free returns of government securities , their share in total earning assets rising from 26 to 33 percent during the 21st century. But there is no doubt that enforcement of stringent prudential norms , capital adequacy stipulations, setting up of the Board for financial Supervision (BFS) and pressure to reduce NPAs have made banks so risk- averse that they have reduced their exposure to private loans with even a modest risk of non- recovery .
- **TamalDatta Chaudhuri (2005)** examined the “ resolution Strategies for maximizing value of NPAs” . The article indicates that defining capital adequacy adversely affects shareholder value and restricts the ability of the bank to access the capital market for additional equity to enhance capital adequacy . So, if a resolution strategy for recovery of dues from NPAs is not put in place quickly and efficiently ,these assets would deteriorate in value over time and little value would be realized.
- **Isaac k. Otchere (2005)** conducted a study on the performance of privatized banks in middle and low income countries shows mixed results by “ Competitive and value effects

of bank privatization in Developed countries .” The paper observed that private banks in developed countries have experienced significant improvements in operating performance. The improvement in performance . The improvement in performance remains significant after controlling for persistence in bank performance . A comparison of the performance of privatized banks in developed and developing countries suggests that privatization has encouraged excessive risk taking among privatized banks in developing countries with the consequence that those banks carry large NPAs than their counterparts in the developed countries . They also observed that consistent with the competitive effect hypothesis, investors view privatization announcements as foreshadowing bad news for rival banks.

- **Sathya (2005)** examined the effect of privatizing of banks on performance and efficiency. The time taken was for 5 years (1998-2002) and it was analyzed by using difference of means test. The banking sector in India includes domestic banks as well as foreign banks and objective of this study is to study the impact of privatization on the banking firms. It was concluded that partially privatized banks have performed better as compared to fully PSBs in respect of financial performance and efficiency. Partially privatized banks have continued to show improved performance and efficiency in the year after privatization.
- **Ved pal and Malik (2007)** in their empirical paper examined the difference in financial characteristics of public , private and foreign sector banks based on factors such as profitability , liquidity, risk and efficiency . Sample of 74 Indian commercial banks consisting of 24 public sector , 24 private sector and 23 foreign banks were taken for the period of 2000-2005. Multinomial regression analysis was used and results revealed that foreign banks proved to be high performer in generating with a given level of resources and they are better equipped with managerial practices and in terms of skills and technology. Foreign banks were more consistent with market system as reflected in terms of net interest margin.
- **Usha Arora (2009)** in the research on “ An Analytical Study of growth of Credit Schemes of Selected Banks” analyzed and compared the performance ( in terms of loan disbursement and non- performing assets) of credit schemes of selected banks for the last five years. Bank wise as well as year wise comparisons are done with the help of compound Annual Growth Rate , mean and Standard deviation and in the second part , a positive relationship is found between total loan disbursement and total NPA of selected

banks with the help of a correlation technique. The study found a positive relationship between total loan disbursement and total NPA outstanding of selected banks.

- **PachMalyadri(2011)** in his research paper title “ A comparative Study on NPAs in India banking Industry” analyze NPA in weaker sections of public Sector banks and private sector banks specifically in India . The study observed that there is increase in advances over the period of the study. However, the basis of analysis that there is significant improvement in the management of NPAs of the public sector banks in India. It is suggested that government should RBI for upliftment of public sector banks. PSBs should try to upgrade technology and should formulate customer friendly policies to face competition at national and international level.
- **Dr. Nammita Rajput (2010)** in her research paper title “ Profitability and Non-performing Assets: Indian perspective” analyze the nature extent and magnitude of NPAs of SCBs ,as a group. This study also analyses the impact of NPAs on the profitability of PSBs operating in Indian .Further , the study could provide useful insights to assess if the changes in efficiency of banks have been in the desirable direction and also useful in regulation and formulation of policies. The analysis concluded that there is a diminishing trend in the ratios of NPAs as GNP and NNPA's. There is a high degree of negative correlation between NPA Ratios with ROA.
- **Kaveri (2001)** Studied the non- performing assets of various banks and suggested various strategies to reduce the extent of NPAs.
- **Dong ( 2002)** reviews the nature of NPAs in the Indian banking System and discusses the key design features that would be important for the Assets Reconstruction Companies to play an effective role in resolving such NPAs.
- **Muniappan (2002)** expressed that the problem of NPAs is related to several internal and external factors confronting the borrowers. The internal factors are diversion of funds for expansion, diversification and mode mis action ; taking up new projects, helping promotion associate concerns time ,cost overruns during the project implementation stage, business failure , inefficient management , strained labour relations, inappropriate technology problems, products obsolescence, etc. Which external factors are recession , non-payment in other countries ,inputs / power shortage, price escalation, accidents and natural calamities.

- **Dr. Janardhan G. Naik (2006)** pointed out on the problems of NPAs to face the challenges before the banking sector.
- **Chaitanya, V.K (2004)** proposed a view that Non-Performing Assets are one of the major concerns for banks in India. NPAs reflect the performance of banks. A high level of NPAs suggests high profitability of a large number of credit defaults that affect the profitability and net worth of banks and also erodes the value of the assets . The NPAs growth involves the necessity of provisions, which reduces the overall profits and shareholder value. The problem of NPAs is not only affecting the banks but also the whole economy. The researcher discusses the concept of NPAs, its magnitude and major causes for an account becoming non performing. The projection of NPA over the next three years in public sector banks.

### **Hypothesis of the Study:**

The research methodology means the way in which we would complete our prospected task. Before undertaking any task it becomes very essential for any one to determine the problem of study. Researcher has adopted the following procedure in completing my research study.

1. **Null Hypothesis( $H_0$ ):** There is no significant difference of gross NPA ratio of all sampled banks during the study period.

**Alternative Hypothesis( $H_1$ ) :** There is significant difference of gross NPA ratio of all sampled banks during the study period.

2. **Null Hypothesis( $H_0$ ):** There is no significant difference of Net NPA ratio of all sampled banks during the study period.

**Alternative Hypothesis( $H_1$ ) :** There is significant difference of Net NPA ratio of all sampled banks during the study period.

3. **Null Hypothesis( $H_0$ ):** There is no significant difference of Total Provision ratio of all banks during the study period.

**Alternative Hypothesis( $H_1$ ):** There is significant difference of Total Provision ratio of all sampled banks during the study period.

4. **Null Hypothesis( $H_0$ )** There is no significant difference of Sub Standard Assets ratio of all sampled banks during the study period.

**Alternative Hypothesis( $H_1$ ) :** There is significant difference of Sub Standard Assets ratio of all sampled banks during the study period.

**5. Null Hypothesis( $H_0$ ):** There is no significant difference of doubtful Assets ratio of all sampled banks during the study period.

**Alternative Hypothesis( $H_1$ ):** There is significant difference of doubtful Assets ratio of all sampled banks during the study period.

**6. Null Hypothesis( $H_0$ ):** There is no significant difference of Loss Assets ratio of all sampled banks during the study period.

**Alternative Hypothesis( $H_1$ ):** There is significant difference of Loss Assets ratio of all sampled banks during the study period.

### **3. Universe of the Study:**

Researcher studied the impact of NPA on profitability of Cooperative banks. So the whole banking industry of India is the universe of the study. There are Numbers of Cooperative banks in Gujarat state. However Gujarat and Maharashtra States holds vital a large number of in India. In Surendranagr District there are at about 6 Cooperative banks working at present. However, the researcher has selected two Cooperative banks in Surendranagr district Dharamdhra Peoples cooperative banks and Nagarik Sahakari Bank of Limbdi.

### **4. Nature of the Study:**

The nature of this research can be termed as descriptive research and also qualitative research. Because of, "Descriptive research includes surveys and fact-finding enquiries of different kinds. The major purpose of descriptive research is description of the state of affairs as it exists at present. In social science and business research, researcher quite often uses the term ex-post facto research for descriptive research studies. The main characteristic of this method is that the researcher has no control over the variables; researcher can only report what has happened or what is happening."

### **5. Research Methodology**

For better economical and attractive construction of house, we need a blueprint or the map of the house well thought out and prepared by an expert architect, similarly, a research design is must in advance of data-collection and analysis for the research project, keeping in view of the objective of the research and the availability of effort, time and money.

#### **5.1. Sampling Design:**

In this research the researcher has taken two Cooperative banks of Surendranagr District of Gujarat State as under.

1. People Cooperative Bank – Dhrangnghra
2. NagarikSahakari Bank- Limbdi

## **5.2.Data Collection:**

Collection of data is very hard work for any types of research. The kind of data collected and the methods used to collect the data is a very important aspect of research. There are two basic means of data collection.

### **(i) Primary Data**

### **(ii) Secondary Data**

The study is based on secondary data, Data has been collected from Financial reports of selected banks. Other information related to the banks has been collected from various books, websites and magazines.

## **6.Data Analysis:**

The collected data are duly edited, classified and analyzed using all type of relevant statistical techniques and employing the most appropriate parametric and non-parametric test. There are many techniques, which may be, used for analyzing the financial position; these techniques have been classified as follows:

### **❖ Ratio Analysis :**

The relationship between two related items of financial statements is known as ratio. A ratio is just one number expressed in terms of another. The Ratio is customarily expressed in three different ways. It may be expressed as a proportion between the two figures. Second it may be expressed in terms of percentage. Third, it may be expressed in terms of rates. The use of ratio has become increasingly popular during the last few years only. Originally, the bankers used the current ratio to judge the capacity of the borrowing business enterprises to repay the loan and make regular interest payments. Today it has assumed to be important tool that anybody connected with the business turns to ratio for measuring the financial strength and the earning capacity of the business.

Following ratios are used in this study.

- Gross NPA Ratio
- Net NPA Ratio
- Problem Assets Ratio
- Total Provision Ratio

- Sub Standard Assets Ratio
- Doubtful Assets Ratio
- Loss Assets Ratio
- Depository Safety Ratio

## STATISTICAL TOOLS OF ANALYSIS

### 1) Mean:

Measures of central tendency or Statistical average tool us the point about which items have a tendency to cluster. Such a measure is considered or the most representative figure for the entire mass of data. Measure of central tendency is also known as statistical average. Mean, Median and Mode are the most popular average. Mean, also known as arithmetic average, is the most common measure of central tendency and may be define as the value which researcher get by dividing the total of the values of various given item in a series the total number of items

$$\text{Mean } \bar{x} = \frac{\sum xi}{n} = \frac{x1 + x2 + \dots + xn}{n}$$

Where

$\bar{x}$ =The symbol for MEAN.

$\Sigma$ = Symbol for summation.

$X_i$ =value of  $i^{\text{th}}$  term.

$i=1, 2, 3, \dots, n$

$n$ = Total number of items.

## 2. INDEX

“An Index number is a numerical expression showing relative percentage changes in the value of a variable from one period to another”.

**“A series of index number is a series which reflects in its trend and fluctuations the movement of some quantity to which it is related.”**

### 3. Coefficient of Correlation:-

“Karl Pearson’s coefficient of correlation is most widely used method of measuring the degree of relationship between two variables. This coefficient assumes the following.

- ❖ That there is linear relationship between the two variables.
- ❖ That the two variables are casually related which means that one of the variables is independent and the one is dependent
- ❖ A large number of independent causes are operating in both variables so as to produce a normal distribution.”

$$\text{Karl Pearson's coefficient of correlation}(r) = \frac{\sum(X-\bar{X})(Y-\bar{Y})}{\sqrt{\sum(X-\bar{X})^2 \sum(Y-\bar{Y})^2}}$$

#### 1. Student’s t- test

The t-statistic was introduced in 1908 by William Sealy Gosset, a chemist working for the Guinness brewery in Dublin, Ireland ("Student" was his pen name).Gosset had been hired due to Claude Guinness's policy of recruiting the best graduates from Oxford and Cambridge to apply biochemistry and statistics to Guinness's industrial processes.Gosset devised the t-test as a cheap way to monitor the quality of stout. He published the test in Biometrika in 1908, but was forced to use a pen name by his employer, who regarded the fact that they were using statistics as a trade secret. In fact, Gosset's identity was known to fellow statisticians.

In case of simple correlation coefficient: Researcher use t-test and calculate the test statistic as under.

$$t = r \sqrt{\frac{n-2}{1-r^2}}$$

#### 5. Analysis of Variance (ANOVA) (F-test).

Professor **R.A.Fisher**was first man to use the term “Variance” and, in fact, it was he who developed a very elaborate theory concerning ANOVA, explaining its usefulness in practical field. Later on **Professor Snedecor** and many others contributed to the development of this technique. ANOVA is essentially a procedure for testing the different graphs of data for homogeneity.

**“The essence of ANOVA is that the total amount of variation in a set of data is broken attributed to specified causes.”**

❖ **Analysis of variance one way classification:**

Under the one-way ANOVA, only one factor is considered and then observes that the reason for said factor to be important is that several possible can occur within that factor.

❖ **Analysis of variance Two way classification:**

For two-way classification the data are classified according to two different factors – between the years and companies classification the analysis of variance table.

## **7.Chapter Plan of Study:**

The detailed report of the subject under study is presented into six chapters, identified as under:

### **Chapter 1**

#### **“An Overview of the Banking Sector in India”**

This chapter presents Introduction, Origin of the word Bank, Definition of Bank, Features of Banking, History of Indian Banking System ,Banking System India, Overview of Indian Banking System, Growth of Banking Industry, Types of Banks in India, Role of Banks in India, Functions of modern Bank, Future of Indian Banking, Services of Indian Bank, E- Banking, Problems & Prospects of Indian Banks, Conclusion.

### **Chapter 2**

#### **“Conceptual frame work of NPA management”**

This chapter presents Introduction, Meaning and definition of NPA, Factors contributing to NPA, Reasons for NPA, Early warning signals for NPA, Impact of NPA, Management of NPA, Remedies Available for NPA, Recommendations of the Narsimham Committee, RBI Guidelines for NPA Recognition, Why and How does an account become an NPA ?, Treatment of account as NPA, Income Recognition, Provisioning norms for NPA, conclusion.

### **Chapter 3**

#### **“Literature Review”**

Many studies have been conducted by researchers on NPAs in banking Industry. In this chapter the researcher has made attempts to present a brief review of literature available, which are

published in the form of research articles and technical papers published in the journals, magazines and websites in the related area. The review of the literature is used to formulate theoretical analysis of Non-performing loans undertaken in the present study. This study is designed for analyzing NPA and its impact on profitability in selected public sector and private sector banks in India.

## **Chapter 4**

### **"Research Methodology"**

This chapter presents Introduction, The title of the study, Relevance of the study, Scope of the study, Objectives of the study, Research Methodology, Hypothesis, Universe of the study, Nature of the study, Research Design, Sampling Design, Data Collection, Data Analysis, Chapter Plan, Limitation of the study.

## **Chapter 5**

### **❖ “ Analysis of Non Performing Assets of Selected Banks”**

This chapter is completely based on the secondary information collected through published annual reports of the selected banks. The collected data is analyzed by preparing tables and ratios has used to know nonperforming assets of the selected banks during the study period. Ratios like gross NPA ratio, Net NPA ratio, substandard assets ratio, total provision ratios, doubtful assets ratio, loss assets ratio, and depository safety ratio etc.

### **❖ "Comparative Analysis of nonperforming assets "**

This chapter is also based on secondary data collected through published annual reports of the selected Cooperative banks of Surendranagar District in Gujarat State. Comparative analysis of different ratios related to NPAs of selected banks has been done with line chart. It covers the broader hypothesis testing and conclusions have been drawn on the basis of the analysis.

### **❖ “Impact of NPA on Profitability”**

This chapter includes introduction, Correlation of NPA with ROA of Selected banks, Correlation of GNPA with ROA of selected Banks, Correlation of NNPA with ROA of selected Banks. It covers the broader hypothesis testing and conclusions have been drawn on the basis of the analysis.

## Chapter 6

### ❖ "Summary, Findings and Suggestion"

This chapter includes summary of each chapter and findings of the study and at last suggestions for improvement in accounting practices in business.

### 8. Limitations of the Study:

Every live and non-live factor has its own limitation, which restrict the usability of that factor. Each study cannot be free from limitations. Some limitations likewise, the limitation of time areas, economic, efforts, scope as well as the method of the study. Some limitations for present research work as under:

1. Scope of this study is wider but sample size is limited to only two cooperative banks of surendranagar district.
2. This research study based on secondary data collected from annual reports of various banks and related websites. The limitation of the secondary data and its finding depend entirely on the accuracy of such data.
3. The data which is used for his study is based on annual report of the bank and secondary data collected from published reports from time to time. Therefore the quality of this research depends a quality and reliability of data published in annual reports.
4. Results of this research are confined and limited to the selected Cooperative banks.
5. The study is limited to five years only.

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