CHAPTER - III

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The present study is descriptive in nature. The primary objective of the study is to find out the issue of Non-performing assets in public sector banks in India. In addition the study covers to find out the ways and means in which the issue can overcome in the years to come. For this purpose, a perceptual survey is conducted among the executives of the banks. In the survey, the reasons for NPAs, The measures taken to minimise the same and the lapses at different points of time in the loan assets management of banks is discussed. Since, the shop floor and directly involved employees can able to explain the strategies to overcome the issue in a better manner. Hence, the suggestions is collected from the practioners in banks and presented as suggestions to overcome the issue. In order to understand the issue, in a broad prospective and the impact of the same on the performance of the banks, a secondary data analysis is made based on the secondary data and key financial variables pertaining to the NPAs and loan assets management in banks. A detailed analysis of the same is presented in the next chapter.

3.2 NEED FOR THE STUDY

The various authors have done their research on the management of Non-performing assets of public sector banks, private sector banks, cooperative banks, NBFCs. Indeed the researcher has noticed similarities and dissimilarities in the various studies mostly following the same pattern of analyzing the cause and impact of NPAs of banks in India. All the studies are with reference to the factors which are already identified by the RBI and BIS. Moreover, the authors had used mostly the secondary data from the banks statements and RBI publications for analyzing the NPAs of PSBs. In spite of legal framework and regulatory bodies dictating and governing the bank’s asset portfolio quality, still the level of the NPAs are high comparatively in PSBs than private and foreign banks. As the need of the time it is
necessary to regain the trust of financial institutions the study on the origination and the management of such NPAs is taken up. The effectiveness of a bank is not reflected only by the size of its balance sheet but also the level of return on its assets. The NPAs do not generate interest income for banks but at the same time banks are required to provide provisions for NPAs from their current profits. The public sector banks are faced with bulging NPAs which results in lower income and higher provisioning for doubtful debts and it will make a dent in their profit margin.

In addition, the statistics reveals that, Almost 5% of the outstanding loans of the Indian banking industry are currently NPAs. This adds up to a whopping Rs 2.4 lakh crore for the 40 top banks – In case of some banks, the top 30 defaulters account for over half of all their NPAs by value. For the entire banking system, almost 40% of all NPAs come from these top defaulters. In the case of Punjab National Bank (PNB), the top 30 defaulters owed the bank a total of Rs 1,494 crore on 31st March 2011. State Bank of India, the top 30 defaulters owed the bank a whopping Rs 8,775 crore – Rs 292 crore for each account. In this scenario it is important to curb the route cause and to mitigate the credit risk in public sector banks. It can help in gaining the trust and confidence of the public and investors at large.

3.3 STATEMENT OF THE PROBLEM

Examination of published works on NPA in scheduled commercial banks (SCBs) in India showed that; (1). Most of the studies focused on NPA ratio’s (gross NPA ratio and net NPA Ratio) to assess the asset quality and effectiveness of credit risk management. (2). Very few studies were conducted examining the relationship between NPA and bank performance and macroeconomic indicators. The mediation or moderation effect of these variables on asset quality is not studied in depth. (3). the fresh NPA generated during a particular year, gross NPA generation rate and net additions to NPA were not emphasized in assessing the asset quality, and (4). Many measures were initiated since 2000 to effectively manage the menace of NPA. Further, limited studies have been done on the effectiveness of various measures taken from the post-millennium period, including One Time Settlement/Compromise Scheme (2000), Debt Recovery Tribunals (originally established in 1993, significant amendment was carried out during 2003), Corporate Debt Restructuring (2001),
SARFAESI (the act was passed during 2002) and Asset Reconstruction Company (ARC).

Thus, the review of literature available on NPA highlighted the necessity to study management of NPA with specific focus to examine (1) the status of Non Performing Assets in banking sector in India. (2) the reasons for Non Performing Assets in the public sector banks. (3) the difficulties in the Non performing assets (NPAs) management among PSBs. (4) the role of policies and Administrative procedures in Non performing assets (NPAs). The research gaps and relevant questions which strike the mind during observation of various studies on Non- performing assets that, what is the level of NPA in Commercial banks? What are the reasons for the assets becoming Non-Performing assets and what is its impact on performance of a bank, public, government and society. Hence there arises a need to address the aforesaid questions.

3.4 CONCEPTS USED IN THE STUDY

NPA, it is called such as while it is an "Asset", it does not bring substantial income to its Owner or is just dormant. Call it a white elephant if you wish. Basically, it is having something that should work but does not (Chaudhary and Sharma, 2011)[234]. It is supposed to make NPAs work. The RBI has issued guidelines to banks for classification of assets into four categories:

A. Standard (Assets)

Standard asset are not consider as a NPAs but does not carry more than normal risk attached to business. Thus in general all the current loans, agricultural and non-agricultural loans may be treated as standard assets (Srivastava and Bansal, 2013)[235]. It requires a minimum of 25% provision on global portfolio but not on domestic portfolio. These are loans which do not have any problem are less risk.

B. Substandard (Assets)

These are assets which come under the category of NPA for a period of less than 12 months (Rajput, Gupta and Chauhan, 2012)[236]. Sub-Standard Assets have been classified as NPAs for a period less than or equal to 18 months. The general provision of 10% of total outstanding principal plus entire outstanding interest should
be made on sub-standard assets. A NPA may be classified as sub-standard on the basis of the following criteria.

- An asset which has remained overdue for a period not exceeding three years in respect of both agricultural and non-agricultural loans should be treated as sub-standard.

- In the case of all types of term loans, where installments are overdue for a period not exceeding three years, the entire outstanding in term loan should be treated as sub-standard.

- An asset, where the terms and conditions of the loans regarding payment of interest and repayment of principal have been renegotiated or rescheduled, after commencement of production, should be called as sub-standard and should remain at least two years of satisfactory performance under the renegotiated terms. It means the classification of an asset should not be upgraded merely as a result of rescheduling unless there is satisfactory compliance with the conditions.

C. Doubtful (Assets)

These are NPA exceeding 12 months. Doubtful assets have remained as NPAs for a period exceeding 18 months (Murali and Ramakrishnaiah, 2013)[237]. On these assets the banks are required to provide 100% for the unsecured portion and additional provision of 20% to 50% advances, if doubtful for 3 and above 3 years in respect of both agricultural and non-agricultural loans. Rescheduling does not entitle a bank to upgrade the quality of advance automatically in the substandard assets. A loan classified as doubtful has all the weakness inherent as that of a sub-standard account. There is also a problem of weakness in the collection or liquidation of the outstanding dues in such an account in full.

D. Loss (Assets)

Where loss has been identified by the bank or internal or external auditors or the RBI inspection but the amount has not been written off wholly (Ahmad, 2013)[238]. Loss assets are those where loss is identified by the bank but the amount has not been written off wholly or partly. Such loss assets will include overdue loans
in cases: Where decrees or execution petitions have been time barred or documents are lost which are legal proof to claim the debt; Where the members and their sureties are declared insolvent or have died leaving no tangible assets; Where the members have left the area of operation of the society leaving no property and their sureties have also no means to pay the dues; Amounts which cannot be recovered in case of liquidated societies.

3.5 NON-PERFORMING ASSETS (NPA)

NPA is defined as a credit facility in respect of which the interest and/or instalment of principal has remained ‘past due’ for a specified period of time.

Gross NPA: Gross NPA is an advance which is considered irrecoverable, for bank has made provisions, and which is still held in banks' books of account. Gross NPAs are the sum total of all loan assets that are classified as NPAs as per RBI Guidelines as on Balance Sheet date. Gross NPA reflects the quality of the loans made by banks. It consists of all the nonstandard assets like as sub-standard, doubtful, and loss assets (Ramesh and Sudhakar, 2012)[239]. It can be calculated with the help of following ratio:

\[
\text{Gross NPAs Ratio} = \frac{\text{Gross NPAs}}{\text{Gross Advances}}
\]

Net NPA: Net NPAs are those type of NPAs in which the bank has deducted the provision regarding NPAs. Net NPA shows the actual burden of banks. Since in India, bank balance sheets contain a huge amount of NPAs and the process of recovery and write off of loans is very time consuming, the banks have to make certain provisions against the NPAs according to the central bank guidelines. It can be calculated by following (Balasubramaniam, 2012)[240]:

\[
\text{Net NPAs} = \frac{\text{Gross NPAs} – \text{Provisions}}{\text{Gross Advances} – \text{Provisions}}
\]

3.6 SIGNIFICANCE OF THE STUDY: IMPACT OF NPAS ON BANKS PERFORMANCE

The effectiveness of a bank is not reflected only by the size of its balance sheet but also the level of return on its assets. The NPAs do not generate interest income for banks but at the same time banks are required to provide provisions for NPAs from their current profits (Zafar, Adeel and Khalid, 2013)[241]. The public
sector banks are faced with bulging NPAs which results in lower income and higher provisioning for doubtful debts and it will make a dent in their profit margin. In this context of crippling effect on banks operation the slew asset quality is placed as one of the most important parameters (Vijayakumar, 2012)[242] in the measurement of banks performance under the Camel’s supervisory rating system of RBI:

A. **Profitability:** NPA means booking of money in terms of bad asset, which occurred due to wrong choice of client. Because of the money getting blocked the prodigality of bank decreases not only by the amount of NPA but NPA lead to opportunity cost also as that much of profit invested in some return earning project/asset. So NPA doesn’t affect current profit but also future stream of profit, which may lead to loss of some long-term beneficial opportunity. Another impact of reduction in profitability is low ROI (return on investment), which adversely affect current earning of bank.

B. **Liquidity:** Money is getting blocked, decreased profit lead to lack of enough cash at hand which lead to borrowing money for shortest period of time which lead to additional cost to the company. Difficulty in operating the functions of bank is another cause of NPA due to lack of money.

C. **Involvement of Management:** Time and efforts of management is another indirect cost which bank has to bear due to NPA. Time and efforts of management in handling and managing NPA would have diverted to some fruitful activities, which would have given good returns. Now day’s banks have special employees to deal and handle NPAs, which is additional cost to the bank.

D. **Credit Loss:** Bank is facing problem of NPA then it adversely affect the value of bank in terms of market credit. It will lose its goodwill and brand image and credit which have negative impact to the people who are putting their money in the banks.

3.7 **OBJECTIVES OF THE STUDY**

The study basically aims at establishing a linkage between internal efforts of bank and financial institution and growth of NPAs. In other words, growth in NPAs can be checked considerably if bank and financial institutions have suitable internal
arrangements. The profitability of the financial institution largely depends upon the level of income generated through optimum use of the assets after paying the cost of funds for acquiring them and other administrative cost involved therein. Once the assets cease contributing to the income, they are termed as Non Performing Assets. The study is related to internal systems, procedures and practices, for monitoring of NPAs and recovery from the same. The research work has undertaken to identify the strategies to manage and reduce the NPA of selected public sector banks with the specific objectives, they are as follows:

1. To examine the status of Non Performing Assets in Banking sector in India.
2. To find out the reasons for Non Performing Assets in the public sector banks.
3. To know the difficulties in the Non performing assets (NPAs) management among PSBs.
4. To study the role of policies and Administrative procedures in Non performing assets (NPAs)
5. To examine the steps taken for recovery in respect of Non performing assets (NPAs) accounts.

3.8 HYPOTHESES OF THE STUDY

1. There is no significant relationship between the Tenure of measuring NPAs in Banks and the Management practices adopted to control NPAs in banks.
2. There is no significant relationship between the Level of NPAs in Banks and the Management practices adopted to control NPAs in banks.
3. There is no significant relationship between Person liable for failure of recovery of outstanding loan in Banks and the Management practices adopted to control NPAs in banks.
4. There is no significant relationship between person responsible for NPAs in Banks and the Management practices adopted to control NPAs in banks.
5. There is no significant relationship between Time taking to declare NPAs in Banks and the Management practices adopted to control NPAs in banks.
6. There is no significant relationship between Person approves credit policy of a bank and the Management practices adopted to control NPAs in banks.

7. There is no significant relationship between the frequency of credit assessment of loan accounts and the Management practices adopted to control NPAs in banks.

8. (a) There is no association between the level of NPAs in banks and Precautions taken while lending loans, (b) There is no association between the level of NPAs in banks and Post disbursement stage Reasons for NPAs, (c) There is no association between the level of NPAs in banks and Bankers preference to lend loans, (d) There is no association between the level of NPAs in banks and Sector Contributes maximum outstanding, (e) There is no association between the level of NPAs in banks and Steps taken by banks to recover the loans, (f) There is no association between the level of NPAs in banks and preventive activities performed by a bank to mitigate credit risk (g) There is no association between the level of NPAs in banks and NPAs, Appraisal stage Reasons for NPAs, (h) There is no association between the level of NPAs in banks and Sanction and disbursement and follow-up Reasons for NPAs in banks.

3.9 RESEARCH METHODOLOGY ADOPTED

A hybrid research methodology is adopted for the purpose of this study. Descriptive research methodology is adopted to know the banking sector climate and NPA management practices of banking sector. Cooper and Schindler, (2003)[243] An exploratory approach is followed to dig out the internal affairs of banking to know the difficulties in the management of NPAs in banks. Malhotra, (2004)[244] Methodology relates to plan of study, which includes steps of data collection, types of questionnaires, process of data and finally interpretation of data. Data is collected from Public sector bank branches located in and around Chennai. Present thesis is outcome of research conducted by researcher adopting survey method. A survey research is usually based on the sample survey or census survey. The sample for survey is public sector bank branches presently functioning in Chennai Tamilnadu have been selected on the basis of convenience of the respondents.
In the present section, primary data analysis is carried out by collecting the opinion of the bankers on the issues and impediments in the adoption and practice of non-performing assets management practices suggested by the regulatory authorities from time to time. The need for the same is felt because of gradual reduction of level of non-performing assets in the public sector banks during the initial stages of regulatory reforms adoption and sudden increase in the recent past. Based on the secondary data it is noted that, the level of NPAs recorded in the year 1995 is Rs.38385 Crores and it was gradually increased and recorded at Rs.54423 crores during the year 2002.

Later, Reserve bank of India started initiating the pressure on the classification of assets and provisioning accordingly from time to time along with the corrective and curative measures to control NPAs in banks. As a result, the level of NPAs started diminishing in the public sector banks and recorded as low as Rs.38602 crores for the financial year 2007. After words with all the initiatives of monitoring of loan assets and continuous pressure to improve the quality of assets, the level of NPAs are increased by 3.5 times and stood at Rs.1,55,890 crores for the financial year ending 2013.(Refer-Table 4.45). It indicates that, there may be some bottlenecks in the adoption and practice of the initiatives and regulations insisted by the RBI from time to time and operational, administrative and customization issues may be arisen in the implementation.

The present initiative of survey on the issues and impediments and the reasons and suggestions to improve the non-performance assets management in the public sector banks, may help in identifying the same and to bring to the notice of the regulatory authorities may help the banks in specific and the economy at large. Hence, the observations and statistical evidences studied in the secondary data form a solid base to study the impediments and to find out the gross route causes for the non performance assets in banks and to strategies to curb the same. Hence, the primary data collection is initiated and carried out and the survey results are presented in the following pages.

The primary data analysis is presented in two sections namely descriptive statistics and inferential statistics. Descriptive statistics deals with the profile of the non-performing assets management practices in public sector banks and the
inferential statistics deals with establishing the relationship between the demographical variables and the dimensions of the theme of the study, management of the non performance assets in public sector banks.

3.10 CONCEPTUAL FRAME WORK

The framework given below explains the independent variables such as reasons for NPA, difficulties in managing NPA, policy issues and recovery issues chosen to measure the level of NPA in PSBs, its effect and impact to provide necessary recommendations to reduce the level of NPAs in PSBs.

3.11 SAMPLE PROFILE

The number of total scheduled commercial banks in India is 57, in which Public Sector Banks are 27. The total number of Public Sector Bank branches located in Chennai is 1266. Since large number of branches is existed, the study covers 200 branches of public sector banks on convenience sampling basis. The number of employees working in the loan division is found at an average of four. In case of large branches, the loan division is further classified on the basis of type of loan. It is felt that a credit manager is the loan granting authority in a bank. Hence, all the credit managers of the sample branches are consulted and distributed the structured questionnaire and collected back the filled in ones after two weeks. On scrutiny, it was found that, there are errors of omissions, duplication and contra errors. After elimination of the questionnaires, 542 samples were taken for the data analysis and discussion. Therefore, the sample size is fixed at 542.

3.12 SAMPLE PROFILE AND SAMPLE SIZE

<table>
<thead>
<tr>
<th>Banks</th>
<th>India</th>
<th>Tamilnadu</th>
<th>%</th>
<th>Chennai</th>
<th>%</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSBs</td>
<td>101261</td>
<td>7666</td>
<td>7.57%</td>
<td>1266</td>
<td>40%</td>
<td>506</td>
</tr>
</tbody>
</table>
The profile of the respondents is almost similar and all are trained in the management of loans divisions and qualified bankers as per the regulations and guidelines of Reserve bank of India. The experience may be varied from one manager to other in some cases. Uniformed rules and regulations are adopted in the processing of loan applications and loans are sanctioned. The issue of NPAs arises only when the customer defaults in the repayment of the EMIs as per the schedule. The preventive measures of margins, provisions may come to the rescue of the same to some extent. To a large extent, it is felt that NPAs are the book debts to be collected through asset reconstruction companies and there by nil NPAs can be shown in the books of a bank. Similar opinions are observed while personal discussion with the many bankers during the data collection. Another observation is that, all the NPAs may not become loss assets and there are occasions, recovery is made after two to three years. Time frame for NPAs declaration needs to be relaxed for gaining the customer loyalty in case of small and marginal barrowers. In case of corporate debts the size of wilful defaults is more and there by a rigid statutory law may help in resolving the same. A single and uniformed law may not serve the purpose in resolving the issue, in the regime of social banking.

3.13 SOURCES OF DATA AND DATA COLLECTION INSTRUMENT DESIGN

The data required for the study is collected from both primary and secondary sources. Primary Data: The primary data is collected through Questionnaire, which is divided into seven parts. Part-I deals with profile of the banking sector and NPAs management climate. Part-II deals with NPAs related information and follow up, Part-III deals with Appraisal Reasons for NPAs in banks, Part-IV deals with Sanction and disbursement reasons for NPAs in banks, Part-V deals with Post disbursement reasons for NPAs, Part-VI deals with difficulties in the management of NPAs in banks, Part-VII deals with Perceptions relating to resolving NPAs issues in banks and finally the questionnaire is concluded with an open ended question asking any scholarly suggestions to control NPAs in banks. Reddy (2003) [245], Kumar (2005) [246]

Primary data was collected through structured questionnaire from bank officials from public sector banks. Their views regarding NPA were collected. The
questionnaire was presented to the bank officials with prior appointment. As far as possible the bank officials and bank mangers provided the information. In some banks branches manager with the permission of his higher officials with the help of technology could provide information of the entire bank. Based on the major reviews, we have designed the questionnaire by consulting the industry experts. Later the instrument is tested through pilot study is conducted to improve the validity of the questionnaire with 65 samples and the reliability test results of the instrument is measured with Corn Bach’s alpha and found suitable for the purpose of study. The detailed results of the reliability test are presented below.

**Table 3.1: showing reliability alpha of the data collection instrument**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Description</th>
<th>No.of items</th>
<th>Alpha value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Part-I Profile of the banking sector and NPAs climate</td>
<td>12</td>
<td>0.8817</td>
</tr>
<tr>
<td>2</td>
<td>Part-II deals with NPAs related information and follow up</td>
<td>12</td>
<td>0.8999</td>
</tr>
<tr>
<td>3</td>
<td>Part-III deals with Appraisal Reasons for NPAs in banks</td>
<td>17</td>
<td>0.8715</td>
</tr>
<tr>
<td>4</td>
<td>Part-IV deals with Sanction and disbursement reasons for NPAs in banks</td>
<td>08</td>
<td>0.8722</td>
</tr>
<tr>
<td>5</td>
<td>Part-V deals with Post disbursement reasons for NPAs,</td>
<td>13</td>
<td>0.8594</td>
</tr>
<tr>
<td>6</td>
<td>Part-VI deals with difficulties in the management of NPAs in banks</td>
<td>15</td>
<td>0.8975</td>
</tr>
<tr>
<td>7</td>
<td>Part-VII deals with Perceptions relating to resolving NPAs issues in banks</td>
<td>15</td>
<td>0.8435</td>
</tr>
</tbody>
</table>

The overall reliability of the questionnaire is represented by the Corn Bach’s alphas is 0.8953 and found reliable to proceed with the data collection. Opinions of banks are collected through the questionnaire. The questionnaire was presented to other facilitators to find out their views regarding bad loans and non performing loans.

**Table 3.2: Showing Break – up of survey and actual sample Responses taken for study**

<table>
<thead>
<tr>
<th>Name of Bank</th>
<th>No. of SQ Given</th>
<th>No of SQs rejected</th>
<th>No of SQs taken for study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allahabad Bank</td>
<td>30</td>
<td>04</td>
<td>26</td>
</tr>
<tr>
<td>Andhra Bank</td>
<td>30</td>
<td>04</td>
<td>26</td>
</tr>
<tr>
<td>Bank of Baroda</td>
<td>30</td>
<td>03</td>
<td>27</td>
</tr>
<tr>
<td>Bank of India</td>
<td>30</td>
<td>03</td>
<td>27</td>
</tr>
<tr>
<td>Bank of Maharashtra</td>
<td>30</td>
<td>04</td>
<td>26</td>
</tr>
</tbody>
</table>
Canara Bank 30 05 25
Central Bank of India 30 03 27
Corporation Bank 30 03 27
Dena Bank 30 04 26
IDBI 30 06 24
Indian Bank 30 06 24
Indian Overseas Bank 30 03 27
Oriental Bank of Commerce 30 04 26
Panjab & Sind Bank 30 04 26
Punjab National Bank 30 06 24
State Bank of India 33 04 26
Syndicate Bank 30 05 25
UCO Bank 30 04 26
Union Bank of India 30 05 25
United Bank of India 30 05 25
Vijaya Bank 30 06 24

**Total** 633 91 542

Secondary Data: Since the study is related to financial problem concerning banks it was obvious to rely on the secondary data in the published form which is extensively used for the purpose of the study. The Annual reports from 2001 to 2011, RBI publications, Notifications, Journals, circulars on NPA, Websites etc. The process is further supplemented by extensive library research reviewing newspapers, periodicals, magazines, articles on NPA, case studies, court decisions, and relevant sections of the provisions of Banking Regulation act, SARFEASE act, Basel accord, recommendations and conclusions of various committees / studies, suggestions and recommendations given in the Ph.D theses are reviewed in a clear manner. From the analysis of annual reports standard assets, doubtful assets, loss assets, net advances, and net NPAs amounts of the sample banks covered under study for the period 2001 to 2011 have been calculated and analyzed and interpreted for the purpose of study.

3.14 **STATISTICAL TOOLS USED**

Entire data related to NPA is financial in nature which required careful scrutiny for which relevant statistical tools have been utilized as per the need of the study. The data is analysis is carried out by using SPSS version 20.0. In the process of the above analysis, the study has adopted statistical techniques in order to get the interpretable solutions. Both parametric and non parametric tests are used in the
study. The analysis part of the present thesis was made by using the various parametric and non-parametric statistical tests namely, Percentage Analysis, Chi-square Test, ANOVA, t-Test, and Multiple Regression Analysis.

3.15 CHAPTERISATION SCHEME

The entire thesis consists of the following five chapters. The first chapter deals with **Introduction to the topic**, banking in Modern era, History of Banks in India, Types of risks associated with banking business. Management of NPAs by the banks, rules and regulations governing NPAs in banks, Classification of assets, Provisioning, Reasons for NPAs, regulatory norms, Strategies to control NPAs in banks, In addition, evolution of banking industry in India, Indian banking system, introduction to PSBs, definition of NPA, categories of NPA, provisioning norms, impact of NPA upon PSBs, reason for NPA in India, preventive measures for NPA, early symptoms, sale of NPAs to other banks, measures initiated by RBI & Government, International practices relate to NPA, Narasimham committee recommendations, SARFAESI act 2002, Indian scenario an overview and Global scenario etc. Finally the challenges in banking in the modern era and chapter summary are given.

The second chapter deals with **Review of literature**. The various studies related to banks in India and abroad were discussed in this chapter. The review of literature on commercial banking, services offered, role of technology enabled services in banking sector, phases of development and issues and concerns associated with technology banking etc. Management of NPAs by the banks, rules and regulations governing NPAs in banks, Classification of assets, Provisioning, Reasons for NPAs, regulatory norms, Strategies to control NPAs in banks, Indian scenario an overview and Global scenario etc. The chapter is concluded with the research gap identified for the purpose of study.

The third chapter has been devoted to **Research Methodology**. It includes Need for study, Objectives, Hypothesis and their tests, Research Methodology, Target Segment, Period of study, Variables studied, Sample Size, Data Collection Method, Analytical Frame work, Research Tools, Limitations of the Study, Scheme of Chapterisation.
The fourth chapter titled as **Data analysis and Results Discussion**. The chapter is presented in two parts. Part-I, deals with descriptive statistics and Part-II deals with inferential statistics. Part-I of analysis is more focused on secondary data trends relating to NPAs and the other key variables movement in public sector banks over a period of time and its influence on the performance and other financial performance parameters. In part-II, the focus is on the perceptions of the sample respondents relating to the issue of NPAs management and its causes, impediments in the management and to the strategies to mitigate the risk of Non-performing assets in banks.

The fifth Chapter is titled as **Summary of Findings, Suggestions and Conclusion**. The detailed findings along with the suitable suggestions are presented. Finally concluding remarks along with the scope for further research is presented.

### 3.16 LIMITATIONS OF THE STUDY

The study covers only Chennai and its suburban branches for the purpose of survey. The survey is restricted to normal affairs of the NPAs management in banks. The sample size is ensured to relay on the findings of the study. However the policy of the government and RBI is keep on changing and there by a concrete answer is not able to given by majority of the respondents in the survey. The level of accuracy of the data given in questionnaire may have some percentage of personal bias.

### 3.17 SCOPE FOR FURTHER RESEARCH

The present study covers all the aspects relating to credit management and internal affairs of the NPAs management in banks. The types of risks covering in the banking sector may have some degree of influence on the banking and its relevance to level of NPAs. A comprehensive study on that dimension can be a value addition to the existing literature. The behavioural aspects of banking and administration, policy making and collection of credit can also be the interesting areas of research pertaining to NPAs in banks. A cross country comparison of the Asian countries can help to understand the deficiencies in the management of loan accounts among PSBs in the county.