FINANCE INDIA
© Indian Institute of Finance
Vol. XXVII No. 1, March 2013
Pages – 105 – 120

NPAs Management in Regional Rural Banks (RRBs) in Tamil Nadu, India

R. SURESH*

Abstract

In this paper, study is made about the Regional Rural Banks (RRBs) and their management of NPA in India. Due to lending process and weak credit appraisal system, the RRBs have accumulated Non-Performing Asset (NPAs). NPAs adversely affect the capital adequacy ratio that reveals the financial health condition of a bank. The study examines and point out the performance of loan portfolios, the amount of NPAs, problem faced due to existence of NPAs and decision making process of NPA Management in the RRBs. This paper studies samples among 86 regional Rural Banks in Tamilnadu, India. The results are derived from the use of statistical tools like Percentage analysis, ANOVA Test and Karl Pearson's Coefficient of correlation & accordingly suitable suggestions have been made for effective management and controlling of NPAs Overall, we found that the ratio of gross NPAs to total assets and ratio to gross NPAs to total advances in RRBs has constantly decline over the period of time.

I. Introduction

THE INDIAN BANKING industry is playing a vital role, particularly in the rural economy and as a whole in the socio-economic augmentation of the country. It is continually noticed that these banking sector are facing so many drastic changes according to the technology development right from the Financial Sector Reforms initiated in the year 1991. There is a general concept commonly accepted "A Man or Woman with no money is equal to dead body". The basic functions of banks are accepting all kinds of deposits and supply money- "The life blood of business concerns" by lending process.

Money is one of the important factors for living and survival. The common exchange is the main factor for the development of an individual

* Head of the Department and Professor, Madurai Kamaraj University College, The Department of Commerce, Sir Balaji Illam, SVS Nagar, Jakkampathi, Aundipathi, Tamil Nadu 625512, INDIA.

Submitted October 2010; *Accepted* March 2012

as well as a nation. It is necessary to produce money by means of productivity that can be denoted as money multiplying concept. This service is provided by the banking institution as well as by individual bankers. Banking institution is suitable for all, cheap for all, particularly to the needy poor rather than individual bankers who are costly. A bank is an establishment as per the law which deals with money. Banking business can be run only by the government or by genuine business people. Banks are the main stimuli of the economic progress of a country. In general there are several challenges to the banks, particularly to the regional rural banks. The main challenge confronting the regional rural banks is the disbursement of funds in quality assets like advances which may lead to non-performing assets to the banks. This paper attempts to study the management of NPAs in a Regional Rural Bank located in Tamilnadu and one of the samples among 86 Regional Rural Banks in India.

1.1 *Non-Performing Assets: Concepts and Types*

Non-Performing assets are those assets of the banks that do not generate income. It has been well defined by Securitization and Reconstruction of Financial Assets are Enforcement of Security Interest (SARFAESI) Act 2002, India as "An Asset or account of borrower, which has been classified by a bank or financial institution as sub-standard, doubtful or loss assets in accordance with the direction issued by the Reserve Bank of India". Basically the assets of the banks are classified as performing and non-performing assets which generate income to the bank. A non-performing asset is an asset which fails to generate income to the bank. As per the regulation, an asset is considered to have gone due, the past due amount remaining uncovered where the borrower has defaulted as principal and interest repayment for more than 90 days is called as non-performing assets. According to the guidelines of Reserve Bank of India NPAs consist of sub-standard, doubtful and loss assets. In a nutshell, it is said that any asset of the bank generally turn into NPAs when they fail to yield income during certain period. As a result a doubtful asset find its ways from sub-standard assets after 18 months in India context against one year under the international norms and finally when it is found irrecoverable then it moves to loss assets category.

1.2 *Provisioning for Non Performing Assets (NPAs)*

In the light of the Narasimham committee recommendations, from time to time the Reserve Bank of India has issued the guidelines in respect of recognition of NPAs, and their classification and provisioning. The following are the Reserve Bank of India guidelines for the provisions for NPAs.

1.2.1 *Standard Assets*

The regional rural banks have been advised to make a general provision for standard assets at the following rates (a) Direct advances to agricultural and small and marginal entrepreneurial sectors at 0.25%; (b) All other advances at 0.40%.

1.2.2 *Sub-Standard Assets*

A general provision of 10% of net outstanding should be made without making any allowances for Export Credit Guarantee Corporation guarantee cover and securities available. The unsecured exposures which are identified as sub-standard would attract additional provision of 10%, i.e. a total of 20% on the outstanding balance.

1.2.3 *Doubtful Assets*

Provision should be made for 100% of the extent to which the advance is not covered by the realizable value of the security to which the bank has a valid recourse and the realizable value is estimated on a realistic basis. In regard the secured portion the provision is to be made as specified in Table I

Table I
Non-performing assets provisioning

(In Percent)

Doubtful status	Provisioning as secured portion
12 months to 24 months	20%
More than 24 months up to 48 months	30%
More than 48 months	100%

1.2.4 *Loss Making Assets*

It is advised by Reserve Bank of India to the banks that in cases where loss assets are more than two years old in the books of a bank without legal action being initiated, the banks should submit a review note to their management committee / boards of directors giving specific reasons as to why steps have not been taken for recovery. These assets should be written off. If they are permitted to remain in the books for any reason 100% should be provided

1.2.5 *Other Purposes*

Usually, banks have retirement benefits namely Provident Fund, Gratuity. Now banks have pension schemes also. Most of the banks have set up recognized Gratuity or Pension Fund to fund the relative liability. In April, 1992, Reserve Bank of India had advised that any bank, which had not set up such fund to estimate such liabilities on archival basis and make full provision for that purpose.

Technically the standard assets are performing assets. The remaining categories of sub-standard, doubtful and less assets are NPAs. According to Reserve Bank of India direction, all the banks are required to maintain NPAs both on gross and net basis.

1.3 *Capital Adequacy*

Non-performing assets does not earn any income; it adversely affects the capital adequacy ratio that reveals the financial health condition of a bank. The capital adequacy ratio is defined as the ratio between bank's capital and its risk- weighted assets. Capital signifies the core strength of an organization.

This is true in case of banks, because adequate capital not only infuses depositors' and regulators' confidence but also acts as a cushion against possible losses arising out of normal risks inherent in banking. Like all other businesses, banks hold capital as a buffer against unforeseen losses.

No such norms have been specified for Regional Rural Banks (RRBs) separately so far. In the Mid-Term Review of Annual Policy Statement of the Reserve Bank of India for the year 2007-2008, it was proposed that RRBs should disclose the level of Capital to Risk-weighted Assets Ratio (CRAR) as on March31, 2008 in their Balance Sheets. Accordingly, all RRB have been advised by the Reserve Bank of India to disclose their CRAR as on March 31, 2008 and thereafter every year as 'Notes on Accounts' to their Balance Sheets.

Dr. Subbarao, Governor, Reserve Bank of India has said at the time of meeting to announce the Annual Policy 2009-2010 that the "phased introduction of capital to risk-weighted assets ratio (CRAR) to the regional rural banks by 2012."

Honourable Union Finance Minister of India Shri. Pranab Mukherji in the meeting to review the performance of regional rural banks held on 18th August, 2009 said that "having recapitalised the regional rural banks by over ₹ 1700 crore, the Central Government has decided to setup a committee to assess the need for further capital infusion. A committee will be setup to assess the capital requirement of Regional Rural Banks so that these entities can achieve capital adequacy ratio of 7%. At present, most of the RRBs, except five, were profitable. It has been agreed that all regional rural banks could be profitable by 2010. There had been significant improvement in their positions with the gross and net non-performing assets of the regional rural banks coming up to acceptable levels. The RRBs were a vital integral segment of the country's banking system. Their focus on providing efficient financial services in the rural areas for the purpose of development of agriculture, trade, commerce and industry and other productive activities in the target areas. Nearly 70% of the credit disbursed by regional rural banks to the farm sector."

II. The Study: Objective, Data and Methodoloy

2.1 *Statement of the problem*

It was a recommendation to start the RRBs in the year 1975 by M. Narashimam Working Group Committee. In their recommendation, they said to "combine the local feel and the familiarity with the rural problems, which the cooperatives possess and the degree of business organization, ability to mobilize deposits, access to control money markets and modernized outlook, which the commercial banks have". For this purpose, to strengthen those in rural areas the regional rural banking system was introduced.

RRBs were formed to meet the excess demand for institutional credit in the rural areas, particularly among the socially and economically marginalized and deprived sections to improve the efficiency in rural credit delivery mechanism. These regional rural banks are functioning with the support of the commercial banks that are technically termed as "sponsor bank". The equity capital of the regional rural bank is to be shared among the Central Government, State Government and by its Sponsor Bank in the proportion of 50:15:35 respectively. The RRBs popularly known as small man's bank have taken the deep roots and have become a sort of inseparable part of the rural economy. It plays a vital and essential role in the rural institutional financing for agricultural credit in terms of geographical coverage, with friendly approach and contributes more for the development of rural economy. Due to lending, the RRBs may also possess non-performing assets. So far, no study has been conducted regarding non-performing assets of the RRBs. In this stage there is a need to have a study.

2.2 *Objectives of the study*

The objectives of the present study are to examine the performance of loan portfolios and procedures of decision making in the area of management of NPAs in RRBs. The objectives are

i. Highlight Loans and Advances trend
ii. Point out the amount of non-performing assets
iii. Find out the problems of bank due to NPAs
iv. Offer suggestions to overcome the problems regarding NPAs.

2.3 *Survey Design*

The study was undertaken to analyze the performing and non-performing assets of one of the RRBs in Tamilnadu, India. The analysis purely depends on the secondary data. It was collected from the annual reports, the facts published in the annual reports and bulletin of Reserve Bank of India, refereed books, journals, newspapers and magazines.

2.4 *Methodology Data analysis*

RRBs of India implemented the Prudential Norms from the year 1996-1997. After the relevant data were collected for a period of 13 years from 1996-1997 to 2008-2009, the study was carried out which was preferred for assessment purposes. Finally, conclusion and recommendations were made accordingly. The statistical tools used for data analysis are Percentage Analysis, ANOVA test and Karl Pearson's coefficient of correlation to understand the impact of NPAs on profitability, liquidity and solvency.

III. Empirical Analysis and Results

3.1 *Analysis of Management of NPAs*

For the banking system the quality of loan assets is the most essential factor for the basic viability. Excess of overdue advances of rural banks in India are mounting and in consequences, the non-performing assets in their portfolio are on the rise, impinging on the bank's viability. This not only eats into the bank's profitability but also hampers their ability to recycle the funds in an effective manner. Avoidance of losses due to loan is one of the pre-occupations of the management of all banks. Complete elimination of such losses in not possible. The bank's management aims to keep the losses at low level. In fact, it is the level of non-performing assets, which to a greater extent, differentiates between a good and worst bank. For clear understanding of the effective management of NPAs is presented in the heads of NPAs as% to total assets and advances, sector-wise NPAs, Asset-wise NPAs, etc. as shown in the tables from Table II to Table VII.

Table II shows the gross and net NPAs to total assets for the period from 1996-1997 to 2008-2009. The ratio of gross NPAs to total assets came down from 8.19% in 1996-1997 to 1.04% in 2008-2009, showing a decreasing trend. On the other hand, the ratio of net NPAs to total assets also declined from 8.19% in 1996-1997 to 1.26 in 2002-2003. There is a sudden increase with a slight fluctuation of 0.91% and 1.26 in the years 2000-2001 and 2002-2003 respectively. Again it declines to 0% from 2003-2004 to 2008-2009. On seeing this, even though there is a fluctuation in the middle of the study period, it indicates that there is a significant improvement in NPAs recovery.

Table II
NPAs as percentage to Total Assets

(In ₹ Lakhs)

Year	Gross NPAs to Total Assets		Net NPAs to Total Assets		Total Assets
	₹	%	₹	%	₹
1996-1997	1563.80	8.19	1563.80	8.19	19093.55
1997-1998	1522.43	5.82	654.00	2.50	26167.37
1998-1999	1529.86	4.56	548.79	1.64	33539.69
1999-2000	1394.11	3.19	442.24	1.01	43742.39
2000-2001	1365.78	2.61	476.45	0.91	52262.10
2001-2002	1524.41	2.39	756.68	1.19	63768.29
2002-2003	2109.89	2.85	933.74	1.26	74135.13
2003-2004	2416.61	3.00	0.00	0.00	80671.45
2004-2005	2222.90	2.40	0.00	0.00	92739.06
2005-2006	1802.87	1.58	0.00	0.00	113767.46
2006-2007	1786.84	1.18	0.00	0.00	151323.88
2007-2008	2298.94	1.27	0.00	0.00	180669.61
2008-2009	2298.94	1.04	0.00	0.00	220679.59

Source : Compiled from the Annual Reports

Table III indicates that the gross and net NPAs to total advances of the bank over the thirteen years period from 1996-1997 to 2008-2009. The per cent gross NPAs to total advances has been marginally a declining trend is observed over the study period, i.e. from 11.27% in the year 1996-1997 to 1.38% in the year 2008-2009. The same trend is observed in the ratio of net NPAs to total advances from 11.27% in 1996-1997 to 2.15% in 2002-2003. From the year 2003-2004 to 2008-2009 the net NPAs to total advances per cent shows 0% constantly. This shows norms are followed effectively by the bank regarding recovery, the bank's net NPAs to advances ratio has been reached below the international standard level of two to 3%, which leads a significant improvement in reduction of mounting NPAs.

Table III
NPAs as percentage to Total Advances

(In ₹ Lakhs)

Year	Gross NPAs to Total Advances		Net NPAs to Total Advances		Total Advances
	₹	%	₹	%	₹
1996-1997	1563.80	11.27	1563.80	11.27	13877.60
1997-1998	1522.43	10.00	654.00	4.30	15222.21
1998-1999	1529.86	9.18	548.79	3.29	16658.56
1999-2000	1394.11	7.02	442.24	2.23	19868.41
2000-2001	1365.78	5.23	476.45	1.83	26094.62
2001-2002	1524.41	4.49	756.68	2.23	33979.28
2002-2003	2109.89	4.87	933.74	2.15	43360.24
2003-2004	2416.61	4.42	0.00	0.00	54631.98
2004-2005	2222.90	3.35	0.00	0.00	66346.43
2005-2006	1802.87	2.26	0.00	0.00	79717.64
2006-2007	1786.84	1.67	0.00	0.00	106736.97
2007-2008	2298.94	1.74	0.00	0.00	131823.19
2008-2009	2298.94	1.38	0.00	0.00	167016.31

Source : Compiled from the Annual Reports.

It is clear from the Table IV that there is an increasing trend in the standard assets during the entire study period. It reveals that the quantum of performing assets is occupying the advances, which reduces the losses through the loans. It shows that the bank is following effective lending system and it lends only to the loyal borrowers. Even though the amount of sub-standard, doubtful and loss assets shows an increasing trend in terms of rupees, but in absolute term in percentage it declines from 11.27% to 1.38% at the end of March 2009 as a per cent of total outstanding. It shows there has been a significant reduction in non-performing assets. Data relating to sub-standard assets also advocate in favour of the bank's efficiency in managing its loan portfolio, even though there is a slight fluctuation during the year 2001-2002, 2002-2003 ,2003-2004,2004-2005,and 2005-2006. The table depicts that there is gradual decrease in the quantum of loss assets which shows the efficiency of the bank in reducing the loss assets by adopting strict norms in lending year by year and also the management of bank is effective in recovering mounting NPAs over the study period.

Table IV
Asset Classification of Performing and Non-Performing Assets

(In ₹ Lakhs)

Year	Standard/ Performing Assets	%to Total Outstanding	NPAs Sub-Standard Assets	NPAs Doubtbtful Assets	NPAs Loss Asset	Total NPAs	% to Total Outstanding	Total Outstanding
1996-97	12313.80	88.73	289.94	1094.73	179.13	1563.80	11.27	13877.60
1997-98	13699.78	90.00	420.94	923.55	177.94	1522.43	10.00	15222.21
1998-99	15128.70	90.82	354.35	434.66	740.85	1529.86	9.18	16658.56
1999-00	18474.30	92.98	252.43	684.71	456.97	1394.11	7.02	19868.41
2000-01	24728.84	94.77	174.05	765.20	426.53	1365.78	5.23	26094.62
2001-02	32454.87	95.51	360.18	757.23	407.00	1524.41	4.49	33979.28
2002-03	41598.68	95.94	532.89	805.30	423.37	1761.56	4.06	43360.24
2003-04	52522.10	96.14	708.65	947.38	453.85	2109.88	3.86	54631.98
2004-05	63929.82	96.36	817.37	1159.78	439.46	2416.61	3.64	66346.43
2005-06	77494.74	97.21	695.38	1284.29	243.23	2222.90	2.79	79717.64
2006-07	104934.10	98.31	273.86	1417.60	111.41	1802.87	1.69	106737.00
2007-08	130036.35	98.64	313.23	1372.07	101.54	1786.84	1.36	131823.20
2008-09	164717.37	98.62	404.34	1342.73	551.87	2298.94	1.38	167016.30

Source: Compiled from the Annual Reports

To sum up, the null hypothesis was framed that there is no significance difference in the asset-wise recovery of mounting NPAs over the study period, for which ANOVA test is employed and the results are presented in the Table V. The calculated value of F is greater than the table value, the hypothesis is rejected. Hence, there is a significance difference in the means of sub-standard assets, doubtful assets and loss assets in recovery of mounting NPAs. It is also calculated the co-efficient of correlation (r) between the performing and non-performing assets. It shows a moderate degree of positive correlation of 0.644. Sector-wise NPAs was also analysed in this regard, which is presented in Table VI.

Table V
ANOVA Table

Source of Variation	Sum of Squares	*df*	Mean Square	*F*-Value	*P*-Value	*F*-criterion	Inference
Between	3177226.05	2	1588613.02			3.26*	
Within	2024979.04	36	56249.42	28.24	0.00		
Total	5202205.09	38					Significant

Note : * at 5% level of Significance
Source : Self Computed

Table VI
Sector-wise Non-performing Assets

(In ₹ Lakhs)

Years	Farm Sector		Non-Farm Sector		Total	
	₹	%	₹	%	₹	%
1996-1997	3324.27	23.95	10553.30	76.05	13877.60	100
1997-1998	6843.44	44.96	8378.77	55.04	15222.21	100
1998-1999	8013.30	48.10	8645.26	51.90	16658.56	100
1999-2000	8173.63	41.14	11694.80	58.86	19868.41	100
2000-2001	9546.80	36.59	16547.80	63.41	26094.62	100
2001-2002	12191.90	35.88	21787.40	64.12	33979.28	100
2002-2003	13771.10	31.76	29589.10	68.24	43360.24	100
2003-2004	19771.30	36.19	34860.70	63.81	54631.98	100
2004-2005	32729.40	49.33	33617.00	50.67	66346.43	100
2005-2006	36684.30	46.02	43033.40	53.98	79717.64	100
2006-2007	61715.20	57.82	45021.80	42.18	106736.97	100
2007-2008	61166.30	46.40	70656.80	53.60	131823.10	100
2008-2009	81247.50	48.65	85768.90	51.35	167016.31	100

Source : Compiled from the Annual Reports

The total NPAs of the bank can also be classified as farm sector and non-farm sector. In Table VI the sector-wise analysis of NPAs shows that the proportion of NPAs in farm sector is in fluctuating manner over the study period from 1996-1997 to 2008-2009. The proportion of NPAs in the non-farm sector is also in a fluctuating manner over the study period. To sum up, the null hypothesis is set up that there is no significant difference among the farm sector and non-farm sector in the recovery of NPAs. The calculated value of F-value shown in Table VII is 0.2618339, which is less than the table value of 4.259677 at 5 % level of significance. Hence there is no significance is observed in sector-wise NPAs recovery for the thirteen years study period.

Table VII
ANOVA Table

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	*F*-Value	*P*-Value	Table Value
Between	162382971.1	1	162382971			4.259677*
Within	14884211941.0	24	620175498	0.2618339	0.613539	
Total	15046594912.0	25				

Note : * at 5% level of Significance

Source : Self Computed

Further an attempt is made to analyze the non-performing assets of the bank through the some relevant major bank ratios for rating the bank's performance. The criteria of gross non-performing assets as well as net non-performing assets percentages cannot be the only yardsticks for measuring the financial strength of the bank or its performance with respect to non-performing asset management. Moreover, the techniques adopted by the banks for the reduction of non-performing assets vary and play an important role in the quality of the management of non-performing assets. The compromise with the borrower, waivers and write-offs are not to be considered as management of non-performing assets. On the other hand, the up gradation of the pre-sanctioning procedure, the follow up of advances and the effective cash recovery are the major components of reducing non-performing assets. In this context, the financial strength and performance of the management of reducing non-performing assets may be analyzed with various parameters and some ratios which are the non-performing assets indicators:

3.2 *Ratio Analysis of RRBs*

3.2.1 *Gross Non-Performing Asset Ratio (GNPAR)*

Gross non-performing asset is the sum of all advances that are declared/ classified as non-performing assets as per the Reserve Bank of India guidelines as on the balance sheet date. It is defined as the ratio of gross non-performing assets to gross advances. It indicates the quality of the credit portfolio of the bank. A high gross non-performing assets ratio indicates a low quality credit portfolio. The international prescribed level is five%.

3.2.2 *Net Non-Performing Asset Ratio (NNPAR)*

The Net Non-performing Asset ratio is determined by deducting from the gross non-performing assets the provision held in respect of the non-performing assets: the interest accrued and charged to the borrower, but not recognized as income by the bank and kept in an interest suspense account; claims receivable/received from the sponsor bank and the National Bank for Agriculture and Rural Development of India and held in a suspense account and such other items. The International standard for this ratio is to maintain 2.5%. It indicates the degree of risk in the credit portfolio of the bank. A high ratio indicates the high quantity of risky loans in the bank for which no provision is made.

3.2.3 *Gross Problem Asset Ratio (GPR)*

It is the ratio of Gross Non-Performing Assets to the Total Assets of the bank. It has a direct bearing on the returns on the assets as well as the liquidity risk management of the bank. A high ratio means low liquidity.

3.2.4 *Depositor's Asfety Ratio (DSR)*

It is also known as the standard assets to total outside liabilities ratio. Here standard asset means standard advances and investments. Outside liabilities are total liabilities minus share capital and reserves. It indicates the degree of safety of the deposits. If the ratio is higher, the safety of the deposits is strong.

3.2.5 *Shareholders' Risk Ratio (SRR)*

It is the ratio of the net non-performing assets to the total of share capital and the reserves of the bank. It indicates the degree of risk associated with the shareholders' investment. High ratio indicates higher the risk to the shareholders.

3.2.6 *Provisions Ratio (PR)*

It is the ratio of the total provisions held in respect of the non-performing advances to the gross non-performing assets of the bank. It indicates the degree of safety measures adopted by the bank. It has a direct bearing on the profitability, dividend and safety of the shareholders fund. If the provision ratio is low, it indicates that the bank has not made adequate provision for the probable advance losses. The upward movement of the provision indicates that the bank is adopting adequate measures for the future advance losses. However, higher provisioning should not be considered as a healthy trend since the percentage would be higher.

3.2.7 *Sub-Standard Assets Ratio (SSAR)*

It is the ratio of the total sub-standard assets to the gross non-performing assets of the bank. It indicates the scope of upgradation of the non-performing assets. If the ratio increases, it indicates that there is high degradation of the performing assets of the bank.

3.2.8 *Doubtful Assets Ratio (DAR)*

This ratio is between the total doubtful assets and the gross non-performing assets of the bank. It indicates the scope of compromise for the non-performing assets reduction. If this ratio increases, it indicates that the management of non-performing assets in the bank is poor.

3.2.9 *Loss Assets Ratio (LAR)*

This ratio is between the total loss assets and the gross non-performing assets of the bank. This ratio should be low and closer to zero. If the ratio increases, it indicates that there is incidence of high erosion of securities of the loan/advance assets.

3.2.10 *Slippage Ratio (SR)*

It is the ratio of the total fresh non-performing assets added during the year to the total standard loan assets in the beginning of the year. It indicates the degree of deterioration of the loan/advance assets. If the slippage ratio increases, it shows that there are no effective preventive measures.

The Reserve Bank of India Bank Board has set up certain bench marks to evaluate the performance of the bank using NPA ratios as parameter. The above relevant ratios are taken as parameter and compared with bench marks standards prescribed by Reserve Bank of India given in Table VIII and Table IX.

Table VIII

A Model for Rating of a Bank for its quality of NPA Management

Sl.No	Parameters	Positive (+1 mark)	Negative (-1 mark)
	In Comparison to the Standardized Bench Marks (Ratios in %) - Marks and Performance		
1.	Gross NPA Ratio	5% & less	More than 5%
2.	Net NPA Ratio	2.5% & less	More than 2.5 %
3.	Problem asset Ratio	2% & less	More than 2%
4.	Depositors' Safety Ratio	More than 80%	80% and less
5.	Shareholders' Risk Ratio	Less than 100%	100% and above
6.	Sub-Standard Asset Ratio	35% and less	More than 35%
7.	Doubtful asset Ratio	60% and less	More than 60%
8.	Loss Assets Ratio	5% and less	More than 5%
9.	Provisions Ratio	60% and More	Less than 60%
10.	Slippage Ratio	Less than 5%	5% and more
	In Comparison to the Previous year Performance		
1.	Gross NPA Ratio	Decrease	Increase
2.	Net NPA Ratio	Decrease	Increase
3.	Problem asset Ratio	Decrease	Increase
4.	Depositors' Safety Ratio	Increase	Decrease
5.	Shareholders' Risk Ratio	Decrease	Increase
6.	Provisions Ratio	Increase	Decrease
7.	Slippage Ratio	Decrease	Increase

Source : Self Computed

Table IX

The rating grades for a Bank for its quality of NPA Management

Ranges of Total Marks Obtained	Grade	Rating
+24 to +30	A+	Excellent
+16 to +22	A	Very Good
+8 to +14	B	Good
0 to +6	C	Average
-10 to -2	D	Poor
-20 to -12	E	Very Poor
-30 to -22	F	Very Very Poor

Note : Ratios applied in this paper only is shown in the above tables.
Source : Aravanan and Vijaya Kumar (2007)

In the present paper, 17 parameters are to be calculated and adopted suitably with modifications. These 17 parameters are going to be awarded the mark of +1 and -1. The total marks for the 17 parameters vary between +17 to -17 and the same will be ranked and grades as per the Table-X which is based on Tables VIII and Table IX.

Table X

The rating grades for a Bank for its quality of NPA Management

Ranges of Total Marks Obtained	Grade	Rating
+14 to +17	A+	Excellent
+7 to +13	A	Very Good
+1 to +6	B	Good
0	C	Average
-6 to -1	D	Poor
-7 to -13	E	Very Poor
-17 to -14	F	Very Very Poor

Note : Ratios applied in this paper is shown in the above tables.

Table XI is worked out from the Tables VIII, Table IX, and Table X. The results were obtained by categorizing into different ranges and grades in accordance with the RBI's prescription for which the rating Table X is formed. In Table-XII the total marks earned by the bank from the year 1997-1998 to 2008-2009 are fitted against the grades, and the results were shown at the end of the Table-XII by specifying the performance of the bank.

Table XI
Important Banking Ratios

Year	GNPAR	NNPAR	GPR	DSR	SRR	PR	SSAR	DAR	LAR	SR
1996-97	11.27	14.40	8.19	58.73	1563.80	59.59	14.64	55.28	9.05	0.00
1997-98	10.00	4.71	5.82	52.86	78.24	57.01	26.92	59.06	11.38	0.00
1998-99	9.18	3.51	4.56	52.53	36.69	64.13	23.28	28.55	48.66	1.68
1999-00	7.02	2.34	3.19	145.82	15.03	68.28	16.50	44.76	29.87	1.71
2000-01	5.23	1.89	2.61	61.26	15.51	65.12	12.48	54.89	30.60	2.37
2001-02	4.49	2.28	2.39	64.14	24.34	60.43	26.37	55.44	29.80	1.65
2002-03	4.87	2.20	2.38	80.66	26.35	55.02	34.96	52.83	27.77	1.40
2003-04	4.42	0.00	2.62	98.51	0.00	106.43	40.23	53.78	25.76	1.24
2004-05	3.35	0.00	2.61	100.68	0.00	106.88	38.74	54.97	20.83	0.83
2005-06	2.26	0.00	1.95	99.26	0.00	48.33	28.78	53.14	10.06	1.12
2006-07	1.67	0.00	1.19	94.40	0.00	118.03	12.32	63.77	5.01	0.49
2007-08	1.74	0.00	0.99	96.75	0.00	124.22	17.37	76.10	5.63	0.61
2008-09	1.38	0.00	1.04	97.13	0.00	127.64	22.63	75.15	30.89	1.02

Source : Compiled from the annual reports

IV. Summary of Findings

After viewing the analysis of management of NPAs, the following findings as well as justification of the hypothesis are presented:

- The ratio of gross NPAs to total assets has constantly been declined from 8.19% in the year 1996-1997 to 1.04% in 2008-2009, whereas net NPAs to assets ratio has come down from 8.19% in 1996-1997 to 1.26% in 2002-2003 and from the next year 2003-2004 it stands with 0% up to 2008-2009.
- The ratio of gross NPAs to total advances has constantly been declined from 11.27% in the year 1996-1997 to 1.38% in 2008-2009, whereas net NPAs to assets ratio has come down from 11.27% in 1996-1997 to 2.15% in 2002-2003 and from the next year 2003-2004 it stands with 0% up to 2008-2009.
- A null hypothesis is framed that there is no significance difference in the asset-wise recovery of mounting NPAs over the study period, for which ANOVA test is employed. The calculated value of F is 28.24, which is greater than the table value 3.26 at 5% level of significance, and hence the hypothesis is rejected. It is observed that there is a significance difference in the means of sub-standard assets, doubtful assets and loss assets in recovery of mounting NPAs for the entire study period. It is also calculated the co-efficient of correlation (r) between the performing and non-performing assets. It shows a moderate degree of positive correlation of 0.644.

Table XII
Rating for quality of NPAs

S.NO.	Parameters	96-97		97-98		98-99		99-00		00-01		01-02		02-03		03-04		04-05		05-06		06-07		07-08		08-09	
		+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
In Comparison to the Standardized Bench Marks (Ratios in %)																											
1.	GNPAR	–	–		1		1		1		1	1		1		1		1		1		1		1		1	
2.	NNPAR	–	–		1		1	1		1		1		1		1		1		1		1		1		1	
3.	GPR	–	–		1		1		1		1		1		1		1		1	1		1		1		1	
4.	DSR	–	–		1		1	1			1		1	1		1		1		1		1		1		1	
5.	SSR	–	–	1		1		1		1		1		1		1		1		1		1		1		1	
6.	PR	–	–		1	1		1		1		1			1	1		1			1	1		1		1	
7.	SSAR	–	–	1		1		1		1		1		1			1		1	1		1		1		1	
8.	DAR	–	–	1		1		1		1		1		1		1		1		1			1		1		1
9.	LAR	–	–		1		1		1		1		1		1		1		1		1	1		1			1
10.	SR	–	–	1		1		1		1		1		1		1		1		1		1		1		1	
In comparison to previous year's performance																											
1.	GNPAR	–	–	1		1		1		1		1		1		1		1		1		1		1		1	
2.	NNPAR	–	–	1		1		1		1			1		1	1		1		1		1		1		1	
3.	GPR	–	–	1		1		1		1		1		1			1	1		1		1		1			1
4.	DSR	–	–		1		1	1			1	1		1		1		1			1		1		1	1	
5.	SRR	–	–	1		1		1		1		1		1		1		1		1		1		1		1	
6.	PR	–	–		1	1		1			1		1		1	1		1			1	1		1		1	
7.	SR	–	–	1			1		1		1	1		1		1		1		1			1		1		1
Sub-total				9	-8	10	-7	13	-4	10	-7	12	-5	12	-5	13	-4	14	-3	13	-4	14	-3	14	-3	13	-4
Total Marks				1		3		9		3		7		7		9		11		9		11		11		9	
Grade				B		B		A		B		A		A		A		A		A		A		A		A	
Rating				GOOD		GOOD		VERY GOOD		GOOD		VERY GOOD		VERY GOOD		VERY GOOD		VERY GOOD		VERY GOOD		VERY GOOD		VERY GOOD		VERY GOOD	

- A null hypothesis is set up that there is no significant difference among the farm sector and non-farm sector in the recovery of NPAs. The calculated value of F is 0.2618339, which is less than the table value of 4.259677 at 5% level of significance. Hence there is no significance is observed sector-wise NPAs recovery for the thirteen years study period.
- From the banking key ratios it is observed the bank's performance is graded as A and B for different years in the entire study period with the rating of Good and Very Good.

V. Suggestions

After going through the summary of findings and the results of hypothesis testing, the following are the suggestions offered to improve the effective management of mounting NPAs of the Regional Rural Bank are as follows:

- The bank may follow different strategies of NPA management, timely construction of loan portfolio. Keeping in view the present condition of the sensitive sector where volatility is increasing day by day the bank may diversify its services into capital market, consultancy, lease financing, housing finance and insurance services with prior permission of Central Government.
- The priority sector lendi ng target, which includes farm sector, has been revised to 60% of total advances, with sub-target of 15% to weaker sections. Even though the ANOVA test rejects the null hypothesis, which shows the bank's management is performing in a very well manner, additional steps may be taken to manage balanced loan portfolio.
- The bank may take steps to improve the existing risk management systems, implementation of new accounting standards to bring up them equal to international standard, transparency and disclosures, supervision of financial conglomerates and corporate governance to face the competitive global environmental conditions.
- The bank may take steps to constitute more legal cells and tribunals, recovery branches, NPA management departments, *lok adalats* etc., for speedy recovery of NPAs in addition to the existing methods.
- The banks may be permitted to design and implement their own policies; the same comes under the RBI guidelines, for recovery especially in case of old and unresolved cases falling under the NPA category and one of the most important aspects required in managing the NPAs to curb the incidence of NPAs amongst new loans sanctioned by the bank.
- The bank may send notices to defaulters, which will serve as a caution list which considering request for new additional credit limits from defaulting borrowings units and also file criminal cases in regard to willful defaulters.
- The bank may consider that the NPAs should be avoided in initial stages of credit consideration by putting in place appropriate credit appraisal mechanism.

- One of the bank's prime responsibilities is that the borrower should also realize their role and responsibilities. They should understand the difficulties of each other and should try to work towards contributing a healthy mechanism.
- The bank should adopt the technological changes by converting their banks as fully computerized banks with core banking solutions, which may lead to a fast and easy service to their customers.

VI. Conclusion

In the liberalized banking scenario, the Regional Rural Banks, which welcomes the radical changes and make the organization fit for the changes without much difficulty. The bank has invited the task assigned to her both at the time of post reforms era. The performance highlights of the bank exposed that it has achieved the tasks and targets from time to time and continuously retained in a good position in financial strength. In this juncture it is necessary to include that the bank's main business is lending, which may cause for NPAs. But the occurrences of the NPAs are unavoidable but it can be managed effectively with precautionary measures. In this connection, the bank should frame new policies and procedures, which should not go out of the regulation framed by the Reserve Bank of India for Regional Rural Banks. The management should also design a roadmap to bring up the bank equal to international standard. If it is done, it is sure this Regional Rural Bank located in Tamilnadu, India will be the number one bank among the regional rural banks in India.

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