



“PRAGMATIC ANALYSIS OF NPA TRENDS IN DISTRICT CENTRAL COOPERATIVE BANKS OF RAJASTHAN”

Dr. Ankita Chaturvedi¹

Sr. Assistant Professor

Dept. of Accounting and Taxation,
The IIS University, Jaipur (Rajasthan)

Ms. Kanchan Sangwan²

Research Scholar

Dept. of Accounting and Taxation,
The IIS University, Jaipur (Rajasthan)

ABSTRACT

Co-operative bank provide timely assistance to rural people by way of giving loans and other services to agriculturist and civilians in general. But any default in repayment of loan, ultimately effects on operational efficiency and financial health of the bank. Thus it can be postulated that management of loans is very imperative in district cooperative banks. In this backdrop the current research endeavor is attempted to pragmatically study the trend of Nonperforming Assets in District Cooperative banks of Rajasthan. The present paper aims to analyze the NPA factor and returns on assets of the selected five District Cooperative Banks of Rajasthan for the period of five years i.e., from 2011-12 to 2015-16. The data were collected through annual report and other sources which are secondary in nature. Sampling method involves the purposive or deliberate selection of particular units of banks. The study has considered various parameters for measuring the performance like Gross NPA %, Net NPA %, Return % on assets, growth % of Net NPA and growth % of return on assets. After interoperating the correlation R values statistically in above NPA ratios, facts and findings it was postulated that research hypothesis H_1 : *There exists a significant correlation among NPA and financial performance of Cooperative banks* was accepted and proved. It was concluded that NPAs are having a fluctuating trend over the study period, but Non Performing Assets still have a significant impact on financial performance of cooperative banks. This research study is in view of the fact that, the co-operative banks are mainly based in rural areas and have proved that maximum co-operative sector damaged its reputation because of high position of NPA which effect ultimately the economic development of the state and nation.

Keywords: *District Cooperative Bank, NPA, Movement of NPA, mean, Correlation, Standard deviation.*

1. INTRODUCTION

Every country with effective banking system is capable of mobilizing the savings of the people and channelizing the same into the sectors of productive uses. Nevertheless, in order to increase the Indian efficiency and quality of operations in banking system, the system suffered from many deficiencies.

Due to the rapid growth in trajectory of trade and industry which leads to the economic development in nation is significantly depended on the survival of a banking organization which is directly correlated with the level of income generated through optimum use of assets after paying the cost of funds for acquiring them and other administrative costs involved therein. Once the assets cease to contribute the income, they are termed as Non Performing Assets, which not only have cost of funds involved but also require to be operated as per prudential norms⁽¹⁾

A nonperforming asset (NPA) refers to a classification for loans on the books of financial institutions that are in default or are in arrears on scheduled payments of principal or interest. Likely, debt is classified as nonperforming when loan payments have not been made for a period of 90 days. The standard period of time for debt to be categorized as nonperforming is considered to be 90 days and each loan has its own term and conditions according to which the amount of elapsed time may differ i.e. it can be shorter or longer.

In the Indian Banking System, Co-operative banks exist side by side with commercial banks and play a supplementary role in providing need-based finance, especially for agricultural and agriculture-based operations including farming, cattle, milk, hatchery, personal finance etc. along with some small industries and self-employment driven activities. Co-operative Banks have come a long way since the enactment of Agricultural Credit Co-operative Societies Act 1904.⁽²⁾

The classification of cooperative credit institutions in the country may be broadly into urban credit cooperatives and rural credit cooperatives. There are about 2090 urban credit cooperatives and these societies mutually constitute for about 10 percent of the aggregate banking business and therefore regarded as an important segment of the banking system. The urban credit cooperatives are also prevalently recognized as Urban Cooperative Banks.

With a view to cater the seasonal financial requirements for agriculture & other allied activities at state level in Rajasthan, The Rajasthan State Cooperative Bank Ltd.(RSCB) was established & registered under Rajasthan Cooperative Societies Act on 14th October, 1953. It is an Apex institution of the District Central Cooperative Banks (DCCBs) functioning in the state. The governance of village level Primary Agriculture Cooperative Societies, District Central Cooperative Banks & RSCB is ensured by elected board through a democratic election system under The Rajasthan Cooperative Societies Act. At the District level 29 DCCBs covering 33 Districts of the State having 437 Branches.⁽³⁾

Thus in this backdrop there seems a research gap to enquire the NPA Trends in District Central Cooperative Banks of Rajasthan and the same has been formulated into current research endeavor.

2. LITERATURE REVIEW

A number of researches have been done and gone through in the field of NPA management in banks and this part of research paper is to present a review of all those important findings in the Cooperative banking sector. Few important among them are deliberated below:

Suryan and Veluraj (2017)⁴, in their investigation titled, "Productivity Analysis of the Pondicherry State Co-agent Bank", broke down the execution of the bank from 2005-06 to 2010-11. Different proportions, for example, cost of administration (add up to costs) to working capital

proportion, benefit to working capital proportion, non-intrigue wage to add up to pay proportion, and so on were utilized to survey the general execution of the bank. Spread and weight places of the bank were likewise investigated. They inferred that the productivity execution of the bank was noteworthy and bank could meet its commitments and standards. The cost of administration and foundation costs got decreased amid the time of study which additionally reinforced the benefit position of the bank.

A research conducted by Kumar S. (2016)⁵, on "Administration of Non-Performing Advances of District Central Co-agent Banks of Punjab test of ten DCCBs, i.e., five with abnormal state of NPAs and five with low level of NPAs, was taken for the investigation. It was discovered that in spite of the best endeavors, Central Co-agent banks had not prevailing with regards to enhancing their business. The NPAs in trim credit were observed to be the most reduced, while these were the most elevated in non-cultivate segment advance. Based on step-wise numerous relapses, it was discovered that standing, instruction, sum and sufficiency of credit were the primary components influencing reimbursement execution of the borrowers. She recommended that these banks should frame an extraordinary cell to screen NPAs and should take administrations of recuperation specialists.

Biswas P. K. and Deb A. T. (2015)⁶ in their investigation entitled, "Determinants of NPAs in the Indian Public Sector Banks: A Critique of Policy Reforms," follows the main drivers of NPAs. The event of default in the Indian setting has been grouped into arbitrary and non-irregular parts. Utilizing Poisson process, they distinguished arbitrary parts in particular: unfriendly choice, moral perils, central office relations and political obstruction which keep the managing an account area from recuperation of credit. Utilizing relapse investigation, they have discovered that NPAs are created in view of modern subsidence, stagnation in enterprises, unnecessary hazard taking by banks and nonattendance of advantage market to understand the security. They likewise pinpointed that breaking down of the institutional condition, caught by its monetary, political, lawful and social signs result in NPA.

Murinde and Yaseen V. H (2015)⁷ in their article on Management of NPA clarified that the customary ways to deal with bank direction are not favorable for administration of NPA. These methodologies underscored the view that the presence of capital ampleness control assumes a vital part in the long haul financing and dissolvability position of banks, particularly in helping the banks to keep away from liquidations and their negative externalities on the money related framework.

Jain S.C. (2014)⁸ in his thesis titled, " Non-performing Assets in Commercial and Development Banks in India" featured that the future benefit of banks would rely upon their readiness, operational effectiveness, client introduction, formation of extensive volume of performing resources, fulfillment of ideal levels of profitability. Since retail clients are quick ending up all the more requesting in the current focused condition, banks bring to the table esteem included administrations.

In same string an important study conducted by **Rajput N, Gupta M, Chauhan A K. (2012)⁹** **on Profitability and credit culture of NPAs precludes that** managing an account area in India has completely changed after the post change time. New difficulties went to bat for the managing an account segment of India in aggressive condition which changed the execution assessment of banks. This paper gives an even minded technique to assess powerful pointer with a concentration of non-performing resources of business banks. By embracing an investigative standpoint, NPA is considered as main considerations which influence bank execution in current circumstance. Then again, factors like better credit culture, dealing with the hazard and business

conditions which prompt bringing down of NPAs. This paper features that productivity measure and NPA convey a negative relationship which was found by utilizing factual apparatuses like connection, relapse and information portrayal method.

In a study of loan losses by **Rajagopal. S (2005)**¹⁰ has remarked that concessional credit should be restricted only to the poorest of the poor and to the under privileged sections of the society. Commercial rate of interest should be charged from those who can afford.

3. RESEARCH METHODOLOGY

RESEARCH METHODOLOGY	
Objectives of Research	<ul style="list-style-type: none"> To analyze the trend of NPA in selected DCCB of Rajasthan. To elucidate the financial performance of selected DCCB of Rajasthan and there correlation with NPA, To suggest improvement in monitoring and reducing the NPA.
Hypothesis of Research	<i>H₁</i> : There exists no significant correlation among NPA and financial performance of Cooperative banks
Research Design	The descriptive research design is used for the analysis and it is essentially a fact finding approach. It aims to explain the behavior and characteristics of an individual or group characteristics and to determine the frequency with the same things occurs.
Selected DCCBs of Rajasthan	(i) Jaipur Central Co-operative Bank Ltd. (ii) Ajmer Central Co-operative Bank Ltd. (iii) Bikaner Central Co-operative Bank Ltd. (iv) Jodhpur Central Co-operative Bank Ltd. (v) Kota Central Co-operative Bank Ltd.
Sampling Design	Sampling method involves the purposive or deliberate selection of particular units of world for constituting a sample that represents the population.
Period of Study	This study covers a period of last five years, i.e., from 2011-12 to 2015-16
Data collection Techniques	Secondary Data Collection – Research reports of RBI and Other Banks, Annual reports of selected banks, Management books, journals, research papers etc.
Statistical Analysis for hypothesis testing	The analysis NPA's of the banks is being carried out from 2011-12 to 2015-16. In order to analyze the NPA factor and NPA based performance of the banks by taking Gross NPA% (GNPA), Net NPA% (NNPA), %Growth of NNPA, Returns on Assets % and %Growth of Assets %. These ratio components of the bank have been analyzed through mean, coefficient of variation, coefficient of correlation, CAGR and t-test of significance.

4. RESULTS AND ANALYSIS

The total assets of any bank mainly comprise of the loans and advances investments etc. which are expected to generate a desirable rate of return at a minimum cost and expenditure. To assess the relative efficacy of the different categories of the banks under umbrella, selected DCCB's of Rajasthan, different ratios on total assets and various heads of expenditures to total assets of selected banks are analyzed for a grasp.

4.1 GROSS RETURN/PROFIT TO TOTAL ASSETS (GRTA)

This ratio indicates how much a bank can perform its operations net of the operating expenses on his total assets. This is arrived at by dividing the operating by total assets i.e.

$$\text{GRTA} = \text{Operating Profit/Total Assets}$$

Table 4.1**Gross Profit/Return to Total Assets of Selected DCCB's of Rajasthan during 2010-11 to 2014-15 (In%)**

Year	Jaipur Central Co-operative Bank Ltd.	Ajmer Central Co-operative Bank Ltd.	Bikaner Central Co-operative Bank Ltd.	Jodhpur Central Co-operative Bank Ltd.	Kota Central Co-operative Bank Ltd.
2010-11	1.80	2.50	1.90	1.80	2.80
2011-12	1.87	2.90	2.03	2.09	3.17
2012-13	2.06	2.73	2.22	2.03	3.09
2013-14	1.93	1.99	2.19	1.59	2.65
2014-15	1.88	2.64	1.64	1.43	2.85
Average	1.908	2.552	1.996	1.788	2.912
F value	9.52*				
*Value significant at 5% level					
Source: Annual report of Selected Banks.					

The higher the ratio, the better it is. This ratio determines the operating profits generated out of funds employed. The better utilization of funds will result in higher operating profits. Thus, this ratio will indicate how a bank has employed. The better utilization of funds will result in higher operating profits. Thus, this ratio will indicate how a bank has employed its funds in generating profits. Banks, which use their assets efficiently, will tend to have a better average than the industry average. The Gross Profit/Return on total assets of the five selected DCCB;s of Rajasthan during 2010-11 to 2014-15 was presented in Table - 4.1

Kota DCCB has recorded the highest average GRTA (2.91 percent) compared to other DCCB bank. This was followed by the Ajmer DCCB (2.52 percent), Bikaner DCCB (1.99 percent) and Jaipur DCCB (1.90 percent). Performance in terms of GRTA appears good in the case of the selected DCCB's of Rajasthan for the reference period.

However, the F value computed for difference in average GRTA among the five study DCCB banks (F=9.52) is found to be significant.

4.2 NET RETURN/PROFIT TO TOTAL ASSETS (NRTA)

Net profit to total assets indicates the efficacy of the bank is utilizing its assets in generating profits. It is arrived at by dividing the net profits by total assets. A higher ratio indicates the better income generating capacity of the assets and better efficiency of the management. Higher ratio indicates better earnings potential in the future.

$$\text{NRTA} = \text{Net Profit/Total Assets}$$

The Net Return/Profit on total assets of the five selected DCCBs of Rajasthan during 2010-11 to 2014-15 is presented in Table-4.2 below.

Table-4.2**Net Return/Profit to Total Assets of DCCB Banks during 2010-11 to 2014-15****(In Percentage)**

Year	Jaipur Central Co-operative Bank Ltd.	Ajmer Central Co-operative Bank Ltd.	Bikaner Central Co-operative Bank Ltd.	Jodhpur Central Co-operative Bank Ltd.	Kota Central Co-operative Bank Ltd.
2010-11	1.00	1.13	1.09	1.06	1.28
2011-12	0.97	1.28	1.33	1.42	1.58
2012-13	0.96	1.43	1.33	1.42	1.58
2013-14	0.88	1.53	1.24	0.95	1.77
2014-15	0.78	1.63	0.90	0.77	1.90
Average	0.918	1.4	1.178	1.124	1.622
F value	23.72*				
*Value significant at 5% level					
Source: Annual report of Selected Banks.					

Among the selected DCCB's of Rajasthan considered in the present study, the average net return on total assets is higher in Kota DCCB (1.62 percent) than in the Jodhpur (1.12 percent). In the same way, the average NRTA for the other DCCBs was reported.

The F value computed for difference in average NRTA among the five DCCB's of Rajasthan (F=23.72) is found to be significant.

4.3 NPA RATIOS

NPA and Financial performance analysis have been conducted which is summarized table below:

4.3.1 GROSS NPAs TO GROSS ADVANCES**Table-4.3****Gross NPAs to Gross Advances of Selected DCCB Banks during 2010-11 to 2014****(In-Percentage)**

Year	Jaipur Central Co-operative Bank Ltd.	Ajmer Central Co-operative Bank Ltd.	Bikaner Central Co-operative Bank Ltd.	Jodhpur Central Co-operative Bank Ltd.	Kota Central Co-operative Bank Ltd.
2010-11	2.0	2.9	1.3	1.6	2.0
2011-12	2.2	2.7	1.4	1.5	1.4
2012-13	2.4	2.3	1.4	1.5	1.1
2013-14	3.3	2.1	1.5	1.7	1.0
2014-15	3.6	2.0	2.4	2.6	1.0
Average	2.7	2.4	1.6	1.78	1.3
F value	2.430*				
*Value significant at 5% level					
Source: Annual report of Selected Banks.					

The F value computed for difference in average gross NPAs among the five DCCB's of Rajasthan (F=2.430) is found to be significant at 5% level.

The decline in gross NPAs in all the five banks covered in the study over the 5 years is a welcome sign and the reason for the drop in the ratio may be attributed largely to the Second Generation of Reforms in the Banking Sector.

4.3.3 NET NPAs TO NET ADVANCES

Table-4.4

Net NPAs to Net Advances of Selected DCCB Banks during 2010-11 to 2014

(In-Percentage)

Year	Jaipur Central Co-operative Bank Ltd.	Ajmer Central Co-operative Bank Ltd.	Bikaner Central Co-operative Bank Ltd.	Jodhpur Central Co-operative Bank Ltd.	Kota Central Co-operative Bank Ltd.
2010-11	0.9	1.3	0.3	1.1	0.6
2011-12	1.1	1.0	0.3	1.1	0.2
2012-13	1.1	0.6	0.4	1.1	0.2
2013-14	1.5	0.5	0.5	1.5	0.2
2014-15	2.0	2.5	1.3	2.2	0.2
Average	1.32	1.18	0.56	1.4	0.28
F value	2.702*				
*Value significant at 5% level					
Source: Annual report of Selected Banks.					

The F value computed for difference in average 'Net NPAs' among the five banks ($F=2.702$) is found to be significant at 5% level.

The decline in 'Net NPAs' in all the five banks considered for the study over the 5 years was a good sign and here also the reason for the drop in the ratio may be attributed largely to the Second Generation of Reforms.

4.3.4 GROSS NPAs TO TOTAL ASSETS

Table-4.5

Gross NPAs to Total Assets of Selected DCCB Banks during 2010-11 to 2014

(In-Percentage)

Year	Jaipur Central Co-operative Bank Ltd.	Ajmer Central Co-operative Bank Ltd.	Bikaner Central Co-operative Bank Ltd.	Jodhpur Central Co-operative Bank Ltd.	Kota Central Co-operative Bank Ltd.
2010-11	1.2	1.7	0.8	1.0	0.9
2011-12	1.4	1.5	0.9	1.0	0.8
2012-13	1.4	1.3	0.9	0.9	0.5
2013-14	1.9	1.1	1.0	1.1	0.6
2014-15	2.4	1.0	1.5	1.5	0.6
Average	1.66	1.32	1.02	1.1	0.68
F value	4.018*				
*Value significant at 5% level					

The F value computed for difference in average in 'Gross NPAs to Total Assets' among the five study banks ($F=4.018$) is found to be significant at 5% level. As in the case of Gross NPAs to gross advances, here (i.e. 'Gross NPAs to Total Assets') also the ratio has come down significantly from 2010-11 to 2014-15. This was due to the focus and attention put by the banks bring down the NPAs in the light of the reform emphasizes and policy presumption.

As to statistically analyze the current hypothesis Null H_0 : There exists no significant correlation among NPA and financial performance of Cooperative banks, all the NPA ratios calculated were correlated with financial performance of selected banks for study research period and further analyzed with Chi Square test. Results of Chi Square testes are depicted below:

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	72.393 ^a	8	.0
Likelihood Ratio	73.489	8	.0
Linear-by-Linear Association	5.904	1	.015

As obtained from the above tables, it can be postulated that Pearson Chi Square value was found to be 72.393 and likelihood ratio at 73.489, which states significance value at 0.015 thus the result is significant at $p < 0.05$. Therefore it can be stated that null hypothesis H_0 : There exists no significant correlation among NPA and financial performance of Cooperative banks is rejected and alternate hypothesis H_1 : There exists a significant correlation among NPA and financial performance of Cooperative banks is accepted and proved.

5. CONCLUSION

The current research endeavor objected to analyze the NPA factor and returns on assets of the selected five District Cooperative Banks of Rajasthan for the period of five years i.e., from 2011-12 to 2015-16.

- The study has considered various parameters for measuring the performance like Gross NPA %, Net NPA %, and Return % on assets, growth % of Net NPA and growth % of return on assets. The data collected about the banks was analyzed using percentage analysis, mean, standard deviation. After interoperating the correlation R values statistically in above NPA ratios, facts and findings it was postulated that research hypothesis **H_1 : There exists a significant correlation among NPA and financial performance of Cooperative banks was accepted and proved.**
- The quality of loan assets is the most important factor for the basic viability of the banking system. The overdue advances of banks in India are mounting and in consequence, the NPAs in their portfolio are on the rise, impinging on the banks, viability.
- Information on the movement of NPAs for the five selected DCCB's of Rajasthan during 2010-11 to 2014-15 was elaborated along with the separate combined units for comparison. Fluctuations have been noticed in both additions and deductions during the five year reference period. Banks in India are taking appropriate steps to reduce the Net NPAs every year.
- It was concluded that NPAs are having a fluctuating trend over the study period, but a significant impact can be analyzed on financial performance of cooperative banks due to

Non Performing Assets. Research findings revealed that DCCBs of Rajasthan cannot have sound financial position unless the fund disbursed by it to the clients is recovered and recycled.

- This research study is in view of the fact that, the District co-operative banks are primarily based in rural areas and have proved that maximum co-operative sector damaged its status because of high position of NPA which effect ultimately the economic development of the state and nation.

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