

## **NON-PERFORMING ASSETS (NPAS) TRENDS IN COOPERATIVE BANKS OF RAJASTHAN AMIDST THE COVID-19 PANDEMIC PERIOD**

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### **ABSTRACT**

Cooperative banks play a crucial role in providing timely financial assistance to rural communities, extending loans and services to both agriculturists and the general populace. However, any lapses in loan repayment can significantly impact the operational efficiency and financial well-being of these banks. Consequently, effective loan management becomes imperative, particularly for district cooperative banks. This research initiative aims to empirically analyze the trajectory of Non-Performing Assets (NPAs) in Urban Cooperative Banks of Rajasthan in COVID 19 phase . The impact of COVID-19 on Non-Performing Assets (NPAs) in banks has been significant and multifaceted. The pandemic has posed unprecedented challenges to businesses and individuals, leading to disruptions in economic activities and financial stress.

The study focuses on five selected Urban Cooperative Banks in Rajasthan, examining the NPA trends and returns on assets over a five-year period from 2016-17 to 2020-21 period i.e COVID 19 period, Data for the analysis were collected from annual reports and other secondary sources. The sampling method involved purposive or deliberate selection of specific bank units. Various parameters, such as Gross NPA %, Net NPA %, Return % on assets, growth % of Net NPA, and growth % of return on assets, were considered to measure performance.

After statistically interpreting the correlation R values in the NPA ratios, the study accepted and confirmed the research hypothesis H1: There exists a significant correlation between NPA and the financial performance of Cooperative banks. The findings suggest that



NPAs exhibited a fluctuating trend during the study period, yet they continued to exert a noteworthy impact on the financial performance of cooperative banks.

In conclusion, this research underscores the significance of addressing NPAs in cooperative banks, especially considering their predominantly rural presence. It highlights the detrimental effects of high NPA levels on the reputation and economic development of both the state and the nation.

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

## 1. INTRODUCTION

Every nation with an efficient banking system possesses the capability to mobilize the savings of its people and direct these funds toward productive sectors. However, despite the trajectory of trade and industry contributing to economic development in India, the banking system faces various deficiencies that impact its efficiency and operational quality.

The success of a banking organization is closely tied to income levels generated through the optimal utilization of assets after accounting for the costs of acquiring them and associated administrative expenses. When assets cease to contribute income, they are termed as Non-Performing Assets (NPAs), incurring not only the cost of funds but also requiring adherence to prudential norms.

A Non-Performing Asset (NPA) refers to a categorization for loans on financial institutions' books that are in default or behind on scheduled payments of principal or interest. Generally, debt is classified as non-performing when loan payments have not been made for a period of 90 days, though this time frame may vary depending on individual loan terms and conditions.

Within the Indian Banking System, Co-operative banks operate alongside commercial banks, playing a complementary role in providing need-based finance, particularly for agricultural and agriculture-based operations such as farming, cattle, milk, hatchery, personal finance, and small industries. The evolution of Co-operative Banks dates back to the Agricultural



Credit Co-operative Societies Act of 1904. The impact of COVID-19 on Non-Performing Assets (NPAs) in banks has been significant and multifaceted. The pandemic has posed unprecedented challenges to businesses and individuals, leading to disruptions in economic activities and financial stress. Here are some key aspects of the impact of COVID-19 on NPAs in banks:

**Economic Disruption:** The lockdowns and restrictions imposed to curb the spread of the virus resulted in economic disruptions across various sectors. Many businesses faced closures, reduced operations, and financial instability, leading to difficulties in repaying loans.

**Borrower Distress:** Individuals and businesses faced financial hardships due to job losses, income reductions, and business closures. This distress among borrowers made it difficult for them to meet their loan obligations, contributing to the rise in NPAs.

**Moratoriums and Restructuring:** To provide relief to borrowers during the pandemic, regulatory authorities and governments implemented moratoriums and loan restructuring programs. While these measures provided temporary relief, they also led to uncertainties about the true extent of asset quality issues.

**Sectoral Variations:** The impact of COVID-19 on NPAs varied across sectors. Industries directly affected by the pandemic, such as travel, hospitality, and entertainment, experienced a more pronounced increase in NPAs compared to sectors that remained relatively resilient.

**Banks' Risk Management:** The pandemic underscored the importance of robust risk management practices in banks. Banks with effective risk assessment and management frameworks were better positioned to navigate the challenges posed by the economic downturn and mitigate the impact on their NPAs.

**Government and Regulatory Measures:** Governments and regulatory authorities implemented fiscal and monetary measures to stabilize economies and support financial institutions. These measures, such as stimulus packages and liquidity support, aimed to minimize the adverse impact on NPAs.

**Uncertainty and Future Outlook:** The evolving nature of the pandemic and uncertainties surrounding its duration and economic repercussions made it challenging for banks to accurately assess and predict the future trajectory of NPAs. This uncertainty influenced decision-making regarding provisioning and risk management strategies.

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*The COVID-19 pandemic has had a profound impact on NPAs in banks globally.* The extent of the impact has been influenced by factors such as the severity of the outbreak, government responses, industry dynamics, and the effectiveness of banks' risk management practices. As economies recover and adapt to the new normal, ongoing vigilance and proactive measures by banks will be crucial in managing and mitigating the long-term impact on NPAs.

Thus in this backdrop there seems a research gap to enquire the NPA Trends in Urban 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 (2009)<sup>4</sup>**, in their investigation titled, "Productivity Analysis of the Pondicherry State Co-agent Bank", broke down the execution of the bank from 2005-06 to 2006-07. 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. (2006)<sup>5</sup>**, 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. (2005)<sup>6</sup>** 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 (2005)<sup>7</sup>** 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. (2004)<sup>8</sup>** 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. (2002)<sup>9</sup>** 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

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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)**<sup>10</sup> 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

<b>RESEARCH METHODOLOGY</b>	
<b>Objectives of Research</b>	<ul style="list-style-type: none"> <li>• To analyze the trend of NPA in selected Urban Cooperative Banks of Rajasthan.</li> <li>• To suggest improvement in monitoring and reducing the NPA.</li> </ul>
<b>Hypothesis of Research</b>	$H_1$ : There exists no significant correlation among NPA and financial performance of Cooperative banks
<b>Research Design</b>	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.
<b>Selected Urban Cooperative Banks of Rajasthan</b>	(i) Jaipur Central Co-operative Bank Ltd. (ii) Ajmer Central Co-operative Bank Ltd. (iii) Integral Urban Co-operative Bank Ltd. (iv) Jodhpur Central Co-operative Bank Ltd. (v) Kota Central Co-operative Bank Ltd.
<b>Sampling Design</b>	Sampling method involves the purposive or deliberate selection of particular units of world for constituting a sample that represents the population.
<b>Period of Study</b>	This study covers a period of last five years, i.e., from 2016-17 to 2020-21
<b>Data collection Techniques</b>	Secondary Data Collection – Research reports of RBI and Other Banks, Annual reports of selected banks, Management books, journals, research papers etc.
<b>Statistical Analysis for hypothesis testing</b>	The analysis NPA's of the banks is being carried out from 2006-07 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 UCB'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)

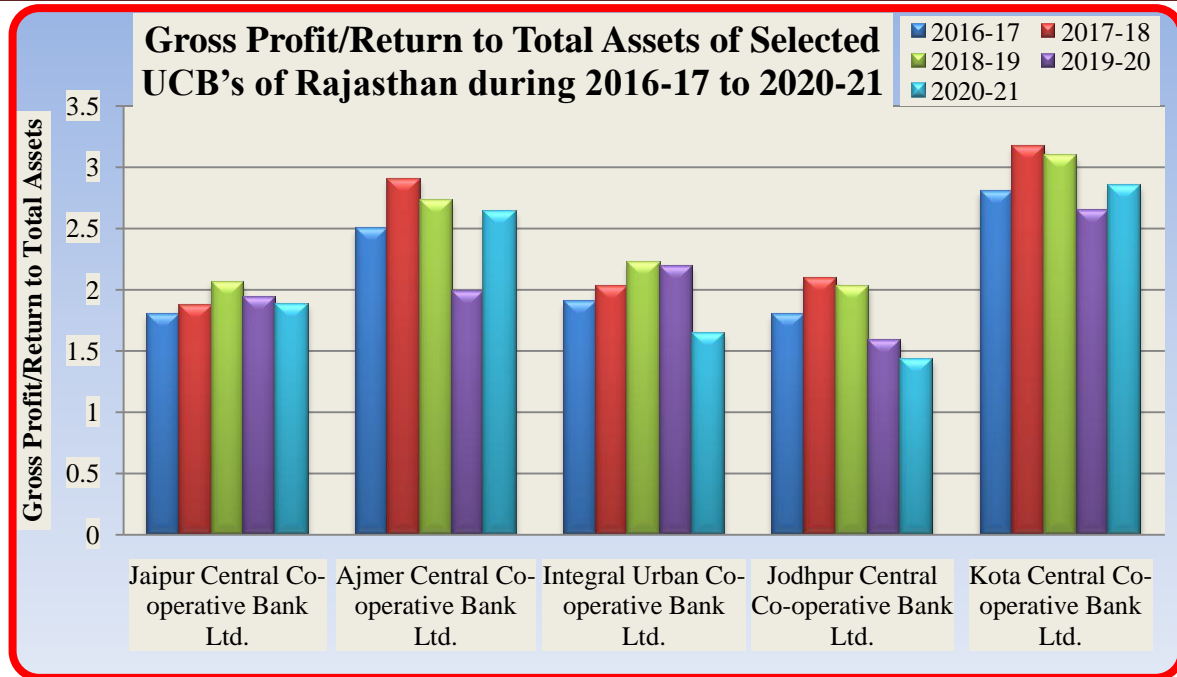
This ratio indicates how much a bank can perform its operations net of the operating expenses on his total assets. This is arrived at by dividing the operating by total assets i.e.

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

**Table 4.1**

**Gross Profit/Return to Total Assets of Selected UCB's of Rajasthan during 2016-17 to 2020-21 (In%)**

Year	Jaipur Central Co-operative Bank Ltd.	Ajmer Central Co-operative Bank Ltd.	Integral Urban Co-operative Bank Ltd.	Jodhpur Central Co-operative Bank Ltd.	Kota Central Co-operative Bank Ltd.
2016-17	1.80	2.50	1.90	1.80	2.80
2017-18	1.87	2.90	2.03	2.09	3.17
2018-19	2.06	2.73	2.22	2.03	3.09
2019-20	1.93	1.99	2.19	1.59	2.65
2020-21	1.88	2.64	1.64	1.43	2.85
<b>Average</b>	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 UCB<sup>'s</sup> of Rajasthan during 2016-17 to 2020-21 was presented in Table - 4.1

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

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



#### 4.2 NET RETURN/PROFIT TO TOTAL ASSETS (NRTA)

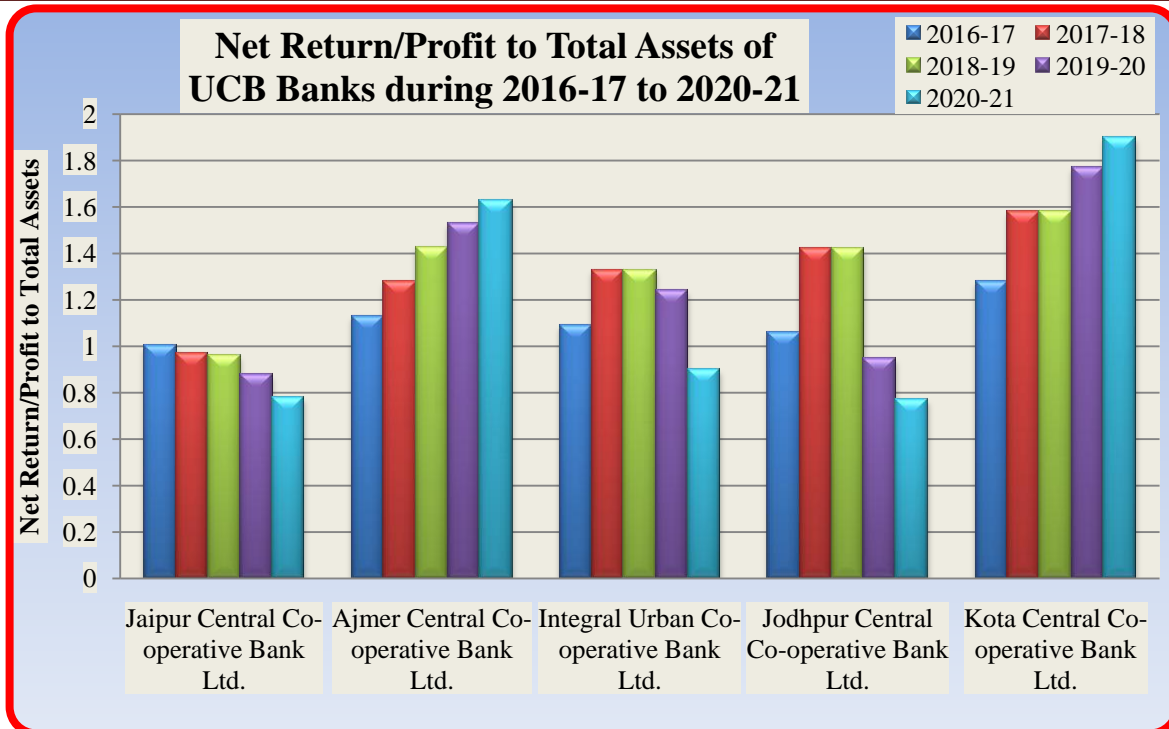
Net profit to total assets indicates the efficiency of the bank is utilizing its assets in generating profits. It is arrived at by dividing the net profits by total assets. A higher ratio indicates the better income generating capacity of the assets and better efficiency of the management. Higher ratio 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 UCBs of Rajasthan during 2016-17 to 2020-21 is presented in Table-4.2 below.

**Table-4.2**  
**Net Return/Profit to Total Assets of UCB Banks during 2016-17 to 2020-21**  
**(In Percentage)**

Year	Jaipur Central Co-operative Bank Ltd.	Ajmer Central Co-operative Bank Ltd.	Integral Urban Co-operative Bank Ltd.	Jodhpur Central Co-operative Bank Ltd.	Kota Central Co-operative Bank Ltd.
2016-17	1.00	1.13	1.09	1.06	1.28
2017-18	0.97	1.28	1.33	1.42	1.58
2018-19	0.96	1.43	1.33	1.42	1.58
2019-20	0.88	1.53	1.24	0.95	1.77
2020-21	0.78	1.63	0.90	0.77	1.90
<b>Average</b>	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 UCB’s of Rajasthan considered in the present study, the average net return on total assets is higher in Kota UCB (1.62 percent) than in the Jodhpur (1.12 percent). In the same way, the average NRTA for the other UCBs was reported.

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

### 4.3 NPA RATIOS

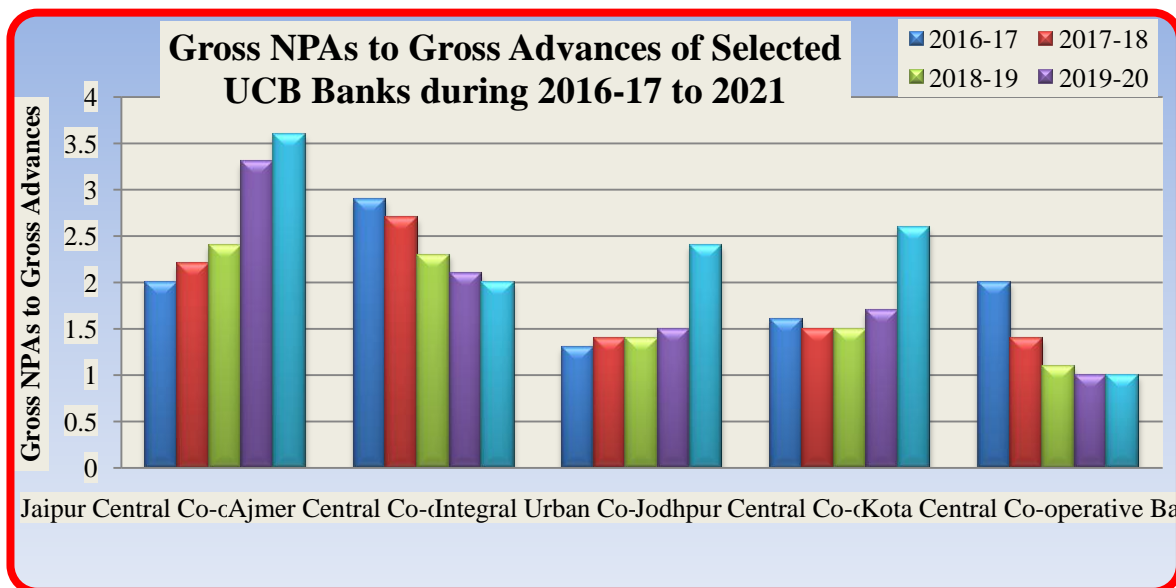
NPA and Financial performance analysis have been conducted which is summarized table below:

### 4.3.1 GROSS NPAs TO GROSS ADVANCES

**Table-4.3**

**Gross NPAs to Gross Advances of Selected UCB Banks during 2016-17 to 2021  
(In-Percentage)**

Year	Jaipur Central Co-operative Bank Ltd.	Ajmer Central Co-operative Bank Ltd.	Integral Urban Co-operative Bank Ltd.	Jodhpur Central Co-operative Bank Ltd.	Kota Central Co-operative Bank Ltd.
2016-17	2.0	2.9	1.3	1.6	2.0
2017-18	2.2	2.7	1.4	1.5	1.4
2018-19	2.4	2.3	1.4	1.5	1.1
2019-20	3.3	2.1	1.5	1.7	1.0
2020-21	3.6	2.0	2.4	2.6	1.0
<b>Average</b>	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.					



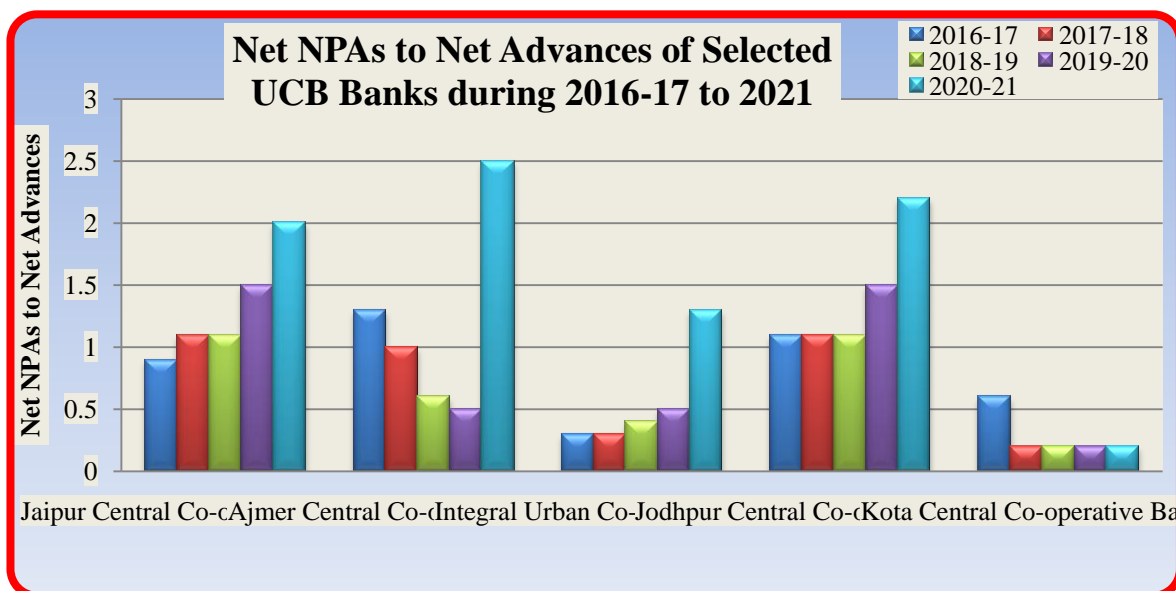
The F value computed for difference in average gross NPAs among the five UCB's of Rajasthan (F=2.430) is found to be significant at 5% level.

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 UCB Banks during 2016-17 to 2021**  
**(In-Percentage)**

Year	Jaipur Central Co-operative Bank Ltd.	Ajmer Central Co-operative Bank Ltd.	Integral Urban Co-operative Bank Ltd.	Jodhpur Central Co-operative Bank Ltd.	Kota Central Co-operative Bank Ltd.
2016-17	0.9	1.3	0.3	1.1	0.6
2017-18	1.1	1.0	0.3	1.1	0.2
2018-19	1.1	0.6	0.4	1.1	0.2
2019-20	1.5	0.5	0.5	1.5	0.2
2020-21	2.0	2.5	1.3	2.2	0.2
<b>Average</b>	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.					



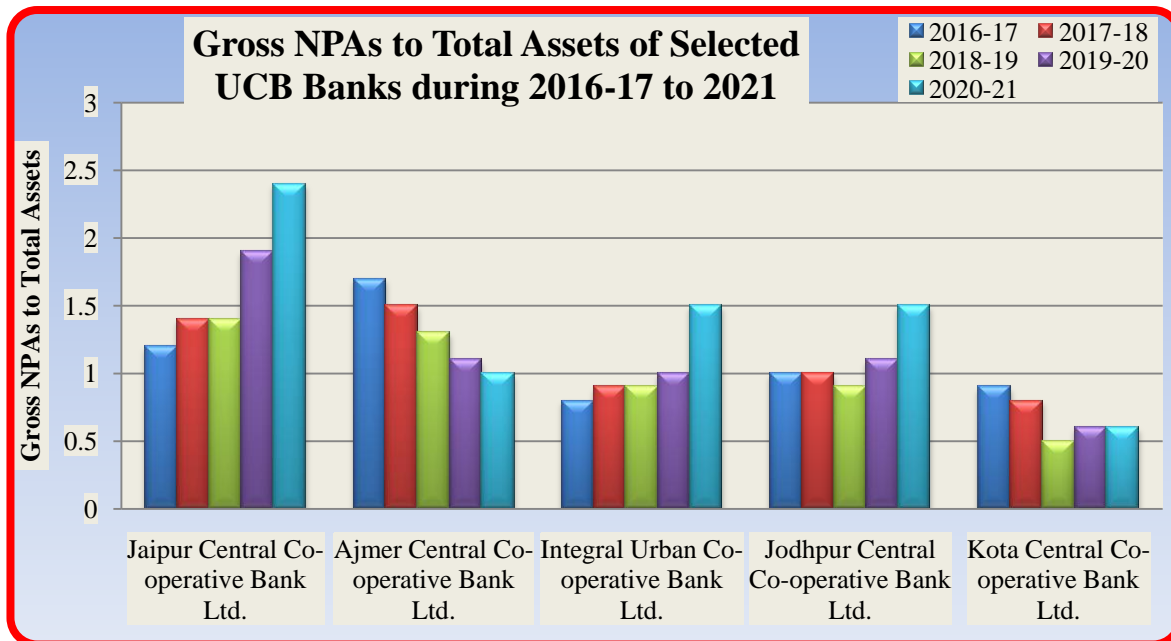
The F value computed for difference in average 'Net NPAs' among the five banks (F=2.702) is found to be significant at 5% level.

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 UCB Banks during 2016-17 to 2021**  
**(In-Percentage)**

Year	Jaipur Central Co-operative Bank Ltd.	Ajmer Central Co-operative Bank Ltd.	Integral Urban Co-operative Bank Ltd.	Jodhpur Central Co-operative Bank Ltd.	Kota Central Co-operative Bank Ltd.
2016-17	1.2	1.7	0.8	1.0	0.9
2017-18	1.4	1.5	0.9	1.0	0.8
2018-19	1.4	1.3	0.9	0.9	0.5
2019-20	1.9	1.1	1.0	1.1	0.6
2020-21	2.4	1.0	1.5	1.5	0.6
<b>Average</b>	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 2016-17 to 2020-21. 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:

**As obtained from the above tables, it can be postulated that Mean Net NPA CAGR** for Selected UCB's of Rajasthan =90.8%, CV=0.499. Return on Assets% with Correlation coefficient (r): -0.913, CV=0.61. The T-value is -0.020432. The P-Value is 0.04677. 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 Urban Cooperative Banks of Rajasthan for the period of five years i.e., from 2016-17 to 2020-21

- 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 UCB's of Rajasthan during 2006-07 to 2010-11 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 UCBs 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 Urban 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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