

## PERFORMANCE EVALUATION OF DIFFERENT REGIONAL RURAL BANKS IN INDIA

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### ABSTRACT

*The current study on Regional Rural Bank explained about history of RRBs in 1975 and the meaning of RRBs and the State of problem in the fields of credit offering in rural population. This study examines the economic results in India about RRBs from 2017–2018 to 2021–2022. Secondary data serve as the foundation for the study. The research paper deals with the financial performance of RRBs during the selected period and how the RRBs financial performance will differ from area to area. This paper evaluate the financial key indicators. This study has utilized the data gathered from the reports of NABARD. The study is an exploratory nature. Secondary data is mostly what the research depends on.*

*Key words: RRB, Performance Evaluation, Rural Credit, Farm Credit*

### I. INTRODUCTION

Regional Rural Banks (RRBs) were established in 1975 in accordance with the provisions of the Ordinance promulgated on September 26, 1975, and the Regional Rural Banks Act, 1976, in order to expand the rural economy by providing credit and other facilities, particularly to small and marginal farmers, agricultural labourers, artisans, and small business owners. These banks were constructed based on suggestions from the Narasimhan Committee Working Group. The first RRB was created under the name Prathama Bank, with a five-crore rupee authorised capital and its headquarters in Moradabad, Uttar Pradesh. The Central Government (50%) owns RRBs, together with the States (15%) and their respective sponsor banks (35%).

**Statement of Problem:** The provision of various forms of farm credit in rural regions with the loans they demand is overseen by RRBs, which are an essential source of financing for those areas. Many regional rural banks are now coping with problems like past-due accounts, recoveries, and non-performing assets as well as other issues consequently, it is important to research the RRBs' financial performance in country like India.

#### Objective of the study:

- 1 To evaluate the financial efficiency of RRBs during the year of 2018-2022.
- 2 To assess how the performance of RRBs has changed
- 3 To evaluate India's RRBs' key performance indicators.

### II. REVIEW OF LITERATURE

**(Rahul, Venkata Mrudula, & Aashi, april 2022) Study on Regional Rural Banks and their Impact on Poverty Reduction in India.**

The panel data model includes the cross-sectional and time-series analysis models, two more well-known analysis methods [12]re[34]. It was found that PDM can provide comparative amounts of information that a single time series or cross-section analysis cannot. The findings of this study indicate that the federal government and regional rural banks ought to focus more on.

**(Govinda Prasad, 1 April 2019) Region Wise Working of the Regional Rural Banks in India.**

Considering the specifics, the research aimed to look into the regional operations of RRBs in terms of branch network, the number of profitable and unprofitable RRBs, the typical amount of loans and advances per office, the typical amount of non-performing assets (NPA), net profit, and regional recovery trends.

**(Anis Ur, 2020) Innovation and Management by Regional Rural Banks in Achieving the Dream of Financial Inclusion in India: Challenges and Prospects**

To study the information that is currently available regarding the performance and operation of RRBs in India in order to determine the difficulties that these banks' staff face when promoting their services to rural customers. Percentages and the Chi-square test of independence were used to check the study's presumptions. The study's results can aid government officials in better comprehending the difficulties that local rural banks face while attempting to assist the underprivileged and disadvantaged sectors of society.

**(Dr. Nagendra , june 2020) The Performance Evaluation of Regional rural banks in India**

Banks help the economy grow faster by acting as lenders of credit and capital. to investigate the RRBs' financial performance between 1985–1986 and 2015–2016 in India. evaluate the performance of RRBs in relation to India both before and after the merger. The current research is based on secondary data that can be found in R.B.I. publications, including Reports on Currency and Finance, Bulletins, NABARD publications,

**(Dr. Satish , Vibhor, & Ms. Poonam, Performance evaluation of regional rural banks ( RRBs ) in India, April 2017) Performance Evaluation of Regional Rural Banks (RRBs) in India**

In India, the banking system plays a significant role in advancing important national policies like social justice, modernization, and growth. An in-depth credit development policy is used to accomplish this. By serving as capital and credit lenders, banks contribute to a more rapid expansion of the economy.

**III. DATA AND METHODOLOGY**

Utilizing the data gathered, the inquiry has an exploratory nature. The Reserve Bank of India and the National Bank for Agriculture and Rural Development (NABARD) provided annual reports that served as the primary sources of the study's real data (RBI). Secondary data is mostly what the research depends on. The tool used for analyzing the data is T-test two-sample assuming unequal variance and ANOVA single factor accomplished through excel.

**IV. DATA ANALYSIS AND FINDINGS**

**4.1 Financial performance: -**

The financial main indicators in RRBs' annual statements, including deposits, loans, borrowings, paid-up capital, investments, and other criteria including branches, employees, and the number of RRBs, change from 2017–18 to 2021–22.

**Table 1: Performance of Key Financial Indicators of RRBs for the selected period**

Sl. NO	Parameter	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
1	No of RRBs	56	53	45	43	43
2	Branches	21747	21871	21847	21856	21892
3	Staff	89806	92443	91616	87861	95833
4	Paid up Capital	6436	6721	7849	8392	14880
5	Reserves	25083	25398	26814	30348	34359
6	Total Borrowings	57647	53548	54393	67864	73881
7	Total Deposits	400459	434444	478737	525226	562538
8	CASA (%)	53	54	53	53.8	54.5
9	Gross Loans O/S	253978	280755	298214	334171	362838
10	Total B/S	654438	715199	776952	859397	925376
11	CD Ratio (%)	63	65	62	63.6	64.5
12	Priority Sector Loans O/S	227941	255022	270182	334171	362838
13	Total Investments	222266	226172	250859	275658	295665
14	Net Owned Funds	29653	29232	28195	38740	49239
15	Accumulated Losses	1866	2887	6467	8264	9062

Source: NABARD annual report from 2017-18 to 2021-22

### T-Test: Two-Sample Assuming Unequal Variances

#### Hypothesis:

H0: - For the chosen time period, there is no difference in the financial performance of RRBs.

H1: - There is a difference in financial performance of RRBs for the selected time period.

#### Result:

t-Test: Two-Sample Assuming Unequal Variances

	56	53
Mean	100196.3333	36608.25
Variance	22532676928	1451207754
Observation	6	4
Hypothesized Mean Difference	0	
D f	6	
t stat	0.990876393	
P(T<=t) one-tail	0.180004	
t Critical one-tail	1.943180281	
P(T<=t) two-tail	0.360007999	
t Critical two-tail	2.446911851	

**Interpretation:** In the above table and result of t-test: two- sample assuming unequal variances, the P (T less than equals to t) one-tail value is 0.180004, P value is more than the significance level (0.180004 is more than 0.05 level of significance), so that the result conclude that accepting the H0 because there is no difference in performance of RRBs for the selected period.

**ANOVA: Single Factor**

**Hypothesis:**

H0: - There is no difference in between groups and within groups of financial performance indicators for selected time period.

H1: - There is a difference in between groups and within groups of financial performance indicators for selected time period.

**ANOVA: Single Factor  
SUMMARY**

Groups	Count	Sum	Average	Variance
2017-2018	15	1991492	132766.13	3.5967E+10
2018-2019	15	2143864	142924.27	4.3021E+10
2019-2020	15	2312285	154152.33	5.105E+10
2020-2021	15	2592108	172807.23	6.2942E+10
2021-2022	15	2808563	187237.53	7.2618E+10

**ANOVA**

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	2.9294E+10	4	7.323E+09	0.13786686	0.96771	2.502656
Within Groups	3.7184E+12	70	5.312E+10			
Total	3.7477E+12	74				

**Interpretation:** ANOVA Test result shows that the variance of 2017-18 to 2021-22 is continuously increased (3.5967E+10 and 7.2618E+10). And the P value of ANOVA table is 0.96771 it is more than to the 0.05 level of significance. F value is 0.13786686 is less than as compared to F critical value 2.502656. The mean square value of within group is 7.323E+09 and within group is 5.312E+10. The total degrees of freedom of ANOVA table are 74. The result concluded that accepting H0 because there is no difference in between groups and within groups of financial performance indicator for the selected period.

**4.2 Financial Performance: -**

The assets and liabilities, profit and losses, return on assets (%), expenses, incomes, cost of funds, and GNPA (%) and NNPA (%) yield on assets (%) for the years from 2017–18 to 2021–22 are all displayed in RRB's annual report.

**Table 2:**

SI.NO	Parameter	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
1	Total Assets/ Liabilities	504864	537989	588021	651585	705400
2	GNPA (%)	9.47	10.8	10.43	9.4	9.1
3	NNPA (%)	5.9	6.81	5.83	4.8	4.7
4	Yield on Assets (%)	8.04	7.51	7.86	10.8	8.3
5	Cost of Funds (%)	5.01	4.58	4.68		
6	Net Interest Margin (%)	3.03	2.94	3.19	3.44	3.49
7	Cost of Management (%)	2.29	2.66	3.62	3.27	3.19
8	Risk Cost (%)	1.14	1.18	1.01	1.1	
9	Miscellaneous Income (%)	0.72	0.77	1.04	1.1	0.48
10	Return on Assets (%)	0.32	-0.13	-0.4	0.27	0.48
11	No of RRBs in Profit	45	39	26	30	34
12	Profit of RRBs in Profit	2530	1759	2203	3550	4116
13	No of RRBs in Loss	11	14	19	13	9
14	Loss of RRBs in Loss	1005	2411	4411	1867	897
15	Net Profit/Loss	1525	-652	-2208	1682	3219

**Source: NABARD annual report from 2017-18 to 2021-22**

**T-Test: Two-Sample Assuming Unequal Variances**

**Hypothesis:**

H0: - There is no significant difference in financial performance key indicators of RRBs for the selected period.

H1: - There is a significance difference in financial performance key indicators of RRBs for the selected period.

<b>t-Test: Two-Sample Assuming Unequal Variances</b>		
	<i>2017-2018</i>	<i>705400</i>
Mean	34001.06133	692.0616667
Variance	16968308203	2032915.218
Observations	15	12
Hypothesized Mean Difference	0	
D f	14	
t Stat	0.990274123	
P(T<=t) one-tail	0.169423802	
t Critical one-tail	1.761310136	
P(T<=t) two-tail	0.338847604	
t Critical two-tail	2.144786688	

**Interpretation:** In the above table 4.2.1 and result of t-test: two-sample assuming unequal variance, the P (T less than equals to t) one-tail is 0.169423802, P value is more than the significance level (0.169423802 is more than 0.05 level of significance), so that the result conclude that accepting H0 because there is no significance difference in financial performance key indicators of RRBs for the selected period.

**ANOVA: Single Factor**

**Hypothesis:**

H0: - There is no significant difference in between groups and within groups of financial key indicators of RRBs for the selected period.

H1: - There is a significance difference in between groups and within groups of financial key indicators of RRBs for the selected period.

**ANOVA: Single Factor**

**SUMMARY**

<b>Groups</b>	<b>Count</b>	<b>Sum</b>	<b>Average</b>	<b>Variance</b>
2017-2018	15	510015.92	34001.06133	16968308203
2018-2019	15	541597.12	36106.47467	19277595394
2019-2020	15	592509.26	39500.61733	23028100113
2020-2021	14	658761.18	47054.37	30275718350
2021-2022	13	713704.74	54900.36462	38202884917

**ANOVA**

<b>Source of Variation</b>	<b>SS</b>	<b>D f</b>	<b>MS</b>	<b>F</b>	<b>P-value</b>	<b>F crit</b>
<b>Between Groups</b>	4094796116	4	1023699029	0.040781063	0.99676548	2.50869484
<b>Within Groups</b>	1.68186E+12	67	25102313575			
<b>Total</b>	1.68595E+12	71				

**Interpretation:**

ANOVA test result shows that the variance of 2017-18 to 2021-22 is continuously increased (16968308203 and 38202884917). And the P value of ANOVA table is 0.99676548 it is more than the 0.05 level of significance. And in F value is 0.040781063 is less than as compared to the F critical value 2.509869484. The mean square of between groups is 1023699029 and within group is 25102313575. The total degree of freedom is 71. The result concludes that accepting H0 because there is no significant difference in between groups and within groups of financial key indicators of RRBs for the selected period.

**4.3 Capital to Risk Weighted Asset Ratio (CRAR): -**

The Reserve Bank of India has set a minimum capital-to-risk-weighted asset ratio (CRAR) requirement of less than 9% for RRBs as well as an overall average CRAR (%) and a minimum number of RRBs with CRAR below 9%.

**Table 3:**

<b>CRAR (%) of RRBs</b>			
As on 31st March	CRAR (%) all India Average	Total No. of RRBs	No. of RRBs With CRAR Less than 9%
2018	12.4	56	10
2019	11.5	53	13
2020	10.3	45	17
2021	10.2	43	16
2022	12.7	43	13

Source: NABARD annual report from 2017-18 to 2021-22

**T-Test: Two-Sample Assuming Unequal Variances**

**Hypothesis:**

H0: - There is no significant difference between no. of RRBs have average CRAR in India and no. of RRBs with CRAR less than 9%.

H1: - There is a significant difference between no. of RRBs have average CRAR in India and no. of RRBs with CRAR less than 9%.

**Result:**

**t-Test: Two-Sample Assuming Unequal Variances**

	<b>CRAR (%) all India Average</b>	<b>No. of RRBs With CRAR Less than 9%</b>
Mean	11.42	13.8
Variance	1.337	7.7
Observations	5	5
Hypothesized Mean Difference	0	
D f	5	
t Stat	-1.77031202	
P(T<=t) one-tail	0.068446286	
t Critical one-tail	2.015048373	
P(T<=t) two-tail	0.136892573	
t Critical two-tail	2.570581836	

**Interpretation:**

In the table 3 and result of t-test: two-sample assuming unequal variance, the P (T less than equals to t) one-tail value is 0.068446268, P value is more than 0.05 level of significance, so that the result concludes that accepting of H0, because of there is no significant difference between no. of RRBs have average CRAR in India and no. of RRBs with CRAR less than 9%.

## ANOVA: Single Factor

### Hypothesis:

H0: -There in no significant difference between, between group and with in group of RRBs in average CRAR (%) and CRAR less than 9%.

H1: - There is a significant difference between, between group and within group of RRBs in average CRAR (%) and CRAR less than 9%.

### Result:

#### ANOVA: Single Factor

##### SUMMARY

Groups	Count	Sum	Average	Variance
As on 31st March	5	10100	2020	2.5
CRAR (%) all India Average	5	57.1	11.42	1.337
Total No. of RRBs	5	240	48	37
No. of RRBs With CRAR Less than 9%	5	69	13.8	7.7

##### ANOVA

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	14938162	3	4979387	410358.1	2.72E-39	3.238872
Within Groups	194.148	16	12.13425			
Total	14938356	19				

### Interpretation:

ANOVA test result shows that the variance as on 31<sup>st</sup> march is 2.5 as compared to the no. of RRBs with CRAR less than 9% is 7.7. And P value in ANOVA table is 2.72E- 39 it is more than 0.05 level of significance. And the F value is 410358.1 is more than as compared to the F crit value is 3.238872. And the mean square value of between group is higher than within group (4979387 is more than 12.13425). And the total degrees of freedom 19. Lastly the result concludes that accepting H0 because there is no significant difference in between group and within groups of RRBs in average CRAR (%) and CRAR less than 9%.

## V. CONCLUSION

The research paper on the functioning evaluation of Regional Rural Banks in India draws conclusions regarding the RRBs' operational and financial performance. RRBs successfully accomplishes its primary objective, which is to make banking tasks easier, particularly in rural areas. RRB's efforts in branch creation and growth, deposits, capital mobilization, credit approval for underserved groups, and rural development. The rural population relies heavily on local private lenders, however since the Narasimhan committee's recommendations to the RBI, the majority of RRBs have opened with the goal of distributing credits to the rural population and boosting the rural sector.

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