

# A STUDY ON THE FINANCIAL PERFORMANCE OF REGIONAL RURAL BANKS IN INDIA USING CAMEL APPROACH

S. Grace Josephine <sup>1</sup>, Dr. U. Jerinabi <sup>2</sup>

<sup>1</sup> Department of Commerce, Avinashilingam Institute for Home Science & Higher Education for Women

<sup>2</sup> Department of Commerce, Avinashilingam Institute for Home Science & Higher Education for Women

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**Abstract** - The banking industries are the backbone of a country's economy. It contributes directly to the national income. It works as the midway for all sectors like the agriculture sector, other manufacturing industries, small scale industries, large scale industries, etc. The development of a country is mainly influenced by the growth of the banking industry of that country. In this modern period, banking functions are not restricted to small geographical limits. It is accessed throughout the world. The RRB plays an essential part in the rural credit system of the country. It contributes financial supports for the rural population to the development of the rural economy of India. This study shows the level performance of the RRBs in India regional-wise. The analysis of the banks is conducted under the CAMEL model. In this study, the performance of regional rural banks in India has been made by using CAMEL approaches.

**Key Words:** rural, regional rural bank, credit, agriculture, banking, CAMEL model

**INTRODUCTION** The banking sector is a very old institution and is considered to be the most primary sector. It contributes directly to the national income and it can be said to be that, the banking industries are the backbone of a country's economy. It works as the midway for all sectors like agricultural sector, textile industries other manufacturing sectors, small scale industries, marginal industries, large scale industries, etc. In this modern period, banking functions are not restricted to small geographical limits. It can be accessed throughout the world. In the olden days, people face their financial needs through non-institutional sources like money lenders, friends, family, etc. Financial support is very much important to undertake any business activities, the banks reduce such risks and provide credit facilities, other monetary facilities and it contributes to the development of business activities. The RRB plays an essential part in the rural credit system of the country. It contributes financial supports for the rural population to the development of the rural economy of India. This study shows the level of performance of the RRBs in India regional-wise. The performance of the bank is very much important to know the healthy functioning of the economy. To know the level of performance of a bank, some of the ratio analysis has to be done. It will lead the people to know the ability of a bank to take up a reasonable amount of losses.

## Regional Rural Banks (RRBs)

The regional rural banks are operating in different states at the regional level. It has been created mainly for purpose of serving the rural population of India to fulfill the basic financial need. It also has many branches in urban areas for

urban operations. The RRB is limited to operate in the specified areas notified by the government of India. The operations of RRB are as follows

- It provides banking services to rural and semi-urban areas.
- It undertakes government operations like distribution of wages, distribution of pensions, etc.
- It has locker facilities, debit cards, and credit card facilities, mobile banking, internet banking, etc.

## History of RRB

RRB was established on 26<sup>th</sup> September 1975 and the RRB act 1976 established to provide banking and financial facilities for the rural population and agricultural sectors. On 2<sup>nd</sup> October of 1975, they were 5 RRB was set up by the reference of the Narshimham Committee during Indira Gandhi's Government for the rural population to become a sound economy. On that period Indian population was about 70% engaged in agricultural and rural activities. The first 5 RRBs are as follows, the Prathama Bank, its head office at Moradabad (U.P.) with an authorised capital of Rs.5 crore, was sponsored by a syndicate bank. The Gaur Gramin Bank at Malda in West Bengal was sponsored by UCO bank. The Gorakhpur Kshetriya Gramin Bank, at Gorakhpur, U.P., was sponsored by SBI, Haryana Kshetriya Gramin Bank at Haryana, sponsored by PNB. The Anchalik Gramin Bank at Jaipur, Rajasthan which was sponsored by UCO bank. The RRB was owned by central and state governments and by the respective sponsored banks. The RRB can be sponsored by the commercial bank which holds the shares as the following ratio, central government – 50%, state government – 15% and sponsor banks – 35%. The RRB runs to develop the rural economy by facilitating to development of agriculture, industries, trade, commerce and other productivity activities in rural areas by providing financial supports especially for the small and medium level of farmers, and small and medium entrepreneurs.

## Literature Review

**Mishra (2011)**, 'A CAMEL Model Analysis Of State Bank Group' this study is conducted for the purpose to know the financial ability of the state bank groups. According to the first parameter capital adequacy, SBBJ and SBP were in the top position and SBI was ranked lower. According to asset quality, the SBBJ was ranked high and SBI ranked lower. In terms of parameter management efficiency, the SBT ranked higher and SBBJ ranked lower. Under the parameter earning quality, SBM got the top-ranking and SBP was ranked lower

and finally based on the last parameter liquidity SBI ranked high and SBM was ranked lower. So it concluded, the SBI must improve bases on asset quality, capital adequacy and SBBJ must improve in management efficiency and SBP must improve in terms of earning capacity.

**G. L. Meena (2016)**, 'A Study on Financial Analysis of Select Banks Using CAMEL Approach' this study conducted based on the Indian banking sector. This study shows that they were four main factors are the most impacting factors for the financial operation of the bank, they are as follows debt-equity ratio, earnings per employee, net assets to total deposits ratio, net non-performing assets to total advances ratio.

**Dr. Harsh Vineet Kaur (2016)**, 'CAMEL Analysis of Selected Public Sector Banks' this study analyzed the performance of public sector banks by using the CAMEL model, from 2004 to 2014. It shows the result as the Bank of Baroda place first position, secondly PNB, followed by Central Bank of India. Here the study concluded that the performance of the Bank of Baroda and the PNB was stabled and followed by Indian banks and IDBI Banks. The performance of Canara Bank and SBI was medium. Then the Union Bank, Syndicate Bank, Bank of India are considered to be below averaged banks according to their performance.

### Objective of the study

1. To examine the financial performance of regional rural banks in India by CAMEL model.
2. To rank according to the parameters under the CAMEL model.

### Methodology of the study

This study is descriptive in nature. To conduct the study the secondary data has been taken. The balance sheet and financial performance of the banks were taken from the website of the respective banks, report of RBI, etc. This study contains the performance of 26 regional rural banks in India. The RRB in India is separated into 4 regions likewise, 8 banks from north India, 4 banks from south India, 6 banks from west India and 8 banks from east India. The period of the study is 2019-2020. CAMEL model is carried out to calculate the performance of banks. To Simplify the table CAR represents as C1, Debt equity ratio as C2, Total advance to total asset ratio as C3, Government securities to total investment as C4, Net NPA to total asset as A1, Gross NPA to total asset as A2, Net NPA to net advance as A3, Gross NPA to net advance as A4, Total advance to total deposit as M1, Business per employee as M2, Profit per employee as M3, Return on asset as M4, Operating profit to total asset as E1, Net interest to total income as E2, Interest income to total income as E3, Liquid asset to total asset as L1, Liquid asset to total deposit as L2 and CDR as L3. The performance of bank is measured and ranked 1 as strongest and 5 as Weakest.

### Limitation of the study

This study is based on secondary data only. Some of the banks are excluded due to the unavailability of data. This study is based on one year only.

### CAMEL model

The analysis of the banks is conducted under the CAMEL model. CAMEL model was first established in 1970 by three federal banking supervisors of the U.S, the Federal Reserve, the FDIC and the OCC. In this study, the performance of regional rural banks in India has been made by using CAMEL approaches. It has 5 parameters as follows

#### 1. Capital Adequacy

The financial institutions based on capital lead the depositors to aware of the level of risk perception about the bank. It helps financial managers to uphold a suitable level of capital. This parameter leads to know, how the institution manages even in the uncertain requirement of money. This ratio is used to safeguard the depositors and help the constancy and effectiveness of financial systems around the world.

#### 2. Asset Quality

Asset quality is an important parameter to measure the strength of a bank. It shows the healthiness of the bank against loss of values in the asset. It monitors how the bank is protecting the credit risk may have an outcome on the credit rating that the bank would like to attain. It measures the percentage of Non-Performing Asset (NPA) are present in the total asset. It specifies what kind of loan the bank provides to create its income.

#### 3. Management Efficiency

This parameter indicates the ability of the board of directors and senior managers to ascertain, measure, observe and control risks associated with the bank. It is the most important parameter in the CAMEL model. Because the management has to make critical decisions if risk factors occur. It helps to assess better management for an institution. It helps to attain the growth of an institution.

#### 4. Earning

The earning capacity of the banks shows the profitability of a bank. The quality of earning is an important criterion that shows the ability to maintain quality and earning capacity and it helps to sustainability and development of future earnings.

#### 5. Liquidity

Liquidity management is important for any institution. Every institution should maintain a sufficient level of liquidity to meet sudden financial needs promptly. To satisfy the needs of a customer, a bank must maintain liquidity in their asset. The crisis in liquidity of a bank will lead to affect the financial performance of the bank. If a bank manages the effective system in maintains liquidity then it can be considered to be asset and liability management and it improves the returns.

### Data Analysis and Interpretation & Results

#### 1. Capital Adequacy

Capital Adequacy defines how the institutions are well coping with unexpected financial needs. This ratio is used to know the ability of an institution and safeguard the depositors. The following ratios measure capital adequacy.

- i. **CAR:** This ratio is used to measure the ability of the banks in taking up a reasonable amount of losses. As per RBI, the banks have to maintain a minimum of 9% CAR and as per Basel II norms is 8%. When a bank has the highest CAR is considered to be the strongest bank and high safety against bankruptcy.
- ii. **Debt equity ratio:** This ratio defines the degree of leverage of a bank. It shows how much debt is taken up by the company to fund its asset. When the ratio is higher it shows less protection for the creditors and depositors in the banking systems.
- iii. **Total advance to total asset ratio:** This ratio indicated how a bank is violent in lending which results in improves profitability. A higher ratio of total advances to the total asset is considered to be the lower one.
- iv. **Government securities to total investment:** The ratio of investment in government securities to total investment is the important indicator. It shows the strategy of a bank whether high-profit high risk or low-profit low risk. The Government securities are considered as the safe debt instruments which carry the lowest returns, when the bank has the highest government securities to investment lowers the risk involved in a bank's investment.

## 2. Asset Quality

A bank's financial soundness can be determined by the quality of the asset. It determined the healthiness of the bank against loss of values in the asset. This parameter shows the type of debtors that a bank holds in its balance sheet. The following ratios are used to calculate the asset quality of the bank.

- i. **Net NPA to Total Asset:** The unpaid interest amount or principal amount is considered as the Non-Performing Asset. This ratio identifies the ability of the bank to forecasting the credit risk and its capability to recover the debts.
- ii. **Gross NPA to Total Asset:** The lower ratio is considered as the bank has good quality on its loan advances.
- iii. **Net NPA to Net Advance:** This ratio shows the bad debts against the total loan sanctioned.
- iv. **Gross NPA to Net Advance:** The gross NPA to Net advances ratio is used to measure the quality of the asset. A lower ratio indicates that the bank has provided sound loans and proves good quality of advances.

## 3. Management efficiency

This ratio is used to measure the efficiency and effectiveness of management. The management takes the decision based on the risk perception. The following ratios are used to measure management efficiency.

- i. **Total Advance to Total Deposit:** This ratio is used to measure the ability of the bank's management in converting the deposits available with the bank into high-earning advances. Total deposits include demand deposits, savings deposits and deposits with other banks.
- ii. **Business per Employee:** The business per employee indicates how the human resources are utilized by the business. It is used to measure the efficiency of

employees of a bank in creating business for the bank.

- iii. **Profit per Employee:** This ratio shows the contribution of the employees towards the profit of the bank.
- iv. **Return on Asset:** This ratio shows the efficiency of the bank in utilizing their asset in generating profit.

## 4. Earning capacity

The earning capacity of the banks shows the stability of a bank and helps to determine the profitability of a bank. The following ratios are used to measure the Earning Capacity.

- i. **Operating profit to total asset:** This ratio indicated how much a bank can earn profit from its operation for every rupee invested in its total asset.
- ii. **Net interest to total income:** This ratio is an important parameter of the performance of a bank. The net interest shows the ability of the bank to keep the interest on deposit low and interest on advances high.  
**Interest income to total income:** The interest income is a primary source of revenue for the banks. This ratio indicates the ability of the bank in generating income from its lending.

## 5. Liquidity

The liquidity shows the ability of the bank to fulfill the financial obligations. The following ratio is used to measure the liquidity of a bank.

- i. **Liquid asset to total asset:** It measures the liquidity position of the bank. The liquid asset includes cash in hand, Cash at balance, money at call and short notice.
- ii. **Liquid asset to total deposit:** It measures the ability of the bank how quickly converts their deposits into cash.
- iii. **CDR:** This ratio shows the level of advances issued by the bank from its total deposits received from the customer. It shows the capacity of the bank to lend. If the ratio is high then it shows that the bank is fully using its resources.

**Table -1:** Performance of RRB of North Region through CAMEL Model

Capital Adequacy										
Banks	C1 (%)		C2 (%)		C3 (%)		C4 (%)		Composite C	Over All Rank
	Rank	Rank	Rank	Rank	Rank	Rank				
Aryavart Bank	10.19	5	16.25	4	52.45	4	90.02	7	5	6
Baroda Rajasthan Kshetriya Gramin Bank	10.26	4	15.80	3	65.27	1	98.91	2	2.5	1
Baroda UP Bank	13.20	2	19.59	6	32.31	7	100.00	1	4	4
Ellaquai Dehati Bank	-0.75	8	66.87	8	27.86	8	94.27	5	7.25	8
Prathama UP Gramin Bank	12.60	3	13.00	2	62.29	2	95.03	6	3.25	2
Punjab Gramin Bank	15.71	1	12.20	1	52.25	5	87.10	8	3.75	3
Rajasthan Marudhara Gramin Bank	9.70	6	19.31	5	56.51	3	94.54	4	4.5	5
Uttarakhand Gramin Bank	6.12	7	45.21	7	38.58	6	96.80	3	5.75	7

  

Asset Quality										
Banks	A1 (%)		A2 (%)		A3 (%)		A4 (%)		Composite A	Over All Rank
	Rank	Rank	Rank	Rank	Rank	Rank				
Aryavart Bank	7.66	8	11.88	8	14.61	7	22.65	7	7.5	7
Baroda Rajasthan Kshetriya Gramin Bank	0.68	1	0.22	1	1.04	1	0.34	1	1	1
Baroda UP Bank	1.77	4	3.21	3	5.47	6	9.94	6	4.75	5
Ellaquai Dehati Bank	4.28	7	6.71	7	15.56	8	24.08	8	7.5	7
Prathama UP Gramin Bank	1.02	2	5.27	6	1.65	2	8.47	4	3.5	3
Punjab Gramin Bank	2.08	6	4.75	5	3.99	5	9.09	5	5.25	6
Rajasthan Marudhara Gramin Bank	2.01	5	3.48	4	3.55	4	6.16	2	3.75	4
Uttarakhand Gramin Bank	1.36	3	3.01	2	3.55	3	7.81	3	2.75	2

  

Management Efficiency										
Banks	M1 (in lakhs)		M2 (in lakhs)		M3 (in lakhs)		M4 (%)		Composite M	Over All Rank
	Rank	Rank	Rank	Rank	Rank	Rank				
Aryavart Bank	62.41	5	755.69	5	0.71	5	0.14	5	5	5
Baroda Rajasthan Kshetriya Gramin Bank	75.23	2	789.00	4	3.55	3	0.72	2	2.75	3
Baroda UP Bank	38.16	7	710.87	7	0.86	4	0.15	4	5.5	6
Ellaquai Dehati Bank	36.61	8	467.45	8	-14.31	8	-3.26	8	8	8
Prathama UP Gramin Bank	76.22	1	802.38	2	5.57	1	1.02	1	1.25	1
Punjab Gramin Bank	68.91	3	933.59	1	4.10	2	0.60	3	2.25	2
Rajasthan Marudhara Gramin Bank	63.64	4	792.54	3	0.18	6	0.05	6	4.75	4
Uttarakhand Gramin Bank	42.24	6	711.48	6	-7.14	7	-1.39	7	6.5	7

Earning Capacity										
Banks	E1 (%)		E2 (%)		E3 (%)		Composite E	Over All Rank		
	Rank	Rank	Rank	Rank	Rank	Rank				
Aryavart Bank	0.14	4	41.96	4	87.48	6	4.67	5		
Baroda Rajasthan Kshetriya Gramin Bank	0.89	2	42.02	2	88.64	5	3.00	2		
Baroda UP Bank	0.14	4	42.00	3	92.45	3	3.33	3		
Ellaquai Dehati Bank	-3.26	7	31.32	8	95.91	1	5.33	6		
Prathama UP Gramin Bank	1.00	1	48.36	1	90.51	4	2.00	1		
Punjab Gramin Bank	0.57	3	34.63	7	85.35	8	6.00	7		
Rajasthan Marudhara Gramin Bank	0.03	5	36.49	6	86.93	7	6.00	7		
Uttarakhand Gramin Bank	-1.33	6	39.72	5	95.26	2	4.33	4		

  

Liquidity										
Banks	L1 (%)		L2 (%)		L3 (%)		Composite L	Over All Rank		
	Rank	Rank	Rank	Rank	Rank	Rank				
Aryavart Bank	25.10	1	29.86	1	72.18	4	2	1		
Baroda Rajasthan Kshetriya Gramin Bank	15.53	5	17.91	5	77	2	4	3		
Baroda UP Bank	15.14	6	17.88	6	39.89	7	6.33	6		
Ellaquai Dehati Bank	17.95	2	23.58	2	39.81	8	4	3		
Prathama UP Gramin Bank	13.49	7	16.51	7	82.57	1	5	5		
Punjab Gramin Bank	10.72	8	14.14	8	72.41	3	6.33	6		
Rajasthan Marudhara Gramin Bank	17.52	3	19.73	3	65.29	5	3.67	2		
Uttarakhand Gramin Bank	17.48	4	19.13	4	44.38	6	4.67	4		

**Capital Adequacy of North Region RRBs:**

The table shows that the Punjab Gramin Bank scored rank 1 with highest capital adequacy and Ellaquai Dehati Bank ranked last with least CRAR, as per Basel II norms, the RRB's in the north region of India, other than Ellaquai Dehati Bank, Uttarakhand Gramin Bank has met the requirement of 8% in CRAR. As per the debt-equity ratio, Punjab Gramin Bank ranks first by using minimum debts and Ellaquai Dehati Bank ranks last by using higher debt to their operations. According to the total advance to total asset ratio Baroda Rajasthan Kshetriya Gramin Bank lends the most and it ranks first comparing to other RRB in the north region of India and Ellaquai Dehati Bank ranks last which lends low. The government securities to total investment ratio show the status of risk involved in a bank's investment. According to the above table, Baroda UP Bank ranks first with 100% of investment by government securities and Punjab Gramin Bank ranks last which has 87.10% of investment by government securities. It shows that all the regional rural banks in the north region of India were at lower risk which has its government securities above 80% on its total investment.

Based on the average of all four sub-parameters of capital adequacy, Baroda Rajasthan Kshetriya Gramin Bank ranks

first, followed by Prathama UP Gramin Bank, Punjab Gramin Bank, Baroda UP Bank, Rajasthan Marudhara Gramin Bank, Aryavart Bank, Uttarakhand Gramin Bank, Ellaquai Dehati Bank. The performance of Ellaquai Dehati Bank and Uttarakhand Gramin Bank was not good regarding capital adequacy.

**Asset Quality of North Region RRBs:**

The table shows that the Baroda Rajasthan Kshetriya Gramin Bank is having the lowest net NPA against the total asset, Aryavart Bank has the highest net NPA against the total asset and this shows that the advances given by the Aryavart Bank are not safe. In terms of gross NPA to total asset, Baroda Rajasthan Kshetriya Gramin Bank has good quality on its loan advances and Aryavart Bank has poor quality on its loan. Regarding net NPA to net advances Baroda Rajasthan Kshetriya Gramin Bank ranks first which has got less non-performing asset to net advances, Aryavart Bank and Ellaquai Dehati Bank got high non-performing asset to net advances. It shows that the quality of loan advances of Aryavart Bank and Ellaquai Dehati is not good. As per the gross NPA to total asset ratio Baroda Rajasthan Kshetriya Gramin Bank ranks first which is in a better position regarding advance, Aryavart Bank and Ellaquai Dehati Bank are not having good quality on their advances.

As per the average of sub-parameters of asset quality of RRBs in the north region of India, Baroda Rajasthan Kshetriya Gramin Bank has a good asset quality and it ranks first among the other RRB in the north region followed by Uttarakhand Gramin Bank, Prathama UP Gramin Bank, Rajasthan Marudhara Gramin Bank, Baroda UP Bank, Punjab Gramin Bank and as per the above table Aryavart Bank, Ellaquai Dehati Bank has bad asset quality during the study period.

**Management Efficiency of North Region RRBs:**

Total advance to total deposit ratio is used to measure the efficiency and the ability of the bank's management which converts the available deposits into earning advances, as per the above table the management of Prathama UP Gramin Bank is considered as healthy comparing to other RRB in North India. The business per employee ratio specifies that the value of business produced by the employees to the bank, it shows the efficiency of the management of the bank, how much sales and revenue are generated by the employees. According to the above table, Punjab Gramin Bank has placed the first rank and Ellaquai Dehati Bank ranks last which shows less productivity. The profit per employee ratio shows the contribution of the employee to the bank's profitability. The above table shows that Prathama UP Gramin Bank ranks first and Ellaquai Dehati Bank ranks last which the contribution of each employee towards productivity is very poor. According to return on asset Prathama UP Gramin Bank having the highest profit which shows the bank utilizes its asset to generate more profit and it ranks first and Ellaquai Dehati Bank ranks last.

According to the average of all sub-parameters of management efficiency the performance of Prathama UP Gramin Bank is very good followed by Punjab Gramin Bank, Baroda Rajasthan Kshetriya Gramin Bank, Rajasthan Marudhara Gramin Bank, Aryavart Bank, Baroda UP Bank

and the performance of Uttarakhand Gramin Bank and Ellaquai Dehati Bank very bad and it ranks last.

**Earning Capacity of North Region RRBs:**

The operating profit to total asset ratio shows that how much a bank earns profit from the operation of every rupee invested from its total asset. Thus the above table shows that the profit of profitability of Prathama UP Gramin Bank is satisfactory and the Ellaquai Dehati Bank's profitability is not satisfactory. The net interest to total income ratio Prathama UP Gramin Bank ranks first which shows the highest-earning against the total asset and Ellaquai Dehati Bank ranks last which shows the lowest-earning against the total asset. The interest income to total income ratio indicates the ability of a bank in generating income from its lending, as per the table Ellaquai Dehati Bank ranks first and Punjab Gramin Bank ranks last.

As per the above table Prathama UP Gramin Bank having the highest earning capacity followed by Baroda Rajasthan Kshetriya Gramin Bank, Baroda UP Bank, Uttarakhand Gramin Bank, Aryavart Bank, Ellaquai Dehati Bank, Punjab Gramin Bank, Rajasthan Marudhara Gramin Bank.

**Liquidity of North Region RRBs:**

From the RRBs of North India the largest liquidity is maintained by Aryavart Bank followed by Ellaquai Dehati Bank, Rajasthan Marudhara Gramin Bank, Uttarakhand Gramin Bank, Baroda Rajasthan Kshetriya Gramin Bank, Baroda UP Bank, Prathama UP Gramin Bank, Punjab Gramin Bank. The liquid asset to total deposit ratio is used to measure the ability of a bank to meet the demand from its deposits, as per the above table Aryavart Bank has higher liquidity and it ranks first among the RRBs in north India and Punjab Gramin Bank ranks last. As per credit deposit ratio, Prathama UP Gramin Bank is using its deposit largely and Ellaquai Dehati Bank is not using its resource adequately.

As per the above table, the high liquidity to fulfill the short-term obligation are held by Aryavart Bank followed by Rajasthan Marudhara Gramin Bank, Baroda Rajasthan Kshetriya Gramin Bank, Ellaquai Dehati Bank, Uttarakhand Gramin Bank, Prathama Up Gramin Bank, Baroda UP Bank, Punjab Gramin Bank.

**Table -2:** Composite Performance (overall rating) of RRBs in North India

Banks	C	A	M	E	L	Average	Rank
Aryavart Bank	6	7	5	5	1	4.8	4
Baroda Rajasthan Kshetriya Gramin Bank	1	1	3	2	3	2	1
Baroda UP Bank	4	5	6	3	6	4.8	4
Ellaquai Dehati Bank	8	7	8	6	3	6.4	5
Prathama Up Gramin Bank	2	3	1	1	5	2.4	2
Punjab Gramin Bank	3	6	2	7	6	4.8	4
Rajasthan Marudhara Gramin Bank	5	4	4	7	2	4.4	3
Uttarakhand Gramin Bank	7	2	7	4	4	4.8	4

The overall ranking of CAMEL model as per above table, the RRBs from north India Baroda Rajasthan Kshetriya Gramin Bank ranks first followed by Prathama Up Gramin Bank, Rajasthan Marudhara Gramin Bank, Aryavart Bank, Baroda UP Bank, Punjab Gramin Bank, Uttarakhand Gramin Bank and Ellaquai Dehati Bank.

**Table -3:** Performance of RRB of South Region through CAMEL Model

Capital Adequacy										
Banks	C1 (%)	Rank	C2 (%)	Rank	C3 (%)	Rank	C4 (%)	Rank	Composite C	Over All Rank
Andhra Pradesh Grameena Vikas Bank	16.15	2	10.43	2	55.10	3	97.79	2	2.25	2
Andhra Pragathi Grameena Bank	17.75	1	9.68	1	62.71	2	98.73	1	1.25	1
Chaitanya Godavari Grameena Bank	11.49	3	15.59	3	63.41	1	86.22	4	2.75	3
Karnataka Vikas Grameena Bank	10.69	4	17.28	4	52.53	4	89.67	3	3.75	4
Asset Quality										
Banks	A1 (%)	Rank	A2 (%)	Rank	A3 (%)	Rank	A4 (%)	Rank	Composite A	Over All Rank
Andhra Pradesh Grameena Vikas Bank	0.00	1	0.63	1	0.00	1	1.15	2	1.25	1
Andhra Pragathi Grameena Bank	0.00	1	1.07	3	0.00	1	1.70	3	2	3
Chaitanya Godavari Grameena Bank	0.14	2	0.72	2	0.23	2	1.13	1	1.75	2
Karnataka Vikas Grameena Bank	4.35	3	8.20	4	8.28	3	15.61	4	3.5	4
Management Efficiency										
Banks	M1 (%)	Rank	M2 (in lakhs)	Rank	M3 (in lakhs)	Rank	M4 (%)	Rank	Composite M	Over All Rank
Andhra Pradesh Grameena Vikas Bank	93.18	2	1144	2	18.69	1	2.21	1	1.5	1
Andhra Pragathi Grameena Bank	96.60	1	1188	1	10.59	2	1.34	2	1.5	1
Chaitanya Godavari Grameena Bank	92.78	3	971	3	6.65	3	0.94	3	3	2
Karnataka Vikas Grameena Bank	72.30	4	750	4	-17.27	4	-3.46	4	4	3
Earning Capacity										
Banks	E1 (%)	Rank	E2 (%)	Rank	E3 (%)	Rank	Composite E	Over All Rank		
Andhra Pradesh Grameena Vikas Bank	3.88	1	40.25	1	86.40	3	1.67	1		
Andhra Pragathi Grameena Bank	2.03	2	35.88	2	84.03	4	2.67	3		
Chaitanya Godavari Grameena Bank	1.73	3	31.38	3	90.96	1	2.33	2		
Karnataka Vikas Grameena Bank	-0.91	4	27.79	4	87.86	2	3.33	4		

Liquidity										
Banks	L1 (%)	Rank	L2 (%)	Rank	L3 (%)	Rank	Composite L	Over All Rank		
Andhra Pradesh Grameena Vikas Bank	28.16	1	47.62	1	104.47	1	1	1		
Andhra Pragathi Grameena Bank	14.28	3	21.32	3	95.30	2	2.67	2		
Chaitanya Godavari Grameena Bank	14.04	4	20.55	4	93.62	3	3.67	4		
Karnataka Vikas Grameena Bank	27.04	2	35.04	2	73.07	4	3.00	3		

**Capital Adequacy of RRB in South India**

The above table shows that the Andhra Pragathi Grameena Bank scored rank one with highest capital adequacy and Karnataka Vikas Grameena Bank ranked last with least CRAR, but still it scores above 8%, the minimum requirement Basel II norms. As per the debt-equity ratio, Andhra Pragathi Grameena Bank ranks first by using minimum debts Karnataka Vikas Grameena Bank ranks last by using higher debt to their operations. According to the total advance to total asset ratio, Chaitanya Godavari Grameena Bank lends the most and it ranks first comparing to other RRB in the south region of India and Karnataka Vikas Grameena Bank lends lower and it ranks last. The above table shows that Andhra Pragathi Grameena Bank has 98.73% government securities on its total investment and it ranks first, followed by Andhra Pradesh Grameena Vikas Bank which has 97.79% of government securities and then by Karnataka Vikas Grameena Bank which that 89.67% of government securities, and Chaitanya Godavari Grameena Bank ranks last which has 86.22% of government securities.

As per the average of all four sub-parameters of capital adequacy, Andhra Pragathi Grameena Bank ranks first, followed by Andhra Pradesh Grameena Vikas Bank, Chaitanya Godavari Grameena Bank, Karnataka Vikas Grameena Bank. Comparing to these four banks the performance of Karnataka Vikas Grameena Bank was lesser than other banks.

**Asset Quality of RRB in South India**

The table shows that the Andhra Pragathi Grameena Bank and Andhra Pradesh Grameena Vikas Bank is having the lowest

net NPA against the total asset, followed by Chaitanya Godavari Grameena Bank and Karnataka Vikas Grameena Bank. This shows that the advances of Karnataka Vikas Grameena bank are not safe. Regarding gross NPA to total advances ratio, it shows that the quality of loan provided by Andhra Pradesh Grameena Vikas Bank is good and it ranks first followed By Chaitanya Godavari Grameena Bank, Andhra Pragathi Grameena Bank and Andhra Pragathi Grameena Bank ranks last it has poor performance among the loan advances. In terms of net NPA to net advances, the quality of loan advances provided by The Andhra Pragathi Grameena Bank, Andhra Pradesh Grameena Vikas Bank and Chaitanya Godavari Grameena Bank is good and the quality of loan advances provided by the Karnataka Vikas Grameena Bank is poor. According to the gross NPA to net advance ratio, Chaitanya Godavari Grameena Bank has the better quality on its advances, followed by Andhra Pradesh Grameena Vikas Bank And Andhra Pragathi Grameena Bank and Karnataka Vikas Grameena Bank has poor quality on its advances.

As per the above table, the average of sub-parameters of asset quality shows Andhra Pradesh Grameena Vikas Bank has the good asset quality, followed Chaitanya Godavari Grameena Bank, Andhra Pragathi Grameena Bank, Karnataka Vikas Grameena Bank.

**Management Efficiency of RRB in South India**

According to the total advance to total deposit ratio Andhra Pragathi Grameena Bank ranks first followed by Andhra Pradesh Grameena Vikas Bank, Chaitanya Godavari Grameena Bank and Karnataka Vikas Grameena Bank. In terms of business per employee ratio, Andhra Pragathi Grameena Bank ranks first followed by Andhra Pradesh Grameena Vikas Bank, Chaitanya Godavari Grameena Bank and Karnataka Vikas Grameena Bank shows less productivity. As per profit per employee ratio in the south region, Andhra Pradesh Grameena Vikas Bank ranks first and Karnataka Vikas Grameena Bank ranks last with the poor performance of employees. Regarding the return of an asset, Andhra Pradesh Grameena Vikas Bank ranks first and Karnataka Vikas Grameen Bank ranks last with less profit.

According to the management efficiency, Andhra Pradesh Grameena Vikas Bank and Andhra Pragathi Grameena Bank ranks first followed by Chaitanya Godavari Grameena Bank and Karnataka Vikas Grameena Bank ranks last.

**Earning Capacity of RRBs in South India**

In the south region the operating profit of RRB is satisfied among Andhra Pradesh Grameena Vikas Bank and it ranks first followed by Andhra Pragathi Grameena Bank, Chaitanya Godavari Grameena Bank and the profitability of Karnataka Vikas Grameena Bank is poor. As per the net interest to total income ratio, Andhra Pradesh Grameena Vikas Bank ranks first followed by Andhra Pragathi Grameena Bank, Chaitanya Godavari Grameena Bank, Karnataka Vikas Grameena Bank. According to the interest income to total income ratio, the performance of Chaitanya Godavari Grameena Bank indicates the highest ability to generate income from its lending and it

ranks first among other banks in the south region followed by Karnataka Vikas Grameena Bank, Andhra Pradesh Grameena Vikas Bank and Andhra Pragathi Grameena Bank.

According to the above table, Andhra Pradesh Grameena Vikas Bank has the highest earning capacity followed by Chaitanya Godavari Grameena Bank, Andhra Pragathi Grameena Bank and Karnataka Vikas Grameena Bank.

**Liquidity of RRBs in South India**

According to the liquid asset to total asset ratio Andhra Pradesh Grameena Vikas Bank ranks first which is said to be the bank that maintains the highest liquidity. As per liquid asset to total deposit ratio, Andhra Pradesh Grameena Vikas Bank ranks first followed by Karnataka Vikas Grameena Bank, Andhra Pragathi Grameena Bank, Chaitanya Godavari Grameena Bank. Regarding CDR, Andhra Pradesh Grameena Vikas Bank is fully using its resources and it ranks first followed by Andhra Pragathi Grameena Bank, Chaitanya Godavari Grameena Bank Karnataka Vikas Grameena Bank.

The above table shows that the liquidity source is highly fulfilled by Andhra Pradesh Grameena Vikas Bank followed by Andhra Pragathi Grameena Bank, Karnataka Vikas Grameena Bank, Chaitanya Godavari Grameena Bank.

**Table -4:** Composite Performance (overall rating) of RRBs in South India

Banks	C	A	M	E	L	Average	Rank
Andhra Pradesh Grameena Vikas Bank	2	1	1	1	1	1.2	1
Andhra Pragathi Grameena Bank	1	3	1	3	2	2	2
Chaitanya Godavari Grameena Bank	3	2	2	2	4	2.6	3
Karnataka Vikas Grameena Bank	4	4	3	4	3	3.6	4

The composite ranking of all selected RRB from the south Region, Andhra Pradesh Grameena Vikas Bank ranks first followed by Andhra Pragathi Grameena Bank, Chaitanya Godavari Grameena Bank, Karnataka Vikas Grameena Bank.

**Table -5:** Performance of RRB of East Region through CAMEL Model

Capital Adequacy										
Banks	C1 (%)	Rank	C2 (%)	Rank	C3 (%)	Rank	C4 (%)	Rank	Composite C	Over All Rank
Arunachal Pradesh Rural Bank	10.25	3	13.62	3	18.78	8	41.31	8	5.5	5
Bangiya Gramin Vikash Bank	-3.29	7	21.89	5	31.23	5	68.67	7	6	6
Jharkhand Rajya Gramin Bank	11.33	2	22.27	6	33.41	3	91.09	5	4	2
Mizoram Rural Bank	9.80	4	24.64	7	37.23	2	96.72	3	4	2
Odisha Gramya Bank	-4.91	8	19.11	4	31.42	4	99.86	1	4.25	3
Tripura Gramin Bank	21.89	1	11.22	1	27.90	7	86.94	6	3.75	1
Utkal Grameen Bank	-1.34	6	11.85	2	28.75	6	99.84	2	4	2
Uttar Bihar Gramin Bank	2.88	5	33.65	8	42.18	1	93.75	4	4.5	4

  

Asset Quality										
Banks	A1 (%)	Rank	A2 (%)	Rank	A3 (%)	Rank	A4 (%)	Rank	Composite A	Over All Rank
Arunachal Pradesh Rural Bank	0.20	3	1.10	2	1.04	3	5.83	3	2.75	3
Bangiya Gramin Vikash Bank	0.04	2	0.07	1	0.13	2	0.24	1	1.5	1
Jharkhand Rajya Gramin Bank	1.13	5	3.21	5	3.38	5	9.62	5	5	5
Mizoram Rural Bank	0.53	4	1.93	3	1.41	4	5.19	2	3.25	4
Odisha Gramya Bank	4.38	7	9.54	6	13.92	7	30.37	7	6.75	6
Tripura Gramin Bank	0.00	1	2.49	4	0.00	1	8.94	4	2.5	2
Utkal Grameen Bank	3.72	6	9.74	7	12.93	6	33.86	8	6.75	6
Uttar Bihar Gramin Bank	6.36	8	10.18	8	15.08	8	24.14	6	7.5	7

  

Management Efficiency										
Banks	M1 (%)	Rank	M2 (in lakhs)	Rank	M3 (in lakhs)	Rank	M4 (%)	Rank	Composite M	Over All Rank
Arunachal Pradesh Rural Bank	21.02	8	837	4	3.07	2	0.41	3	4.25	3
Bangiya Gramin Vikash Bank	34.71	6	951	3	-19.31	8	0.00	5	5.5	6
Jharkhand Rajya Gramin Bank	37.73	4	635	8	2.50	4	0.51	2	4.5	4
Mizoram Rural Bank	44.15	2	1099	2	2.92	3	0.37	4	2.75	2
Odisha Gramya Bank	34.94	5	744	6	-16.46	7	-3.08	8	6.5	8
Tripura Gramin Bank	38.18	3	1240	1	19.71	1	1.89	1	1.5	1
Utkal Grameen Bank	33.96	7	668	7	-9.39	5	-1.85	6	6.25	7
Uttar Bihar Gramin Bank	47.88	1	829	5	-13.36	6	-2.22	7	4.75	5

  

Earning Capacity										
Banks	E1 (%)	Rank	E2 (%)	Rank	E3 (%)	Rank	Composite E	Over All Rank		
Arunachal Pradesh Rural Bank	1.19	3	31.12	3	82.32	6	4.00	3		
Bangiya Gramin Vikash Bank	-2.53	8	31.08	4	89.27	4	5.33	6		
Jharkhand Rajya Gramin Bank	2.76	1	30.03	6	76.23	8	5.00	5		
Mizoram Rural Bank	0.50	5	45.97	1	94.92	2	2.67	1		
Odisha Gramya Bank	-1.35	7	26.53	8	95.16	1	5.33	6		
Tripura Gramin Bank	2.19	2	25.06	7	76.95	7	5.33	6		
Utkal Grameen Bank	0.68	4	30.29	5	89.20	5	4.67	4		
Uttar Bihar Gramin Bank	-1.03	6	44.15	2	92.96	3	3.67	2		

  

Liquidity										
Banks	L1 (%)	Rank	L2 (%)	Rank	L3 (%)	Rank	Composite L	Over All Rank		
Arunachal Pradesh Rural Bank	10.27	6	11.49	6	22.03	8	6.67	6		
Bangiya Gramin Vikash Bank	5.23	8	5.81	8	38.46	6	7.33	7		
Jharkhand Rajya Gramin Bank	19.29	4	21.78	4	40.07	5	4.33	4		
Mizoram Rural Bank	38.23	1	45.32	1	44.15	2	1.33	1		
Odisha Gramya Bank	6.93	7	7.70	7	40.68	4	6.00	5		
Tripura Gramin Bank	20.13	3	27.55	2	38.18	7	4.00	3		
Utkal Grameen Bank	13.91	5	16.43	5	41.07	3	4.33	4		
Uttar Bihar Gramin Bank	22.51	2	25.55	3	52.22	1	2.00	2		

### Capital Adequacy of RRB in East India

According to the above table, the Tripura Gramin Bank scored rank 1 with highest capital adequacy and Odisha Gramya Bank ranked last with least CRAR, as per Basel II norms, in the eastern region the RRB's other than Bangiya Gramin Vikash Bank, Odisha Gramya Bank, Utkal Grameen Bank, Uttar Bihar Gramin Bank has met the requirement of 8% in CRAR. Regarding the debt-equity ratio, Tripura Gramin Bank ranks first by using minimum debts Uttar Bihar Gramin Bank ranks last by using higher debts. According to the total advance to total asset ratio Uttar Bihar Gramin Bank lends the most and it ranks first and Arunachal Pradesh Rural Bank lends lower and it ranks last. The Odisha Gramya Bank has the highest government securities on its total investment and it ranks first, Bangiya Gramin Vikash Bank And Arunachal Pradesh Rural Bank score last in government securities to total investment ratio which has only 68.67% & 41.31% of government securities on its total investment. These two banks are considered to be high risk on their investments.

Based on the average of the sub-parameters of capital adequacy, in the east region, Tripura Gramin Bank ranks first, Utkal Grameen Bank, Mizoram Rural Bank, Jharkhand Rajya Gramin Bank these three banks place second, followed by Odisha Gramya Bank, Uttar Bihar Gramin Bank, Arunachal Pradesh Rural Bank, Bangiya Gramin Vikash Bank.

### Asset Quality of RRB in East India

According to the above table, Tripura Gramin Bank has the lowest net NPA against the total asset it ranks first on net NPA to total asset, so the advances provided by the bank are safe and Uttar Bihar Gramin Bank ranks last hence the amount of the advance provided by this bank are considered as not safe. According to the gross NPA to total asset ratio, Bangiya Gramin Vikash Bank shows good quality on its advances and Uttar Bihar Gramin Bank's status of loan advances is of poor quality. In terms of net NPA to net advances the Tripura Gramin Bank ranks first followed by Bangiya Gramin Vikash Bank, Arunachal Pradesh Rural Bank, Mizoram Rural Bank, Jharkhand Rajya Gramin Bank which has the good quality in the level of loan advances and Utkal Grameen Bank, Odisha Gramya Bank, Uttar Bihar Gramin Bank has the poor quality in its loan advances. Regarding the gross NPA to total asset ratio, Bangiya Gramin Vikash Bank has good status on its loan advances and Uttar Bihar Gramin Bank, Odisha Gramya Bank, Utkal Grameen Bank has not had a good position on recovering the advances.

According to the asset quality of RRBs in east India, Bangiya Gramin Vikash Bank ranks first which it shows the better quality regarding the parameter of asset quality followed by Tripura Gramin Bank, Arunachal Pradesh Rural Bank, Mizoram Rural Bank, Jharkhand Rajya Gramin Bank and Odisha Gramya Bank, Utkal Grameen Bank, Uttar Bihar Gramin Bank has poor asset quality.

### Management Efficiency of RRB in East India

As per the total advance to total deposit ratio Uttar Bihar Gramin Bank ranks first it is considered to be health management comparing to other RRBs in east India and Arunachal Pradesh Rural Bank Ranks last which is said to poor management efficiency. Regarding business per employee ratio in east region RRBs, Tripura Gramin Bank shows high productivity and it ranks first and Jharkhand Rajya Gramin Bank ranks last. As per profit per employee ratio, Tripura Gramin Bank ranks first and Bangiya Gramin Vikash Bank ranks last. According to the return on asset ratio, Tripura Gramin Bank rank first and Odisha Gramya Bank ranks last.

As per the average of sub-parameters of management efficiency Tripura Gramin Bank ranks first Odisha Gramya Bank ranks last.

### Earning Capacity of RRBs in East India

As per operating profit to total asset ratio Jharkhand Rajya Gramin Bank ranks first and Bangiya Gramin Vikash Bank ranks last. Regarding net interest to total income ratio, Mizoram Rural Bank ranks first and Odisha Gramya Bank ranks last. According to interest income to total income ratio, Odisha Gramya Bank ranks first and is followed by Mizoram Rural Bank, Uttar Bihar Gramin Bank, Bangiya Gramin Vikash Bank, Utkal Grameen Bank, Arunachal Pradesh Rural Bank, Tripura Gramin Bank, Jharkhand Rajya Gramin Bank.

As per the above table, Mizoram Rural Bank has the highest earning capacity followed by Uttar Bihar Gramin Bank, Arunachal Pradesh Rural Bank, Utkal Grameen Bank,

Jharkhand Rajya Gramin Bank, Bangiya Gramin Vikash Bank, Odisha Gramya Bank, Tripura Gramin Bank.

**Liquidity of RRBs in East India**

As per liquid asset to total asset ratio Mizoram Rural Bank rank first and Bangiya Gramin Vikash Bank ranks last. Regarding liquid assets to total deposit ratio, Mizoram Rural Bank has more liquidity and Bangiya Gramin Vikash Bank has lower liquidity. As per CDR, Uttar Bihar Gramin Bank ranks first and Arunachal Pradesh Rural Bank ranks last which is not using its resources adequately.

The liquidity of Mizoram Rural Bank is highly utilized and it ranks first among the RRBs in the east region of India followed by Uttar Bihar Gramin Bank, Tripura Gramin Bank, Jharkhand Rajya Gramin Bank, Utkal Grameen Bank, Odisha Gramya Bank, Arunachal Pradesh Rural Bank, Bangiya Gramin Vikash Bank.

**Table -6:** Composite Performance (overall rating) of RRBs in East India

Banks	C	A	M	E	L	Average	Rank
Arunachal Pradesh Rural Bank	5	3	3	3	6	4	3
Bangiya Gramin Vikash Bank	6	1	6	6	7	5.2	5
Jharkhand Rajya Gramin Bank	2	5	4	5	4	4	3
Mizoram Rural Bank	2	4	2	1	1	2	1
Odisha Gramya Bank	3	6	8	6	5	5.6	6
Tripura Gramin Bank	1	2	1	6	3	2.6	2
Utkal Grameen Bank	2	6	7	4	4	4.5	4
Uttar Bihar Gramin Bank	4	7	5	2	2	4	3

As per the above table, the composite ranking of all selected banks in the east region, Mizoram Rural Bank ranks first followed by Tripura Gramin Bank, Arunachal Pradesh Rural Bank, Jharkhand Rajya Gramin Bank, Uttar Bihar Gramin Bank, Utkal Grameen Bank, Bangiya Gramin Vikash Bank, Odisha Gramya Bank.

**Table -7:** Performance of RRB of West Region through CAMEL Model

Banks	Capital Adequacy								Over All Rank	
	C1 (%)	Rank	C2 (%)	Rank	C3 (%)	Rank	C4 (%)	Rank		
Baroda Gujarat Gramin Bank	9.86	3	24.77	4	44.47	4	99.13	3	3.5	3
Madhya Pradesh Gramin Bank	4.02	4	17.20	1	53.44	2	96.86	4	2.75	2
Madhyanchal Gramin Bank	-9.66	6	27.64	6	23.21	6	99.29	2	5	6
Maharashtra Gramin Bank	10.58	1	25.93	5	38.84	5	64.87	6	4.25	5
Saurashtra Gramin Bank	10.27	2	19.47	2	64.91	1	100.00	1	1.5	1
Vidharbha Konkan Gramin Bank	-7.65	5	21.58	3	50.55	3	90.82	5	4	4

Asset Quality										
Banks	A1 (%)	Rank	A2 (%)	Rank	A3 (%)	Rank	A4 (%)	Rank	Composite A	Over All Rank
Baroda Gujarat Gramin Bank	1.58	2	2.86	2	3.56	2	6.43	2	2	2
Madhya Pradesh Gramin Bank	7.66	5	11.71	6	14.32	5	21.92	5	5.25	6
Madhyanchal Gramin Bank	5.42	3	8.48	4	23.35	6	36.56	6	4.75	5
Maharashtra Gramin Bank	1.58	2	3.20	3	4.07	3	8.24	3	2.75	3
Saurashtra Gramin Bank	1.01	1	1.02	1	1.56	1	1.57	1	1	1
Vidharbha Konkan Gramin Bank	5.86	4	9.92	5	11.60	4	19.61	4	4.25	4
Management Efficiency										
Banks	M1 (%)	Rank	M2 (in lakhs)	Rank	M3 (in lakhs)	Rank	M4 (%)	Rank	Composite M	Over All Rank
Baroda Gujarat Gramin Bank	50.22	4	798.89	3	0.03	2	0.01	3	3	3
Madhya Pradesh Gramin Bank	61.49	2	731.28	4	-11.15	3	-2.11	4	3.25	4
Madhyanchal Gramin Bank	25.97	6	730.24	5	-26.12	4	-4.68	5	5	5
Maharashtra Gramin Bank	42.49	5	946.25	2	2.45	1	0.23	2	2.5	2
Saurashtra Gramin Bank	75.02	1	1135.34	1	0.03	2	0.50	1	1.25	1
Vidharbha Konkan Gramin Bank	54.40	3	589.79	6	-27.53	5	-7.32	6	5	5
Earning Capacity										
Banks	E1 (%)	Rank	E2 (%)	Rank	E3 (%)	Rank	Composite E	Over All Rank		
Baroda Gujarat Gramin Bank	2.33	1	33.98	5	90.70	3	3.00	1		
Madhya Pradesh Gramin Bank	-2.02	4	27.55	6	90.35	4	4.67	4		
Madhyanchal Gramin Bank	-3.49	5	35.66	3	94.07	1	3.00	1		
Maharashtra Gramin Bank	1.13	3	37.89	2	89.96	5	3.33	2		
Saurashtra Gramin Bank	1.95	2	39.67	1	89.72	6	3.00	1		
Vidharbha Konkan Gramin Bank	-6.98	6	35.46	4	93.15	2	4.00	3		
Liquidity										
Banks	L1 (%)	Rank	L2 (%)	Rank	L3 (%)	Rank	Composite L	Over All Rank		
Baroda Gujarat Gramin Bank	18.91	2	21.35	2	51.62	4	2.67	2		
Madhya Pradesh Gramin Bank	17.91	4	20.61	3	66.16	2	3.00	3		
Madhyanchal Gramin Bank	11.65	6	13.04	6	29.39	6	6.00	6		
Maharashtra Gramin Bank	29.37	1	32.13	1	49.52	5	2.33	1		
Saurashtra Gramin Bank	14.29	5	16.51	5	75.46	1	3.67	5		
Vidharbha Konkan Gramin Bank	18.42	3	19.82	4	61.04	3	3.33	4		

**Capital Adequacy of West Region RRBs:**

According to the above table, the Maharashtra Gramin Bank scored rank 1 with the highest CRAR and Madhyanchal Gramin Bank ranked last with least CRAR, as per Basel II norms, the RRB's in the west region, Madhya Pradesh Gramin Bank, Madhyanchal Gramin Bank, Vidharbha Konkan Gramin Bank has not met the requirement of 8% in CRAR. Regarding the debt-equity ratio, Madhya Pradesh Gramin Bank ranks first by using minimum debts Madhyanchal Gramin Bank has ranked last by using higher debts. According to the total advance to total asset ratio Saurashtra Gramin Bank lends the most and it ranks first and Madhyanchal Gramin Bank lends lower and it ranks last. The Saurashtra Gramin Bank Ranks first in government securities to total investment ratio which has 100% investment on government securities. Except Maharashtra Gramin Bank all other RRBs are highly secured with is an investment. Maharashtra Gramin Bank has only 64.87% of government securities on its total investment. Hence it ranked last.

The RRB's in the west region is based on the average of the sub-parameters of capital adequacy, Saurashtra Gramin Bank ranks first followed by Madhya Pradesh Gramin Bank, Baroda Gujarat Gramin Bank, Vidharbha Konkan Gramin Bank, Maharashtra Gramin Bank, Madhyanchal Gramin Bank ranks last.

**Asset Quality of West Region RRBs:**

The Saurashtra Gramin Bank ranks first by scoring 1.01% in net NPA to total advances ratio and Madhya Pradesh Gramin Bank ranks last by scoring 7.66%. Regarding the gross NPA to total asset ratio, in the west region, Saurashtra Gramin Bank ranks first which shows the level of quality of advances is in good status and Madhya Pradesh Gramin Bank has poor quality on its loan advances. In terms of net NPA to net

advances, the quality of loan by the Saurashtra Gramin Bank is good and it ranks first, Vidharbha Konkan Gramin Bank, Madhya Pradesh Gramin Bank, Madhyanchal Gramin Bank has poor quality among the loan advances. According to gross NPA to total asset ratio, Saurashtra Gramin Bank is said to be good quality on its advances whereas, Vidharbha Konkan Gramin Bank, Madhya Pradesh Gramin Bank, Madhyanchal Gramin Bank is not having a better position on recovering advances.

As per the average of sub-parameters of asset quality, Saurashtra Gramin Bank has good asset quality and it ranks first followed by Baroda Gujarat Gramin Bank, Maharashtra Gramin Bank, Vidharbha Konkan Gramin Bank and Madhyanchal Gramin Bank And Madhya Pradesh Gramin Bank has poor asset quality.

**Management Efficiency of West Region RRBs:**

As per the total advance to total deposit ratio Saurashtra Gramin Bank ranks first in west region RRBs and Madhyanchal Gramin Bank ranks last. As per the business per employee ratio, Saurashtra Gramin Bank ranks first and Vidharbha Konkan Gramin Bank ranks last. According to the profit per employee ratio, Maharashtra Gramin Bank ranks first and Vidharbha Konkan Gramin Bank ranks last with less performance of an employee. In terms of return on asset, Saurashtra Gramin Bank ranks first and Vidharbha Konkan Gramin Bank ranks last.

As per the average of sub-parameters of management efficiency Saurashtra Gramin Bank ranks first which shows it is sound management followed by Maharashtra Gramin Bank, Baroda Gujarat Gramin Bank, Madhya Pradesh Gramin Bank and Madhyanchal Gramin Bank and Vidharbha Konkan Gramin Bank ranks last and the management efficiency of these two banks are poor.

**Earning Capacity of West Region RRBs:**

Regarding operating profit, to total asset ratio Baroda Gujarat Gramin Bank ranks first and Vidharbha Konkan Gramin Bank ranks last which profitability is not satisfactory. As per the net interest to total income ratio, Saurashtra Gramin Bank has the highest earnings against the total asset and Vidharbha Konkan Gramin Bank ranks last which has the lowest earnings against the total asset. Regarding interest income, to total income ratio, Madhyanchal Gramin Bank ranks first which has the highest ability to generate income from its lending.

The average of sub-parameters of earning capacity Baroda Gujarat Gramin Bank, Madhyanchal Gramin Bank, Saurashtra Gramin Bank has highest earning capacity followed by Maharashtra Gramin Bank, Vidharbha Konkan Gramin Bank and Madhya Pradesh Gramin Bank.

**Liquidity Position of West Region RRBs:**

Regarding liquid asset, to total asset ratio Maharashtra Gramin Bank ranks first followed by Baroda Gujarat Gramin Bank, Vidharbha Konkan Gramin Bank, Madhya Pradesh Gramin Bank, Saurashtra Gramin Bank, Madhyanchal Gramin Bank. As per liquid asset to total deposit ratio, Maharashtra Gramin Bank ranks first and the smallest liquidity held by Madhyanchal Gramin Bank. In terms of CDR, Saurashtra

Gramin Bank ranks first followed by Madhya Pradesh Gramin Bank, Vidharbha Konkan Gramin Bank, Baroda Gujarat Gramin Bank, Maharashtra Gramin Bank, Madhyanchal Gramin Bank.

The average of sub-parameters of liquidity shows that Maharashtra Gramin Bank has highly utilized its liquidity source and it ranks first followed by Baroda Gujarat Gramin Bank, Madhya Pradesh Gramin Bank, Vidharbha Konkan Gramin Bank, Saurashtra Gramin Bank, Madhyanchal Gramin Bank.

**Table -8:** Composite Performance (overall rating) of RRBs in West India

Banks	C	A	M	E	L	Average	Rank
Baroda Gujarat Gramin Bank	3	2	3	1	2	2.2	2
Madhya Pradesh Gramin Bank	2	6	4	4	3	3.8	4
Madhyanchal Gramin Bank	6	5	5	1	6	4.6	6
Maharashtra Gramin Bank	5	3	2	2	1	2.6	3
Saurashtra Gramin Bank	1	1	1	1	5	1.8	1
Vidharbha Konkan Gramin Bank	4	4	5	3	4	4	5

The overall performance of RRB in the west region shows that Saurashtra Gramin Bank ranks first followed by Baroda Gujarat Gramin Bank, Maharashtra Gramin Bank, Madhya Pradesh Gramin Bank, Vidharbha Konkan Gramin Bank, Madhyanchal Gramin Bank.

**CONCLUSION**

The development of a country is mainly influenced by the growth of the banking industry of that country. The present study was conducted to examine the economic sustainability of a sample of Regional Rural Banks in India using the CAMEL model during the period 2019-2020. This study reveals that in terms of capital adequacy Tripura Gramin Bank stood top. Bangiya Gramin Vikash Bank was in the first position in terms of Asset Quality. Andhra Pradesh Grameena Vikas Bank stood first in terms of Management efficiency. In Earning Capacity Mizoram Rural Bank ranks first and Andhra Pradesh Grameena Vikas Bank ranks first in terms of Liquidity.

**Abbreviations**

- CDR - Credit Deposit Ratio
- CAR - Capital Adequacy Ratio
- FDIC - Federal Deposit Insurance Corporation.
- IDBI - Industrial Development Bank of India
- NPA - Non-Performing Assets
- OCC - Office of the Comptroller of the Currency
- PNB - Punjab National Bank
- RRB - Regional Rural Bank
- SBBJ - State Bank of Bikaner and Jaipur
- SBI - State Bank of India

SBM	-	State Bank of Mauritius
SBP	-	State Bank of Patiala
SBT	-	State Bank of Travancore
UCO	-	United Commercial Bank

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