



# Performance Evaluation of Regional Rural Banks: Evidence from Indian Rural Banks

By Jaynal Uddin Ahmed

*North Eastern Hill University, India*

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# Performance Evaluation of Regional Rural Banks: Evidence from Indian Rural Banks

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**Abstract** - The genesis of the Regional Rural Banks (RRBs) for around three and half decades can be traced to the need for stronger institutional arrangements for providing rural credit. The inception of RRBs can be seen as a unique experiment as well as experience in improving the efficacy of rural credit delivery mechanism in India. In the wake of introduction of financial sector reforms, the feasibility of RRBs emerged as the most crucial factors in deciding the desired role due to their limited business flexibility with hardly any scope of diversification, smaller size of loans with higher exposure to risk prone advances and professional inefficiency in financial deployment. In order to strengthen RRBs and to improve their performance, various initiatives have been taken by the Government of India and Reserve Bank of India. The paper, therefore, is a synopsis on the evaluation of performance of RRBs in India with respect to deposit mobilization, credit channelization, credit deposit ratio, deployment of credit to various occupations etc.

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## I. INTRODUCTION

The bank nationalization witnessed an incredible achievement in the banking system through the expansion of bank branches in the country. The establishment of more rural branches undoubtedly has served the twin objectives of mobilization of rural deposits and channelization of credit to the rural areas. However, the pace of acceleration of deposit mobilization depends on the economic and industrial infrastructure of higher magnitude as well as creating greater awareness among rural populace for effective use of bank credit. The credit absorption capacity in the rural areas largely depends on the availability of required infrastructure. The deposit mobilization and channelization of credit in social and productive units to meet the social objectives with profitability is the major motive of any financial institution. Regional Rural Banks (RRBs) as like any other scheduled commercial banks (SCBs) in the country mobilizes the deposits of people and as a business institution it utilizes deposit in providing credit to needy people in rural and backward areas and thereby tries to earn certain profit for its survival. The RRB in India was established in the year 1975 and the prime objective behind its establishment was to provide banking facility to the rural people in the country and

there by accumulating the rural saving and out of it to give credit to the rural people like small and marginal farmers, small scale industries, village artisans and craftsmen etc (Ibrahim, 2010) who failed to get credit from cooperative institutions.

The credit is a function of deposit. The higher the amount of deposit, the higher can be the fund for credit to a financial institution to deploy in the economy. The deposit mobilization of a bank depends on the income of the surrounding environment where the bank exists and the number of branches spread by it. To make successful deposit accumulation, the RRBs need to bring the rural masses. Similarly, the deployment of credit depends upon the availability of funds, business condition in the economy and the recovery rate. The deposit mobilization is a significant indicator of banks performance. The main idea is to tap deposit and culminate savings habit of the community. Further, tapping of potential savings and marshalling them especially for rural uses through small credit and to increase the village level income was the concern area for the RRBs of the country.

RRBs have been in existence for around three and half decades in the Indian financial scene. The inception of RRBs can be seen as a unique experiment as well as experience in improving the efficacy of rural credit delivery mechanism in India. A remarkable feature of their performance over the past three and half decades has been the massive expansion of their retail network in rural areas. From a modest beginning of 6 RRBs with 17 branches covering 12 districts in December 1975, the numbers have grown into 196 RRBs with 14,446 branches working in 518 districts across the country in March 2004. Govt. of India initiated the process of structural consolidation of RRBs by amalgamating RRBs sponsored by the same bank within a State as per the recommendations of the Vyas Committee (2004). The amalgamated RRBs were expected to provide better customer service due to better infrastructure, computerization of branches, pooling of experienced work force, common publicity marketing efforts, etc. and also derive the benefits of at large area of operation, enhanced credit exposure limits and more diverse banking activities. As a result of amalgamation, the number of RRBs was reduced from 196 to 133 as on March, 2006 and further to 82 RRBs with 15,658 branches operating in 621 districts as on March 2011. Thus, under the amalgamation process, a number

**Author** : Professor & Head, Department of Management, North Eastern Hill University, Tura Campus, Chandmari, Tura-794002, Meghalaya, India. E-mail : jaynaluahmed@yahoo.co.in

of RRBs have been amalgamated but the branches have increased. The credit deposit ratio of RRBs has increased from 46.3 per cent in March 2004 to 59.6 per cent in March 2011 (RBI, 2010-11). It is, therefore clear that RRBs have moved far away from the conditions and compulsions that were prevailing at the time of RRBs in 1975. Hence, in the context of present day competition with other banking and non banking institutions, improvement of performance level is essential for the survival of RRBs. Keeping in view the above facts in mind, the paper attempted to analyze the performance of RRBs in terms of growth of deposit, credit deployment and credit deposit ratio etc.

## II. REVIEW OF LITERATURE

A number of studies have been made on the various aspects of working and performance of RRBs in India. A concise review of these studies is painted in the following paragraphs to identify the significance of the present study.

The RRBs followed usually the same methods of operation and procedures as followed by commercial banks which have not found favourable for the rural masses. In many cases, banks have not been located at the right place. For instance, the sponsoring banks are also running their branches in the same areas where RRBs are operating. The issue whether location matters for the performance has been addressed in detail by Malhotra (2002). The Narasimham Committee (1998) emphasized that while discharging their functions as purveyors of rural credit and mobilisers of rural savings, RRBs should not ignore the importance of financial viability and operational efficiency. The productivity, profitability and solvency of the RRBS must be maintained and sustained to enable them to function as an effective and efficient institution of rural credit. Hadi and Bagchi (2006) assessed the performance of RRBs in India in general and in West Bengal in particular. The study reviewed the progress of the RRBs in West Bengal in terms of expansion of branches, credit expansion and deposit mobilization since inception till the end of June 2001. Shivappa (2007) in a study examined the growth in advances, deposits and financial performance of the RRBs. The study covered the RRBs as a whole and discussed mostly theoretical issues rather than any analytical depth. Kumar (2008) opined that amalgamation became a death blow to the credit starved rural poor, most of whom are small and marginal farmers, agricultural and landless labourers, and artisans. The study recommended for an immediate de-amalgamation of RRBs in the interest of the vast majority of the rural poor.

Dhaliwal, Kaur and Arora (2009) pointed out that RRBs were established in India essentially for taking banking to the doorstep of rural masses, particularly in areas without banking facilities. RRBs were expected to

operate as State sponsored, region based and rural oriented commercial banks. RRBs were expected to mobilize resources from rural areas and play a significant role in developing agriculture and rural economy by deploying mobilized resources in rural sectors for the needy not conversed by other formal credit institutions. Singh and Singh (2009) in their paper examined the recovery performance of Manipur Rural Bank. The study observed that the repayment of loans mainly depends on proper utilization of the loan amount, supply of quality assets, generation of sufficient income from schemes, availability of infrastructural and marketing, facilities, willingness to re-pay continuous supervision and follow up visits etc. Ibrahim (2010) studied performance evaluation of RRBs in India and investigated whether the merger/amalgamation of RRBs in India, undertaken in 2005-06 has helped to improve their performance. Various committees have also emphasized the need to improve the performance of these banks which play an important role in the rural credit market in India. The study finds and concludes that performance of rural banks in India has significantly improved after amalgamation process which has been initiated by the Government of India.

Bhaskar (2011) found that RRBs have to be repositioned and to carry out their entrusted responsibility of meeting the credit requirements in rural sector. In order to repositioning of RRBs, loss making RRBs should take step for enhancing productive by improving the skill and performance of their employees by better and specialized training in the areas of banking and finance, IT, management etc. Reddy and Prasad (2011) in an evaluative study observed that these banks penetrate every corner of the country and have been extending a helping hand in the growth of the economy. Despite the RRBs journeyed over three decades, they have achieved performance to the expected level quantitatively but not turning towards sound financial management and productivity. Kumar and Sharma (2011) in a comparative study of Himachal Gramin Bank and Parvatiya Gramin Bank found that the Parvatiya Gramin Bank is more conservative as compared to the Himachal Gramin Bank with regard to NPAs' management.

Whatever studies have emerged on the topic, they have primarily relied on exploratory analysis done for a particular year or on a group of RRBs to draw inferences. This kind of an approach has a serious limitation that the findings are guided by the choice of the year of analysis. To overcome this problem, one need to consider, as attempted in this paper, reasonably long period for analysis where extreme observations would be evened out so that one may get results that are more dependable.

### III. OBJECTIVES OF THE PAPER

The objective of the study is to analyze the performance level of rural banks in India. The specific objectives are as follows-

- To examine the trend and growth of deposit mobilization of RRBs in India.
- To analyze the growth trend and sector wise deployment of credit of RRBs over the years.
- To review the credit deposit ratio of RRBs in India.

#### *Hypotheses Framed*

- There is no difference in the growth of deposit as well as the growth of credit of RRB operating in India.
- RRB has made special dent in banking operation for fulfilling the socio economic motto over the years.

### IV. RESEARCH METHODOLOGY

The RRBs operating in India has been considered as research population of the proposed study. As on March 2010-11, there were 82 RRBs with 15,658 numbers of branches operating in the country. For the purpose of the proposed study, we have considered all the branches particularly for the analysis of performance of the bank. The sources of data collection are financial statements compiled by the head office of Regional Rural Banks, RBI bulletin, RBI Annual Reports, RBI Trend and Progress of Banking in India, Annual Reports of NABARD, Directorate of Economics and Statistics, various reports, surveys and research papers. To assess the growth performance of the bank, we have taken the variables like number of districts covered by RRBs, total deposits, total advances, population per branch, deposit and advances per branch, employee per branch and credit deposit ratio etc. The statistical techniques have been used to test the hypotheses of the study. The parametric test ie, 't' test, has been considered to test significance level in appropriate cases. The study has covered 11 years from 2000-01 to 2010-11 in order to analyze the position of RRBs in the context of global financial sector recession in 2000-01. The impact of restructuring strategies adopted on RRBs performance has been studied for the aforesaid time period.

### V. PERFORMANCE OF RRBs: ANALYSIS AND DISCUSSIONS

#### *a) Branch Expansion of RRBs*

The number of banks operating in India has undergone rapid changes as a result of the controlled expansion. There were 648 banks operating in India in 1947. A large number of them were very small non-scheduled banks with high mortality rates and poor capital base. The introduction of minimum capital base

strengthened the financial base of banks for trimming their number. At the time of nationalization of banks, there were only 85 banks (Thingalaya, 1987) in India. The establishment of RRBs in 1975 reversed the trend of healthy banking structure. Since then, 196 RRBs have joined the banking system. The table-1 showed below exhibits that in the year 2000-01, the total numbers of RRBs in all India level were 196 which reduced to 82 in the year 2010-11. This decrease in number is due to restructuring strategies adopted and amalgamation of various RRBs in the country which started after the implementation of the Narasimham Committee recommendation by the Govt. of India. Although the numbers of RRBs have decreased over the years, the branch network has increased to 15, 658 in 2010-11 from 14, 301 branches in 2000-01. During the period of 11 years under consideration, 1,357 number of new branches have been opened in order to cover more number of districts. This has been confirmed by the fact that the number of districts covered by the RRBs in the country has increased from 484 in 2000-01 to 621 districts in 2010-11. It indicates that an additional 137 numbers of districts were covered by setting up of new branches in the various uncovered and under-banked districts of the country. The population served per branch of RRBs is interestingly high ie, roughly 84.6 thousand in 2000-01 which slightly improved and figured at 77.3 thousand populations served per branch in 2010-11. The scenario is extremely terrible while compared with the population per branch of commercial banks as a whole which covered 18 thousand populations by each branch during 2010-11 (IBA, 2011) . The number of employee per branch found to be very low ie, around 4 to 5 persons throughout the period. In 2000-01, the average number of employee per office was 4.90 which has declined to 4.14 during the year 2010-11. This decrease in average number of employee per branch may be due to computerization of the in certain branches of RRBs.



Table 1 : Branch Network of Regional Rural Banks in India

Year	No. of RRBs	No. of Branches	No. of Employee per office	No. of Districts Covered	Population Per Branch*
2000-01	196	14,301	4.90	484	84622.99
2001-02	196	14,390	4.86	511	84099.61
2002-03	196	14,433	4.82	516	83849.06
2003-04	196	14,446	4.79	518	83773.60
2004-05	133	14,484	4.76	523	83553.81
2005-06	94	14,494	4.73	525	83496.17
2006-07	90	14,520	4.70	534	83346.65
2007-08	90	14,761	4.60	594	81985.87
2008-09	86	15,181	4.51	616	79717.64
2009-10	82	15,475	4.22	619	78203.13
2010-11	82	15,658	4.14	621	77289.14

Source : Reserve Bank of India, *Basic Statistical Return of Scheduled Commercial Banks, Various Issues*

\*population per branch of RRB is calculated with the total population as per 2011 census divided by the number of branches

#### b) Deposit Mobilization of RRBs

The resource mobilization is an integral part of banking activity and is a significant indicator of bank's performance. The basic principle of branch expansion is to tap deposit and culminate savings habit of the community. Further, tapping of potential savings and marshalling them for strategic uses for productive purposes in particular is the main objective. As a result, various schemes were launched over the years. The Govt has directed the banks to make all possible efforts to access to new deposits that can only expedite the pace of lending activities. There has been a substantial rise of deposits of RRBs during the period under consideration as depicted in table-2. The total amount of deposit in the year 2000-01 was Rs. 37,027 crores and this figure has gone up to Rs. 1,63,928 crores in 2010-11 recording 4.43 times increase in total deposit over the years. Although there has been decrease in the total numbers of RRBs in the country, the quantum of deposit is increasing over the years. At the same time, deposit per branch has increased over the years. The average deposit per branch in 2000-01 was Rs. 2.59 crores which has gone up to Rs. 10.47 crores per office during the year 2010-11. The scenario of deposit per branch of Indian commercial banks is much higher than the RRB as a whole during the same span. The figures for commercial banks as a whole increased from Rs. 14.56 crores in 2000-01 to Rs.44.65 crores in 2010-11 (IBA, 2011). The per capita deposit in RRBs is also very low; the figure for the same was Rs. 0.31 thousands in 2000-01, increased to Rs. 1.35 thousands in 2010-11. It could thus be inferred from the above analysis that the reform measures introduced following Narasimham committee recommendations 1991 and 1998 have positive impact in mobilizing the rural deposits as reflected from the increase in deposit per branch of RRBs. But the fact remained that the RRBs failed to maintain the deposit performance of commercial banks of the country.

#### c) Credit Channelization of RRBs

The bank credit is an important input variable in the production functions of agriculture, industry, commerce and allied productive activities for the socio-economic development of the backward region of the country. In this connection, Pandey (1968) suggested for the channelization of bank credit in proper direction, as otherwise, there will be adverse affect on the economy of the country. Raj committee (1977) recommended 40 per cent of lending to the priority sector. After nationalization, banks have attempted to steer the direction of change and strive towards achieving fundamental objectives of mitigation of regional disparities, dispersal of industries and reduction of concentration of economic wealth (Raul, 1997). Hartough (1994) studied the implications of bankers action plan for profit-able small business portfolio and suggested that customers payment track record and market condition etc. Bank should make advances to most attractive and growth potential units. In order to review the efficacy of existing framework of money lending a technical group, was constituted under the chairmanship of S.C. Gupta, submitted its report on July 2007 and recommended alternative avenues of credit dispensation such as micro finance institutions (RBI, 2007). Kumar (2008) opined that as a result of amalgamation of RRBs, quantum of credit allocation of bank has been under a severe concern mostly for small and marginal farmers, agricultural and landless labourers, and artisans. He recommended for an immediate de-amalgamation of RRBs in the interest of the vast majority of the rural poor. Hence, it is very interesting to know composition and direction of credit allocation of RRBs.

The loans and advances offered by the RRBs in the country are also increasing over the years in a continuous manner as observed from table-2. The total amount of loans and advances of RRBs in the country was Rs. 15,794 crores in 2000-01; the amount has gone

up to a total of Rs. 98,244 crores. It is clear that the total amount of loans and advances of RRBs in the country has increased by more than 5 times over the period. The per branch advances was Rs. 1.10 crores in 2000-01 which has increased to Rs. 6.27 crores in 2010-11. The RRBs are not in a position to deploy credit for socio economic development unlike commercial banks in India as the credit per office of RRBs is much lower while compared to the figure for credit per commercial banks in India throughout the period. The credit per commercial banks increased to Rs.41.55 crores in 2010-11 from Rs. 7.79 crores in 2000-01 (RBI, 2010-11). The per capita loans and advances of RRBs are also very low throughout the period under consideration.

#### d) Credit Deposit Ratio of RRBs

The credit deposit ratio is considered as a dependable indicator of efficiency of bank's participation in the developmental process. It indicates the extent of bank deposits advanced to multifarious activities in the area. Nambiar (1980) articulated that low credit absorption capacity due to low infrastructural facilities in the area particularly in 'no industrial region' is the main hurdle of increasing C/D ratio. The banks along with developing and implementing authorities of the area can only take a challenge against the congenital impediments to sustain the economic development of that area. Sikidar (1990) has aptly viewed that the C/D ratio should be looked into its segment and disaggregated forms and for extending advances, the sources of fund are deposits, refinance

from higher financial institution, and accretion of profit. Nandal and Singh (2002) viewed that due to larger quantum of deposits, banks have advanced credit to a large extent but C/D ratio has not been found satisfactory. They suggested that there should be proper recovery of loan amount from the loanee in order to have a satisfactory C/D ratio, otherwise banks would suffer causing harm to the economy as a whole. Bhagawati (1991) articulated that banks in north eastern region have not been able to increase their credit portfolio. As a result, bank's sensitiveness and effectiveness in planning of advances is required for bringing a paradigm change in the competitive environment.

The credit deposit of the RRBs in India has been increased over the years. The fact has been delineated in table-2. In 2000-01, the credit deposit ratio of the RRBs in the country was 41.0 per cent which increased to 59.6 per cent in 2010-11. The trend of credit deposit ratio of commercial banks is much higher than that of the RRBs; the figure was 45.9 per cent in March 2001 which has reached to the level of 73.9 per cent in March 2008 (RBI, 2008). Hence the apparent fact remains that the RRBs failed to maintain the C/D ratio of commercial banks of the country during the period. The reason of significantly low C/D ratio of RRBs may be attributed to nature of loans sanctioned, non-recovery of loans, stubborn cheaters, lack of direction of end use of bank credit, lack of implementation of bankable schemes and so on.

Table 2 : Performance of Regional Rural Banks in All India Level

Year	Total Deposits (Rs. In Crores)	Deposit per branch (Rs. in Crores)	Per Capita Deposit (Rs. In thousands)	Total Loans and advances (Rs. in Crores)	Loans and advances per branch (Rs. in Crores)	Per Capita Loans and Advances (Rs. In Thousands)	Credit-Deposit Ratio (%)
2000-01	37,027	2.59	0.31	15,794	1.10	0.13	41.0
2001-02	43,220	3.00	0.36	18,629	1.29	0.15	41.8
2002-03	48,346	3.35	0.40	22,158	1.54	0.18	44.2
2003-04	57,010	3.94	0.47	26,115	1.81	0.22	46.3
2004-05	62,143	4.29	0.51	32,871	2.27	0.27	52.8
2005-06	71,329	4.92	0.59	38,520	2.66	0.32	55.6
2006-07	83,144	5.73	0.69	47,326	3.26	0.39	58.3
2007-08	99,093	6.71	0.82	57,568	3.90	0.48	59.5
2008-09	1,20,189	7.92	0.99	65,609	4.32	0.54	56.4
2009-10	1,45,035	9.37	1.20	79,157	5.12	0.65	57.6
2010-11	1,63,928	10.47	1.35	98,244	6.27	0.81	59.6

Source : Reserve Bank of India, Basic Statistical Return of Scheduled Commercial Banks, Various Issues Consolidated RBI Report on Trend and Progress of Banking in India from 2000-01, 2010-11 RBI, Statistical Tables Relating to Banks in India 2003

In order to analyze the nature of relationship between growth of deposits and growth of advances, coefficient of correlation (r) analysis has been employed. For this purpose, 'r' value between deposit per office and advance per office have been calculated for the period of 11 years from 2000 to 2011. The result

obtained is as under-

$$r = 0.99$$

$$t = 21.06 \text{ (cal.)}$$

$$t_{0.05}(9 \text{ df.}) = 1.833$$

$$t_{0.01}(9 \text{ df.}) = 2.821$$

The high positive correlation ( $r=0.997$ ) value between deposit per office and advances per office are statistically significant at 1 per cent and 5 per cent level of significance at 9 degree of freedom. The calculated value of 't' is much higher than the table value. It confirms that along with the increase of deposits, loans and advances has increased at the same proportion. This implies that the RRBs deploying credit at the same rate what they have mobilized for this purpose although they have not attained the stipulated C/D ratio of 60 per cent.

e) *Population Group - Wise Growth of Deposits of RRBs*

The population group-wise deposits and credit of RRBs viz, rural, semi-urban, urban and metropolitan

area is presented in table- 3. It is clear from the table that there is a quantum jump of rural deposit from Rs. 22,307.06 crores in March 2000 to Rs. 84,115.62 crores in March 2010 recording an increase 3.8 fold during 2000-2010. But the percentage share of rural deposit declined from 69.63 per cent to 59.23 per cent during the same period. The semi-urban deposit was Rs. 7,268.64 crores in March 2000 which increased to Rs. 36,625.67 crores in March 2010. The percentage share of semi-urban deposit increased from 22.69 per cent to 25.79 per cent. It shows positive growth of semi-urban deposits both in quantum and percentage term over the years. The urban and metropolitan deposits also increased both in quantitative and percentage term.

*Table 3 : Population Group-wise Deposits of RRBs in India (As on March)  
(Amount Rs. in Crores)*

Year/Population Group	Rural	Semi-Urban	Urban	Metropolitan	Total
2000	22,307.06 (69.63)	7,268.64 (22.69)	2,393.70 (7.47)	65.28 (0.20)	32,034.68 (100)
2001	26,312.89 (69.33)	8,568.89 (22.58)	2,994.39 (7.89)	77.08 (0.20)	37,953.23 (100.0)
2002	30,154.59 (68.43)	10,218.22 (23.19)	3,589.09 (8.14)	101.23 (0.22)	44,063.12 (100.0)
2003	33,745.05 (68.09)	11,664.81 (23.54)	4,039.04 (8.15)	109.25 (0.22)	49,558.14 (100.0)
2004	37,711.63 (67.45)	13,433.77 (24.03)	4,619.74 (8.26)	143.88 (0.26)	55,909.02 (100.0)
2005	40,957.13 (66.65)	15,154.59 (24.66)	5,160.81 (8.40)	174.37 (0.28)	61,446.90 (100.0)
2006	44,359.98 (62.98)	17,978.85 (25.53)	7,403.50 (10.51)	691.91 (0.98)	70,434.24 (100.0)
2007	50,913.97 (62.37)	21,361.13 (26.17)	8,489.90 (10.40)	865.50 (1.06)	81,630.50 (100.0)
2008	59,661.45 (61.19)	25,883.31 (26.54)	10,883.46 (11.16)	1,081.20 (1.11)	97,509.41 (100.0)
2009	71,646.76 (60.43)	31,651.27 (26.69)	13,862.90 (11.69)	1,409.34 (1.19)	1,18,570.27 (100.0)
2010	84,115.62 (59.23)	36,625.67 (25.79)	19,271.04 (13.57)	1,998.52 (1.41)	1,42,010.85 (100)
<b>CV</b>	<b>42.54</b>	<b>53.38</b>	<b>70.24</b>	<b>108.10</b>	<b>48.62</b>

*Source : Statistical Returns of Scheduled Commercial Banks in India, Various Issues  
(Figures in the Parentheses Indicate per cent to Total Deposit)*

The above analysis found that deposits of all the population groups and their percentage share to total deposits of RRBs have increased except percentage share of rural deposit which has declined during the period under consideration. This indicates that in respect of deposit mobilization, the RRBs in rural areas are not performing at par with others groups. The coefficient of variations results, however, gives contradictory results indicating that there have been a less variations of rural deposits. This has called for a further enquiry on the degree of relationship among the population group-wise deposits.

In order to study the extent of deposit mobilization in the rural areas, the correlation matrix analysis is employed among the population group wise deposit during 2000-2010. The result obtained is presented in table-4.

Table 4 : Matrix of Correlation among the Population Group wise Deposits

Variables	Total Deposit	Rural Deposit	Semi-Urban Deposit	Urban Deposit	Metropolitan Deposit
Total Deposit	1				
Rural Deposit	0.99*(21.06)	1			
Semi-Urban Deposit	0.99*(21.06)	0.99*(21.06)	1		
Urban Deposit	0.99*(21.06)	0.99*(21.06)	0.99*(21.06)	1	
Metropolitan Deposit	0.98*(14.7)	0.97*(12.13)	0.98*(14.7)	0.99*(21.06)	1

Source : Calculated by the Researcher on the basis of table-3

$t_{0.05}$  (9 df.)=1.833 &  $t_{0.01}$  (9 df.)=2.821 (Figures in parentheses indicate the respective 't' values)

\*Significant both at 5 per cent and 1 per cent level of significance.

It is observed that the 't' values (calculated) of the highly positive correlations are higher than the tabulated values. It means that 'r' values are statistically significant. It indicates that with the increase in total deposits, the population group wise deposits increased in the same proportion.

#### f) Population Group wise Credit Channelization of RRBs

There has been a quantum increase of population group wise credits of RRBs during the period 2000-2010. But the percentage share of credit to total credit has declined in case of rural credit. The table-5 presents the facts relating to population group-wise credit of RRBs.

Table 5 : Population Group-wise Credit of Regional Rural Banks in India

(Amount Rs. In Crores)

Year/Population Group (March)	Rural	Semi- Urban	Urban	Metropolitan	Total
2000	9,644.22 (73.47)	2,683.83 (20.45)	777.98 (5.93)	20.06 (0.15)	13,126.10 (100)
2001	11,826.11 (73.17)	3,491.50 (21.60)	1,009.43 (6.25)	24.57 (0.15)	16,163.51 (100.0)
2002	13,509.02 (71.59)	4,105.31 (21.75)	1,212.87 (6.43)	41.56 (0.22)	18,868.76 (100.0)
2003	16,177.11 (71.51)	4,921.71 (21.76)	1,470.67 (6.50)	53.44 (0.24)	22,622.92 (100.0)
2004	18,265.45 (70.19)	5,917.39 (22.74)	1,771.62 (6.81)	65.88 (0.25)	26,020.34 (100.0)
2005	23,017.35 (70.41)	7,529.16 (23.09)	2,072.83 (6.34)	69.49 (0.21)	32,688.83 (100.0)
2006	24,453.53 (66.73)	9,124.13 (24.90)	2,825.82 (7.71)	240.03 (0.65)	36,643.51 (100.0)
2007	32,226.20 (67.34)	11,759.79 (24.57)	3,581.75 (7.48)	287.38 (0.60)	47,855.11 (100.0)
2008	38,736.20 (66.91)	14,434.77 (24.94)	4,340.15 (7.50)	375.44 (0.65)	57,886.56 (100.0)
2009	44,247.18 (66.21)	16,693.32 (24.98)	5,429.25 (8.12)	459.16 (0.69)	66,828.91 (100.0)
2010	53,623.12 (64.79)	20,970.86 (25.34)	7,529.29 (9.10)	638.50 (0.77)	82,761.76 (100)
CV	55.64	65.08	73.11	101.83	59.50

Source : Statistical Returns of Scheduled Commercial Banks in India, Various Issues

(Figures in the Parentheses Indicate per cent to total credit)

From the analyses, it is observed that over the years, coefficient of variation of metropolitan credit is on fluctuating trend than that of other population groups ie, rural, semi-urban and urban. As the percentage share of credit in rural areas has declined, it may be observed that a negative attitude of banks to fulfill the socio economic objectives and thereby the motto of rural

development although RRBs were created basically to serve weaker sections, village farmers, artisans etc.

An attempt has been made here under to find out the extent of credit utilization among the population group wise credit of RRBs in India. In this respect, the correlation matrix analysis is employed among the variables during 2000-2010. The table-6 presents the



results of correlations. It is observed that the highly positive 'r' values are significant as the calculated values of 't' are higher than the table value at 5 per cent and 1 per cent level of significance at 9 df. It shows that there

is high relationship exist among the variables. It can further be interpreted that along with the increase in total credit, the credit of rural, semi urban and urban areas have also been increasing proportionately.

*Table 6 : Matrix of Correlation Analysis of Population Group wise Credit*

Variables	Total Credit	Rural Credit	Semi-Urban Credit	Urban Credit	Metropolitan Credit
Total Credit	1				
Rural Credit	0.99* (21.06)	1			
Semi-Urban Credit	0.99* (21.06)	0.99* (21.06)	1		
Urban Credit	0.99* (21.06)	0.99* (21.06)	0.99* (21.06)	1	
Metropolitan Credit	0.98* (14.7)	0.98* (14.7)	0.99* (21.06)	0.99* (21.06)	1

Source : Calculated by the Researcher on the basis of table-5

$t_{0.05} (9 \text{ df.}) = 1.833$  &  $t_{0.01} (9 \text{ df.}) = 2.821$  (Figures in parentheses indicate the respective 't' values)

\*Significant both at 5 per cent and 1 per cent level of significance

#### g) Deployment of Credit of RRBs in India

The RRBs provide credit support for the development of rural and backward areas. It provides loans to various purposes like agriculture, industry, transport operators, professional and personal loans etc. The credit extension of the RRBs in India during the last ten years is presented in table- 7. The amount of agricultural credit and the percentage share of total credit of RRBs have increased during 2000-2010. The

agricultural credit was Rs.6316.56 crores in March 2000 (which was 48.12 percent of total credit), has increased to the tune of Rs. 34063.23 crores in March 2010 (ie, 61.47 per cent of total credit). In case of industrial credit the total loan extended by the RRBs in India in March 2000 was Rs. 919.67 crores (7.01 percent of total credit) and in March 2010, amount of industrial loan has increased to Rs.1707.76 crores (3.08 per cent of the total credit extended).

*Table 7 : Credit Allocation of RRBs in India (As on March)*

(Amount Rs. in Crores)

Sl. No	Occupation	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	Agriculture	6316.56 (48.12)	7665.04 (46.88)	8741.08 (46.33)	10642.00 (47.04)	12237.51 (47.03)	16463.32 (50.36)	18820.42 (51.36)	26184.93 (54.72)	32139.74 (55.52)	36437.64 (54.52)	34063.23 (61.47)
2	Industry	919.67 (7.01)	1207.29 (7.38)	1349.95 (7.15)	1489.64 (6.58)	1536.34 (5.90)	1826.65 (5.59)	1871.99 (5.11)	2476.53 (5.18)	2336.59 (4.04)	2600.32 (3.89)	1707.76 (3.08)
3	Transport Operators	626.82 (4.77)	688.57 (4.21)	567.95 (3.01)	529.02 (2.34)	542.49 (2.08)	548.26 (1.68)	503.81 (1.37)	625.35 (1.31)	609.75 (1.05)	755.14 (1.13)	777.47 (1.40)
4	Professional and other services	384.47 (2.93)	469.47 (2.87)	534.14 (2.83)	659.31 (2.91)	706.26 (2.71)	726.39 (2.22)	808.13 (2.21)	1079.46 (2.26)	1610.07 (2.78)	1919.18 (2.87)	1266.70 (2.29)
5	Personal Loans	2469.22 (18.81)	3449.21 (21.09)	4440.28 (23.53)	5583.02 (24.68)	6680.56 (25.67)	7782.71 (23.81)	8240.91 (22.49)	9804.40 (20.49)	10395.51 (17.96)	12328.16 (18.45)	7435.16 (13.42)
6	Trade	1900.87 (14.48)	2234.41 (13.66)	2216.78 (11.75)	2462.73 (10.89)	2718.49 (10.45)	3196.11 (9.78)	3400.68 (9.28)	4322.24 (9.03)	4877.08 (8.43)	5866.81 (8.78)	4072.18 (7.35)
7	Finance	2.88 (0.02)	5.24 (0.03)	16.97 (0.09)	29.02 (0.13)	50.82 (0.20)	59.82 (0.18)	82.55 (0.23)	91.17 (0.19)	446.96 (0.77)	2738.81 (4.10)	2426.13 (4.38)
8	All Others	505.60 (3.85)	632.39 (3.87)	1001.62 (5.31)	1227.59 (5.43)	1547.85 (5.95)	2085.57 (6.38)	2915.03 (7.96)	327.104 (6.84)	5470.86 (9.45)	4182.86 (6.26)	3668.07 (6.62)
	Total Bank Credit	13126.1 (100)	16351.61 (100)	18868.76 (100)	22622.93 (100)	26020.32 (100)	32688.83 (100)	36643.52 (100)	47855.12 (100)	57886.56 (100)	66828.92 (100)	55416.70 (100)

Source : Statistical Returns of Scheduled Commercial Banks in India, Various Issues (Figures in the Parentheses Indicate per cent to Total Deposit and Total Credit)

Although there has been a quantum increase of industrial credit, the percentage shares of industrial credit to total credit of RRBs declined. In case of transport operators, the total amount of credit provided in March 2000 was Rs.626.82 crores but the contribution to transport operator increased to Rs.777.47crores in

March 2010. However, the share of credit for transport operators has been declining continuously. The transport operator received a meager amount of loan during the period. The share of personal loan to the total amount although declined, its share remained around 13.42 per cent in 2010. The trade and finance together

constitute approximately 12 per cent of total credit of RRBs in the year 2010.

In order to understand the extent of credit allocation of RRBs into various occupations, correlation analysis is employed. The correlation of total bank credit (a) with agriculture (b) industry credit (c) transport operators (d) professional and other services (e) personal loans (f) trade (g) finance (h) all others (i) during 2000-2010 is shown in table-8.

**Table 8 :** Correlation Analysis of Total Credit with Credit to Various Occupations of RRBs

Variables	Correlation value	Calculated 't' value
$r_{ab}$	0.99	21.06
$r_{ac}$	0.89	5.80
$r_{ad}$	0.51	1.78
$r_{ae}$	0.97	12.13
$r_{af}$	0.92	7.08
$r_{ag}$	0.98	14.70
$r_{ah}$	0.75	3.41
$r_{ai}$	0.79	3.82

Source : Self calculated by the researcher

$$t_{0.05} (9 \text{ df.}) = 1.833 \text{ \& } t_{0.01} (9 \text{ df.}) = 2.821$$

It is found that almost all the 'r' values are statistically significant both at 5 per cent and 1 per cent level of significance at 9 df. except the total bank credit with transport operators. It indicates that except the transport operators all other occupation groups are getting adequate credit along with the increase of total bank credit of the RRBs in the country. The correlation between total bank credit and transport operator is 0.51 which is not statically significant at 5 per cent and 1 per cent level of significance. This clearly designated that transport operator is getting comparatively less amount of loans for developmental purpose which might perhaps resultant the severe infrastructural backwardness that persist in rural areas of the country. Hence an immediate step is necessary to enhance the adequate amount of credit to the transport operators.

## VI. MAIN FINDINGS

1. The study found that new branches of RRBs have been opened up in the under-banked districts of the country. The population served per branch of RRBs is interestingly high ie, roughly 77.3 thousand populations served per branch in 2010-11. The scenario is extremely terrible while compared with the population per branch of commercial banks as a whole which covered 18 thousand populations by each branch during 2010-11.
2. The number of employee per branch found to be very low ie, around 4 to 5 persons throughout the period. In 2000-01, the average number of employee per office was 4.90 which has declined to 4.14 during the year 2010-11. This decrease in average number of employee per branch may be

due to computerization strategies of certain branches of RRBs.

3. The scenario of per capita deposit in RRBs is also very low; the figure for the same was Rs. 0.31 thousands in 2000-01, increased to Rs. 1.35 thousands in 2010-11. It could thus be inferred that the reform measures have positive impact in mobilizing the rural deposits as reflected from the increase in deposit per branch of RRBs. But the fact remained that the RRBs failed to maintain the deposit performance of commercial banks of the country.
4. The study found that RRBs are not in a position to deploy credit for socio economic development alike commercial banks in India as the credit per office of RRBs is much lower while compared the figure for credit per commercial bank in India throughout the period.
5. The RRBs have failed to maintain the C/D ratio of commercial banks of the country during the period. The reason of significantly low C/D ratio of RRBs may be attributed to nature of loans sanctioned, non-recovery of loans, stubborn cheaters, lack of direction of end use of bank credit, lack of implementation of bankable schemes and so on.
6. The econometric analysis relating to the deposit per office and advances per office validated the fact that along with the increase of deposits, loans and advances has increased at the same proportion. This implies that the RRBs deploying credit at the same rate what they have mobilized for this purpose although they have not attained the stipulated norms of credit deposit ratio.
7. It is found that except the transport operators all other occupation groups are getting adequate credit along with the increase of total bank credit of the RRBs in the country. The correlation between total bank credit and transport operator is 0.51 which is not statistically significant, indicated that transport operator is getting comparatively less amount of loans for developmental purpose which might perhaps resultant the severe infrastructural hazards that persist in rural areas of the country.

## REFERENCES RÉFÉRENCES REFERENCIAS

1. Ibrahim, M. S. (2010); "Performance Evaluation of Regional Rural Banks in India", International Business Research, 3(4), (November).
2. RBI; Report of the Advisory Committee on Flow of Credit to Agriculture and Related Activities (Dr. Vyas Committee, 2004).
3. RBI (2010-11) Trend and Progress of Banking in India, Reserve Bank of India, Mumbai.
4. Malhotra, R (2002); "Performance of India's Regional Rural Banks (RRBs): Effect of the Umbilical Cord",

- Retrieved from URL: <http://www.alternativefinance.org.uk/rtf/rbbsmalhotra.rtf>. (Date of visit: 10/09/10).
5. Govt. of India (1998); "Report on Banking Sector Reforms" (Narasimham Committee - II), Ministry of Finance.
6. Hadi, A and Bagchi, K.K (2006); "Performance of Regional Rural Banks in West Bengal: An Evaluation", Serial Publications, New Delhi.
7. Shivappa, H (2007); "Working of Regional Rural Banks in India", Indian Journal of Agricultural Economics, July 1, 2007.
8. Kumar, V. A (2008); "Case for De-amalgamation of Regional Rural Banks", Economic and Political Weekly, 43(42):60-68, (October).
9. Dhaliwal, K, N and Arora, R. S (2009); "Profitability of Regional Rural Banks: A Study of Post Liberalization Period. (Report)", Political Economy Journal of India, (January).
10. Singh, N.T and Singh T.J (2009); "Recovery Performance of RRBs: A Case Study of Manipur Rural Bank" Journal of Accounting and Finance, 23((1):66-74 (October 08- March 09).
11. Ibrahim, M.S.(2010); "Performance Evaluation of Regional Rural Banks in India, International Business Research 3(4) (November).
12. Bhaskar, C.S (2011); "Problems and Prospects of Regional Rural Banks in India", Indian Streams Research Journal, 1(X):1-4.
13. Reddy, D.M and Prasad, K.V.N (2011)," Evaluating Performance of Regional Rural Banks: An Application of Camel Model", Research World, Journal of Arts, Science and Commerce, II (4): October .
14. Kumar, R and Sharma, M (2011); "Rural banking in Himachal Pradesh: a comparative study of Himachal Gramin Bank and Parvatiya Gramin Bank", Political Economy Journal of India, (January-July).
15. Thingalaya, N. K.(1987); "Banking Development in India Since Independence", Pigmy Economic Review, 33 (1):1, (August).
16. IBA: (2011), Indian Banks' Association, Indian Banking at a Glance, 2011.
17. IBA (2011); Performance Highlight of Banks, Indian Bank Associations, Mumbai.
18. Pandey, K. L, (1968); "Development of Banking in India Since 1949", Calcutta Scientific Book Agency. P- 80.
19. Reserve Bank of India (1977); "Committee's Report on Financing of Public Sector Banks", RBI (Raj, J. as Chairman).
20. Raul, R. K., (1997); "Industrial Finance in India", Anmol Publications, New Delhi.
21. Hartough, K. J. (1994); "Entrepreneurial Bankers; The Banker's Personal Action Plan for Building a Profitable Small Business Portfolio", Probus Publishing, Chicago.
22. RBI (2007); "Report of the Technical Group to Review Efficacy of Existing Legislative Framework Governing Money Lending and its Enforcement Machinery".
23. Kumar, V. A (2008); "Case for De-amalgamation of Regional Rural Banks", Economic and Political Weekly, 43(42):60-68, (October).
24. RBI (2010-11); Trend and Progress of Banking in India, Mumbai.
25. Nambiar, P.C.D. (1980); "Banking Policy; Which Direction", Commerce Vol- 13, (September-20).
26. Sikidar. S. (1990); "Economic Development of Tribal India", Ashish Publishing House, New Delhi, p-160.
27. Nandal, R. S. and Singh. A (2002); "Banking Infrastructure in Haryana", Banking and Financial Sector Reform in India, Deep and Deep publication Pvt. Ltd. pp – 457.
28. Bhagawati, S. K. (1999); "Credit Deposit Ratio of Commercial Banks; A Case Study of North Eastern Region", Journal of North Eastern Council, 19 (2) : 14 – 19, (April, June).
29. Reserve Bank of India (2008); "Basic Statistical Return of Scheduled Commercial Banks", Mumbai.