IJCBM International Journal of Commerce and Business Management
Volume 5 | Issue 1 | April, 2012 | 44-48

RESEARCH PAPER

An economic analysis on the role of Regional Rural Banks (RRBS) in financial inclusion and alleviating poverty

■ B.S. KULKARNI AND S.M. PATIL

Received : *20.01.2012;* **Revised :** *03.02.2012;* **Accepted :** *01.03.2012*

ABSTRACT

The various financial services include savings, loans, insurance, payments, remittance facilities and financial counseling / advisory services by the formal financial system. There is now recognition that inclusive growth should be achieved in order to reduce poverty and other disparities and raise economic growth, hence the 11th Plan (2007-12) advocates for inclusive growth. To study the performance, growth and instability of Regional Rural Banks in India, analytical techniques such as Compound Growth Rate and Instability analysis were employed. The growth in number of RRBs may be mainly attributed to the amalgamation of these RRBs in several districts causing in their reduction over the years which is also indicated by instability of 41.32 per cent. The growth rate in the number of districts covered by the RRBs was found to be 2.61 per cent per annum at one per cent level of probability whereas, the growth rate for number of staff employed was found to be negative with (-) 0.27 per cent at one per cent level of probability. The recovery performance of RRB was estimated at 80.03 per cent, as on 30 June 2010, compared to 80.09 per cent, as on 30 June 2009. The aggregate gross NPA of all RRB declined from 4.14 per cent as on 31 March 2009 to 3.72 per cent, as on 31 March 2010. The compound growth rate in borrowed funds of RRB was highest with 19.52 per cent as compared to the owned funds with 8.13 per cent per annum at one per cent level of probability. The investments of RRBs recorded a significant growth of 12.39 per cent at one per cent level of probability with coefficient of variation of 40.11 per cent over a period of 2001-02 to 2011-12. Total capital funds increased tremendously after amalgamation took place in the year 2005-06. Credit-deposit ratio increased over the years showing a remarkable deployment of credit by these banks in rural areas.

Key words **:** Financial inclusion, Performance, Amalgamation, NABARD, Loans and advances

How to cite this paper **:** Kulkarni, B.S. and Patil, S.M. (2012). An economic analysis on the role of Regional Rural Banks (RRBS) in financial inclusion and alleviating poverty. *Internat. J. Com. & Bus. Manage*, **5**(1): 44 - 48.

The Financial Inclusion Fund (FIF) for meeting the cost of developmental and promotional interventions of financial inclusion, and Financial Inclusion Technology Fund (FITF) for meeting the cost of technology adoption, were set up in NABARD during 2007-2008, as recommended by the Committee on Financial Inclusion (Anonymous, 2008). The corpus of each fund was ‘500 crore, to be contributed by the GoI, Reserve Bank of India (RBI) and NABARD in the ratio of 40:40:20 in a phased manner over five years. GoI and NABARD made initial contributions of ‘10 crore and ‘5 crore, respectively, to each of these funds. GoI again contributed ‘10 crore for 2009-10 and 2010-11 to each of the funds. As on 31 March 2011, the contribution to this corpus by GoI stood at ‘30 crore in each of the funds, and by NABARD at ‘30 crore (FIF) and ‘40 crore (FITF). The RBI has decided to contribute to these funds on a reimbursement basis. During the year 2010- 11, RBI contributed ‘3.46 crore (‘3.05 crore towards FIF and ‘0.41 crore towards FITF), being its share of expenditure incurred upto July 2009.

“Financial inclusion, thus, has become an issue of worldwide concern, relevant equally in economies of the

MEMBERS OF THE RESEARCH FORUM

Correspondence to:
B.S. KULKARNI, Agricultural Business and Export Knowledge Centre, College of Agriculture, University of Agricultural Sciences, DHARWAD (KARNATAKA) INDIA
Email : bs_kulkarni@rediffmail.com

Authors' affiliations:
S.M. PATIL, Cost of Cultivation Scheme, University of Agricultural Sciences, BENGALURU (KARNATAKA) INDIA
Email : patilnavalur@gmail.com

under-developed, developing and developed nations. Building an inclusive financial sector has gained growing global recognition bringing to the fore the need for development strategies that touch all lives, instead of a select few. Experience has shown that in the initial phase of real and financial sector reforms, there is a need to build in adequate provisions ensuring that the economically weak segment of population have increased participation in the process of economic growth and social development. Reforms in financial systems, therefore, need to be complemented by measures that encourage the institutions, instruments, relationships and financing arrangements to be properly geared for providing sound, responsive financial services to the majority of the people who do not have such access.

Who needs to be included?:

The essence of financial inclusion is in trying to ensure that a range of appropriate financial services is available to every individual and enabling them to understand and access those services. Apart from the regular form of financial intermediation, it may include a basic no frills banking account for making and receiving payments, a savings product suited to the pattern of cash flows of a poor household, money transfer facilities, small loans and overdrafts for productive, personal and other purposes, etc.

By financial inclusion, we mean delivery of banking services and credit at an affordable cost to the vast sections of disadvantaged and low income groups. The various financial services include savings, loans, insurance, payments, remittance facilities and financial counseling / advisory services by the formal financial system. An open and efficient society is always characterized by the unrestrained access to public goods and services. As banking services are in the nature of public goods, financial inclusion should therefore be viewed as availability of banking and payment services to the entire population without discrimination of any type.

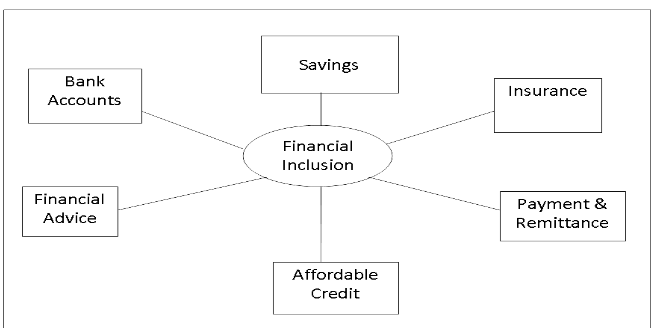

Fig. : Financial inclusion

Need for inclusive growth:

However, exclusion continued in terms of low agriculture growth, low quality employment growth, low human development, rural-urban division, gender and social inequalities, and regional disparities etc. There is now recognition that inclusive growth should be achieved in order to reduce poverty and other disparities and raise economic growth, hence the 11th Plan (2007-12) advocates for inclusive growth. Even at international level, there is a concern about inequalities and exclusion and now they are also talking about inclusive approach for development**.**

Strategy for improving financial inclusion by formal credit sources:

The overall strategy for financial inclusion, especially amongst the poor and disadvantaged segments of the population should comprise :

- Ways and means to effect improvements within the existing formal credit delivery mechanism.
- Suggest measures for improving the credit absorption capacity especially amongst the marginal and sub-marginal farmers and poor non-cultivator households.
- Evolve new models for extending outreach.
- Leverage on technology solutions to facilitate large scale inclusion.

METHODOLOGY

The study utilized the secondary data obtained from the various annual reports published by NABARD, Economic Survey, RBI bulletins etc. (Anonymous, 2010; 2011; 2011a). In addition information from Karnataka at a Glance published by the Directorate of Economics and Statistics, Bangalore has been utilized. The data were also accessed through the official websites of Reserve Bank of India (RBI) and National Bank for Agriculture and Rural Development (NABARD). The indicators related to performance of regional rural banks in India and strategies adopted by the Government were culled out from these reports and the percentages, ratio and tabular analysis were carried out. To study the performance, growth and instability of Regional Rural Banks in India following analytical techniques were employed:

Compound growth rate:

For the analysis of data, the compound growth rate technique was employed to know the per cent growth per annum in area, production, productivity and export of onion from India. The procedure used for computing the compound growth rate is as follows:

$$Yt = Ab^{t}\, V_{t} \qquad \ldots\ldots\ldots\ldots(1)$$

where,

Yt = Data on area, production and productivity in the year "t"

A= intercept indicating Y in the base period (t=0)

T = time period

V_t = error term

B= (1 + g)

g= average compound growth rate to be estimated

Equation (1) was converted into the logarithmic form in order to facilitate the use of linear regression.

Taking logarithms on both sides of the equation (1)

$$\ln Y_t = \ln A + t (\ln B) + \ln V_t$$

This was of the following form

$$Q_t = a + b_t + V_t \qquad \ldots\ldots\ldots\ldots (2)$$

where,

$Q_t = \ln Y_t$

A = ln A

B = ln B

$V_t = \ln V_t$

The values of 'a' and 'b' were estimated by using ordinary least squares estimation technique. Later, the original 'A' and 'B' parameters in equation (1) were obtained by taking anti-logarithms of 'a' and 'b' values as

A = Anti in A

B = Anti in B

Average annual compound growth rate was calculated as

B = 1 + g

g = B – 1

Standard error of growth rate was obtained by

$$Se\ (g) = \frac{100B}{\ln 10^{c}} \sqrt{\frac{\Sigma \ln Y^2 - (\Sigma \ln Y/N)^2 - (\ln B)^2 (\Sigma t) - t^2/N}{(N-2)(\Sigma ti)^2 - (\Sigma ti/N)^2}}$$

N= Number of observations

The average annual compound growth rate obtained by the above method was tested for tis statistical significance using 'g' statistics which was designed as :

t = g/Se (g)

g = compound rate

Se (g) = Standard error or growth rate

The Compound growth rates were estimated using the exponential growth function of the following form :

$$Y = a\, b^t e^t$$

where,

Y = Dependent variable (export quantity, export value and unit value)

t = time variable

et = Error term; a and b are unknown constants to be estimated

Instability analysis (Coefficient of variation %):

$$CV\ (\%) = \frac{\text{Standard deviation}}{\text{Mean}} \times 100$$

CV= Coefficient of variation

ANALYSIS AND DISCUSSION

The role of Regional Rural Banks (RRBs) in the context of financial inclusion is discussed in the following paragraphs:

The Regional Rural Banks were established under the provisions of an Ordinance promulgated on the 26th September 1975 and the RRB Act, 1976 with an objective to ensure sufficient institutional credit for agriculture and other rural sectors. The RRBs mobilize financial resources from rural / semi-urban areas and grant loans and advances mostly to small and marginal farmers, agricultural labourers and rural artisans. The area of operation of RRBs is limited to the area as notified by GoI covering one or more districts in the state. RRBs are jointly owned by GoI, the concerned state Government and Sponsor Banks (27 scheduled commercial banks and one State Cooperative Bank); the issued capital of a RRB is shared by the owners in the proportion of 50 per cent, 15 per cent and 35 per cent, respectively. RRBs started their development process on 2nd October 1975 with the formation of a single bank (Prathama Grameen Bank). As on 31 March 2011, there were 82 RRBs (post-merger) covering 618 districts with a network of 15,938 branches. RRBs were originally conceived as low cost institutions having a rural ethos, local feel and pro poor focus. However, within a very short time, most banks were making losses. The original assumptions as to the low cost nature of these institutions were belied.

Growth of regional rural banks in India:

Till the birth of RRBs in India, Commercial Banks and Co-operative Banks were rendering services to the rural public. But despite such large net work of bank branches, the credit needs of the rural population in India were quite inadequate. Regional Rural Banks in India have achieved tremendous growth in terms of number of banks and their wide braches which is shown in Table 1.

Table 1 : Growth and Instability of regional rural banks in India (2001-02 to 2010-11)

Sr. No.	Particulars	CGR (Per cent per annum)	Coefficient of variation (%)
1.	Number of RRBS	-11.03**	41.32
2.	Number of branches	1.05**	3.63

Note: ** indicate significant at one per cent level.

It could be observed from Table 1 that the compound growth rate in number of regional rural banks was found to be negative with (-) 11.03 per cent over the years whereas, there was significant increase of 1.05 per cent in the case of branches at one per cent level of significance. The negative growth in the case of number of RRBs may be mainly attributed to the amalgamation of these RRBs in several districts causing in their reduction over the years which is also indicated by instability 41.32 per cent.

It is could be concluded from Table 1 that the number of RRBs decreased from 196 in the year 2001-02 to 86 in 2008-09. This was due to the amalgamation that took place in the year 2005-2006, covering 525 districts with a net work of 14,494 branches. However, the number of branches has been significantly increased from 14,390 in 2001-02 to 15,181 in 2008-2009. The increase over the period was 1.05 times.

Geographical coverage and man power deployment:

Regional Rural Banks (RRBs) were established in India essentially for taking banking to the doorsteps of rural masses, particularly in areas without banking facilities. RRB is a bank for rural poor people. Its presence in all the states of country especially in underdeveloped states and union territories is strongly realized. RRBs covered 525 out of 605 districts as on 31st March, 2006. After amalgamation, RRBs have become quite large covering most parts of the states in India. Year-wise coverage of districts and number of branches are given in Table 2.

Table 2 : Growth and instability in number of districts covered and staff employed in RRBs (2001-02 to 2010-11)

Sr. No.	Particulars	CGR (Per cent per annum)	Coefficient of variation (%)
1.	Number of districts covered	2.61**	8.55
2.	Number of staff employed	-0.27**	0.91

** indicates significant of value at P=0.01

The growth rate in the number of districts covered by the RRBs was found to be 2.61 per cent per annum at one per cent level of probability whereas, the growth rate for number of staff employed was found to be negative with (-) 0.27 per cent at one per cent level of probability. These above results are reflected in instability observed for number of districts covered with 8.55 per cent and 0.91 per cent for number of staff employed.

It could be concluded from the results of Table 2 that significant improvement in the performance of RRBs was witnessed over the period of study in terms of number of districts covered. RRBs covered 511 districts as on 31st March, 2002, increased to 619 as on 31st March, 2011. The increase over the period was 1.23 times. However, the human resources employed by RRBs have been considerably decreased year by year owing to the efficiency of the bank and also due to amalgamation of the RRBs.

Capital composition:

RRBs occupy an important position in the rural credit market of India. The rationale for establishment of the RRB was to mobilize deposits, access to central money market and modernized outlook, which the commercial banks have. Sound financial position is essential for any organization to survive to render the services to the society. RRBs have both types of capital *i.e.*, owned and borrowed.

Table 3 reveals that the compound growth rate in borrowed funds of RRB was highest with 19.52 per cent as compared to the owned funds with 8.13 per cent per annum at one per cent level of probability. Similarly the instability ration indicated that the variation in borrowed funds was 64.84 per cent and that of owend funds was 29.39 per cent. On the other hand, the CGR and instability for total funds was 14.85 per cent (one per cent level) and 48.33 per cent, respectively.

Table 3 : Growth and instability in capital composition of RRBS (2001-02 to 2011-12)

Sr. No.	Particulars	CGR (Per cent per annum)	Coefficient of variation (%)
1.	Owned funds	8.13**	29.39
2.	Borrowed funds	19.52**	64.84
3.	Total funds	14.85**	48.33

** indicates significance of value at P=0.01

From the results of Table 3, it could be concluded that the year-wise components of total capital comprised of owned funds and borrowed funds of RRBs in India. Both the owned funds and borrowed funds have constantly been increased over the period of study. It is important to note from the results that the borrowed funds constituted more percentage than the owned funds during the post-merger period especially the year 2005-2006 onwards.

Deposits and loans outstanding of RRBs:

RRBs are 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. The businesses performance of RRBs in terms of deposit mobilization and credit extension is presented in Table 4.

Table 4 : Growth and instability in deposits and loans outstanding of RRBs in India (2001-02 to 2011-12)

Sr. No.	Particulars	CGR (Per cent per annum)	Coefficient of variation (%)
1.	Deposits	14.60**	45.28
2.	Loans issued	18.24**	51.76

** indicates significance of value at P=0.01

The results from the Table 4 revealed that the loans issued by the regional rural banks registered a significant growth of 18.24 per cent followed by the deposits generated at 14.60 per cent per annum at one per cent level of probability each. This growth could be attributed to the instability ratios of 51.76 per cent and 45.28 per cent, respectively for the loans issued and deposits generated by the RRBs during the year 2001-02 to 2011-12.

From the results it could be concluded that the RRBs were showing considerable improvement in their credit and deposits performance. The deposits mobilized by the bank increased from Rs.44, 539 crore in the year 2001-02 to Rs.1,74,041 crore in 2011-12. The increase over the period was 2.9 times. Loans outstanding of the RRBs also highlighted the significant improvement as it has been increased from Rs.18,629 crore in the year 2001-02 to Rs.1,01,039 crore is 2011-12.

Credit-deposit ratio:

The results from the Table 5 indicate that the compound growth rate of the credit-deposit ratio was found to be significant at 2.65 per cent at one per cent level of significance associated with instability index of 11.70 per cent for the period 2001-02 to 2011-12 (Table 5).

Table 5 : Growth and instability in credit deposits ratio of RRBs in India (2001-02 to 2011-12)

Sr. No.	Particulars	CGR (Per cent per annum)	Coefficient of variation (%)
1.	Credit-deposit ratio	2.65**	11.70

** indicates significance of value at P=0.01

From the results of Table 5 it could be concluded that the RRBs were conceived to develop rural economy by providing credit and other facilities for the purpose of development of agriculture, trade and other productive activities to the targeted poor people. The credit deposit ratio of the bank indicates the creation of credit out of the deposits mobilized by the banks exhibited that CD ratio increased from 41.8 in the year 2001-02 to 58.1 in 2011-12. There has been consistent growth in the sphere of credit deposit ratio. The year 2011-12 registered a higher rate *i.e.*, 58.10 per cent.

Growth of investments:

Investment as a window of deployment of funds was given more emphasis than lending. The investment made by the banks in the form of CGR is presented in Table 6.

Table 6 : Growth and instability in investments of RRBs in India (2001-02 to 2011-12)

Sr. No.	Particulars	CGR (Percent per annum)	Coefficient of variation (%)
1.	Investments	12.39**	40.11

** indicates significance of value at P=0.01

From Table 6, it could be observed that the compound growth rate in investments of RRBs recorded a significant growth of 12.39 per cent at one per cent level of probability with coefficient of variation of 40.11 per cent over a period of 2001-02 to 2011-12. From the above results it could be concluded that there has been consistent growth in the sphere of investment activity. It has been observed from Table 6 that the amount of investment of the bank has been increased from Rs 30,532 crore in the year 2001-02 to Rs 95,246 crore in 2011-12. The year 2008-09 registered at a highest percentage of growth with 28.97 per cent followed by 2010-11 with 20.44 per cent and 2011-12 with 19.99 per cent increase over the respective previous years.

Conclusion:

Depending on the context and applications, the term 'financial inclusion' may have different connotations. In the present study, the financial inclusion and poverty in the context of the Regional Rural Banks, is an attempt made to analyze the performance in terms of certain defined parameters like number of branches, district covered, capital funds, and mobilization of deposits, loans and investments made by these banks. The performance of RRBs in India improved in the post-merger period. Even though number of RRBs decreased, the branch net work has been increased. During the post-merger period, there has been increased number of districts covered by the RRBs. Total capital funds have increased tremendously after amalgamation took place in the year 2005-06. Credit-deposit ratio increased over the years showing that a remarkable deployment of credit by these banks in rural areas. However, it is the responsibility of the bank management and the sponsored banks to take the change for corrective steps to raise the credit-deposit ratio of the bank. The gap between CD ratio of commercial banks and the RRBs need to be minimized. With a view to facilitate the seamless integration of RRBs with the main payment system, there is a need to provide computerization support to them. RRBs should extend their services in to un-banked areas and increase their credit-deposit ratio. The process of merger should not proceed beyond the level of sponsor bank in each state. The findings may be of considerable use to the rural banking institutions and policy makers in developing countries and to academic researchers in the area of banking performance evaluation.

REFERENCES

Anonymous (2010). NABSTATS, Quarterly Bulletin of Statistical Information, Issue No. 8 : APRIL – JUNE 2010.

Anonymous (2008). Report of the Committee on Financial Inclusion-C Rangarajan Chairman, NABARD, January 2008.

Anonymous (2011). Annual Report, NABARD, 2010-2011.

Anonymous (2011a) Economic Survey, 2011.

***