

**ROLE OF INSTITUTIONAL CREDIT IN  
AGRICULTURAL DEVELOPMENT: A CASE STUDY  
OF REGIONAL RURAL BANKS**

*Dissertation submitted to the Jawaharlal Nehru University in partial  
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**MASTER OF PHILOSOPHY**

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**CERTIFICATE**


I, Amulya Kumar Sahoo, certify that the dissertation entitled “**ROLE OF INSTITUTIONAL CREDIT IN AGRICULTURAL DEVELOPMENT: A CASE STUDY OF REGIONAL RURAL BANKS**” for the degree of **MASTER OF PHILOSOPHY** is my bonafide work. It may be placed before the examiners for evaluation.

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*Dedicated*  
*to*  
*Bapa & Bou*

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Amulya Kumar Sahoo

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*Chapter I*

*Introduction*



Economic-growth in the countries of Asia, Pacific-region including India, Bangladesh, Myanmar, Cambodia, Indonesia, Malaysia, Philippines, Thailand & Vietnam etc. is substantially influenced by growth of agricultural -sector. A high level of growth of agricultural is essential both for achieving the objective of food-security at macro, micro-level and also to alleviate poverty. In India, the efforts towards the holistic development of agricultural encompassing planning promoting, conducting and coordinating research, education extension, and training on all – aspects of agricultural for ensuring optimal utilization of land, water plant and annual resources have yielded significance results, application of science to generate cost effective technologies and well developed system to transfer technologies to the farmers ensure significant level of growth of this sectors enabled the country to become free from food import .Growth of agricultural sector reached almost 3% of growth of growth in 1990's from a measure growth rate of 0.3% in 1950s<sup>1</sup>, While one fourth of GDP is contributed by agricultural-sector, about 65% of the country's population of dependent on this sector for their livelihood. Agricultural and allied sector provide food to more than billion 210.8 million tones in 2003-04 from merely 30.82 million tones, equally the oilseeds increased to 25 million tones, pulses production to the tune of 11.31 million tones<sup>2</sup>. Raw materials to several agricultural-based industries are drawn from agricultural sector. This sector is a net exporter constituting over fourteen percent of the country's total exports. .

The development experience in the country over the first five decades indicates that, policy makers and planners are increasingly showing their concern towards agricultural-diversification to promote agricultural growth and improved productivity by extending appropriate policy support and fiscal incentives. After leading indices agricultural-performance over the best, now look for a fresh paradigm agricultural-development. The region still leads in terms of productivity level, contribution to the national food economy and over all dynamism. But several analysis suspect that it is running out of stream and the green revolution, path underlying achievement of developed region in approaching a dead end.

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<sup>1</sup> J. Rageswar Rao, (2003), "Crop Diversification in India: Policies, Programmes and Perspectives", in Agricultural Situation in India, Ministry of Agriculture.

<sup>2</sup> Source: economic survey, ministry of finance, Government of India

While some researchers have pointed out that growth rates of agricultural-production are decelerating and income levels are stagnating, others have focused attention on sustainability of agricultural-production and natural resource base. Warnings are also there regarding over evaluation of land and water resources and consequences of resource denudation. This indicates that there is an urgent need to find alternatives and options to sustain the growth of agricultural in the audience regions.

## **1.2. FACTORS – AFFECTING AGRICULTURAL-PRODUCTION:**

The trends in agricultural-production have important implications for policy formulation and implementation. The important factors which affecting agricultural- productivities are:

### ***1. Promotion of Investments, value addition and commercialization:***

Since the focus of agricultural-growth has shifted from the production front to the processing and marketing front a greater share of agricultural-investment has now to be directed to expand and strengthen the infrastructure, institutional foundation of Indian agricultural so necessary for growth. Such an investment programmes should priorities areas infrastructural components that will yield the maximum and also economic and social return. In this respect, in the context of areas that already have a critical mass of infrastructural potential, infrastructural components such as cold storage that can support oilseeds, fruits, and vegetables and other horticultural crops deserve the top priority. can support oil-seeks, fruits, vegetables and other, horticultural crops deserve the top priority.

### ***2. Rationalizing of prices:-***

The increasing responsiveness of Indian agricultural-to price factors suggests that emerging importance of agricultural price policy as a signaling instrument for guiding area allocation and crop diversification, growth with the changing of demand and supply relationship of agricultural commodities. Such a signaling role of price policy is going to become still more important in the emerging content of trade liberalization and in global agricultural net. In this respect, not only the present basis for celebrating the support prices has to be broadened to include also the environment costs of crops but also the agricultural

price policies that are now rooted more as a supporting investment have to evolve to assume their increasingly important signaling role.

### **3. *Strengthening of infrastructure and institutions:-***

As Indian agricultural is going to reach, sooner or later the optimum level of its traditional sources in growth such as area addition, irrigation expansion and farm technology the institutional and infrastructural factors, have now become indispensable to enhance and sustain agricultural-growth, infrastructural and instructional factors are important not only as engine of agricultural growth but also as a mechanism for relaxing prevailing constraints for the traditional source of agricultural growth. The institutional factors that need priority attention are the land ceiling relaxation for horticultural development in select regions, tenancy relaxation to counter enhancement of new unless of form of organizations to integrate the production, marketing and processing phase of agricultural and decentralized mode of planning of planning and programme implementation to articulate area group specific approaches.

Similarly in the infrastructural front the prioritization requires finest and clean distinction between productivity orientated, components networks. With such a categorization of infrastructural components, the productivity centered components has to receive priority in production and productivity-wise lagged regions whereas others receive priority in the regions that have already achieved production and productivity growth.

### **4. *Needs for well designed programme:-***

The success of the mission can be attributed not only to its design where the technology packages were delivered along with infrastructural support but also to its timing that coincides support trade policies.

## **1.3. INSTITUTIONS AND AGRICULTURAL DEVELOPMENT:**

As agricultural the prime sector of the Indian economy, contributes highest percentage of employment providing sector. So it is important for government its policies should induced the agricultural growth.

Rattan Hayam<sup>3</sup> pointed document agricultural-development was nothing but an increase in the-productivity of new technical knowledge and flow of industrial inputs in which the new knowledge was embodied. Maximization of out put through modernization of agricultural, allied activities was called es agricultural development by the national commission of agricultural<sup>4</sup>

It is indeed difficult to explicitly identity all the state subsidized programmes of the central and state government for the agricultural sector. The more easily identifiable forms of state incentive policies are: (i) price supports, (ii) input subsidies, (iii) subsidized institutional credit.

The provision of subsidized institutional credit has been an important component of state policy for indirectly promoting agricultural growth by improving the financial ability of formers to purchase modern inputs.

### ***1.3.1. Importance of institutional credit for Agricultural:***

Indian experience during the five-year plans suggests that, agricultural-improvement can be achieved through intensive integrated crop live-stock system of forming; with the vicious cycle of low productivity, low income, low saving, low investment in operation, farmers are not able to make investment necessary to adopt new technology, So they are complied to borrow. Hence provision of sufficient and timely credit at fair interest rates is an integral part of the plan.

For modernizing agricultural, Indian formers required credit for the following purposes.

- (i) For the adoption of modern form of technology, with HYV in cross along with the complementary inputs;
- (ii) For under taking permanent form improvement measures like well digging and depending, tube, well construction of for addition in live stock.
- (iii) For matching “cash inflows and out flows to smooth out the fluctuating in farm income and expenditure”.
- (iv) For avoiding “distressed sector” to continue their farm operations.

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<sup>3</sup> Yujro Hayami and Vernon W.Ruttan, Agricultural Development-An International Perspective p.3

<sup>4</sup> National Agricultural Commission, 1976

(v) For meeting their post obligations.

Thus, to quote Paul immense number of farmers in developing countries likes India need for credit, for subsistence during certain seasonal periods; almost all farmers need credit when they start-adopting new methods for which, supplies tools are returned”.

Agricultural credit, defined by Christy, and Rodem<sup>5</sup>,as finance” as the study of the nature and used of the mean of payment. According to them, credit might mean being worthy of trust with other peoples money or having the ability to obtain a loan when needed”.

To Murry<sup>6</sup>, agricultural-finance” would compromise the borrowing funds by farmers, the organization and operation of the harm lending agricultural; society’s interest in credit for agricultural”.

Rajagopalan defined “agricultural credit” as the amount of investigable hands made available for the purpose of development and sustenance of harm productivity.”

The agricultural credit machinery in India having agricultural as the base industry would have to act as a catalyst in the promotion of agricultural through not were supply of credit but also creation of suitable conditions to induce farmers to absorb and use the credit to augment production and productivity respecting in incremental income, employment and out put. Such a sound institutional credit machinery has certain attributes as follows:

### **1.3.2. Classification of agricultural credit:**

Murray classified agricultural credit on the basis of six criteria namely, time, purpose, security, lender, type of barrower, productivity.

#### **(a). Time Criterion:**

On the basis of time, credit was classified as (a) short term; (b) medium term, (c) long term credit. Short term credit might be further divided into 3 groups are such as (i) monthly up to 3 months, ( ii ) seasonal (3-9 months); (iii) annual (9months to 1year).

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<sup>5</sup> A.Christ Georgeand F. Peyton Roden,Finance:Enviornment and Decissions,p4

<sup>6</sup> William G.Murray,Agricultural Finance-Principles AND Practices Of Farm Credit,P3

**(b). Purpose criterion and type of loans:**

Purpose, as classified by Munnay, there were three types viz, production of loans, real state loans, loans to farm co operatives. Production loan would be extended to buy seed, feed fertilizers, pay operating expenses, live stock development; and buy machinery elements to purchase additional land. Ross broadly classified agricultural credit into consumption loans, farm business credit. According to Choubey,<sup>7</sup> agricultural production credit could be divided as (i) settlement credit (ii) development credit, (iii) production equipment credit.

**(C). Security criterion and Borrower Farmers:-**

By the type of security again three categories were identified, namely (1). Secured short term, and medium term loans which might be obtained by mortgaging loans, loans tangible personal property like stored crops, live stock, and machinery equipment; secured long term loans, machinery equipment. (2) Secured long term loans which might be real estate mortgage loans and land contracts. (3) Unsecured loans.

In India, the farming community could be distinguished into different groups on the basis of security they could offer for credit. The first category was agricultural laborers who were cultivating without any land holdings but deriving more than 50% of their income as an agricultural wage. Marginal farmers were cultivators having land holding up to 2.5 acres of dry land up to 1.2 acres land. Farmers having less than 0.5 acre or more of plantations crops in a coming yielding stage would be excluded.

**(d). Lender criteria :**

Classification of agricultural credit based on lenders would be used because their lending policy and procedure differ basically. Accordingly there could be (i) non institutional and institutional credit. Non institutional credit being given by money lenders, indigenous bankers, traders, landlords, friends and relatives would be of an exploitive character, (ii) institutional credit would be specially supplied and promoted by institutions which would be governed by proper code of conduct and their form of credit would be non exploitive and development

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<sup>7</sup> B.N.Choubey, Institutional Finance For Agricultural Development, p.3

oriented nature of all the classification one by source of credit was very important for the present study.

Agricultural credit in India would be broadly classified under institution on institutions credit institutions sources of agricultural credit would cover co-operative, commercial bank RRBS, and Government through various development programmes.

**(e).According to nature of credit:**

**Adequacy:-**

Loans given must take care of both production consumption needs of farmers. As the rural credit survey committee observed that "what providing adequately for essential item of consumption its main concern should be with loans for production". In the case of poor groups there has to be provision for consumption component in the loans to enable them to meet, their family needs till the sale of crops and products.

**Duration**

The duration of loans should be related to the purpose of loan. The repayment period should coincide with the income flow from investment made with the help of the loans .There should be provision to extend the repayment on genuine ground such as crop failure.

**Security**

Agricultural credit in the past was linked with the offer of adequate security to avoid any abuse of credit facilities .This denied credit to most of the small farmers .Therefore, the all India rural credit survey committee stated that type of security would be such to accommodate a large number of solvent farmers based on expected income .This would be a boon to the marginal and small farmers.

**Cost and Proximity**

The institutional system of credit would charge reasonable rate of interest falling with in the farmers, leaving enough to add to their capital. A close contact between the lending agency and the borrowing farmers is an attribute of a good

credit system .As Dubhashi<sup>8</sup> indicated, the change of traditional agriculture into a modern one should require the total involvement of the credit agencies and other institutions of the modern sector

### **Coordination:**

The credit system should ensure international coordination among different institutional agencies providing short, medium, and long term loans and also between credit system and non credit system for providing marketing and processing facilities to the cultivators.

### **Supervision**

Since the majority of the rural people in India are illiterate, they lack technical knowledge of modern farming .The mere supply of credit to them without adequate technical guidance would prove to be futile .Johnshon and Johnshon ,opined ,in under development countries ,the improvement e of farming to increase the productivity and standards of living of rural people can be fostered by a programme of supervised credit.

### **Continuity**

Changes in the farmers attitude towards modern farming methods would be a long run process paving way for agricultural development .This long drawn process needs continuous flow of credit –short, medium, and long- supported by adequate technical guidance .There fore ,the credit institutions should have suitable arrangements for raising funds and develop in built financial capacity to have continuous credit flow even in the event of non –repayment of loans due to vagaries of nature or price fluctuations.

## **1.4. SUPPLY OF AGRICULTURAL CREDIT IN INDIA:**

As, the credit, required by agricultural is channeled through institutional and non institutional agencies in India. It can be observed the share of the institutions credit in increase from 7.3 % which is provided government cooperative society/ bank and commercial bank including RRB to 66.3 % in 1991

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<sup>8</sup> P.R.Dubhashi(1968),Commercial Banks and Agricultural Finance:Need For New Out Look ,Structure and Techniques ,Financing Of Agriculture By Commercial Banks, pp .68-70



which is further increased to during 2000-2003<sup>9</sup> investment survey, RBI, Among the institutions commercial bank and RRB are important the commercial bank contribute the rural development by providing agricultural credit.

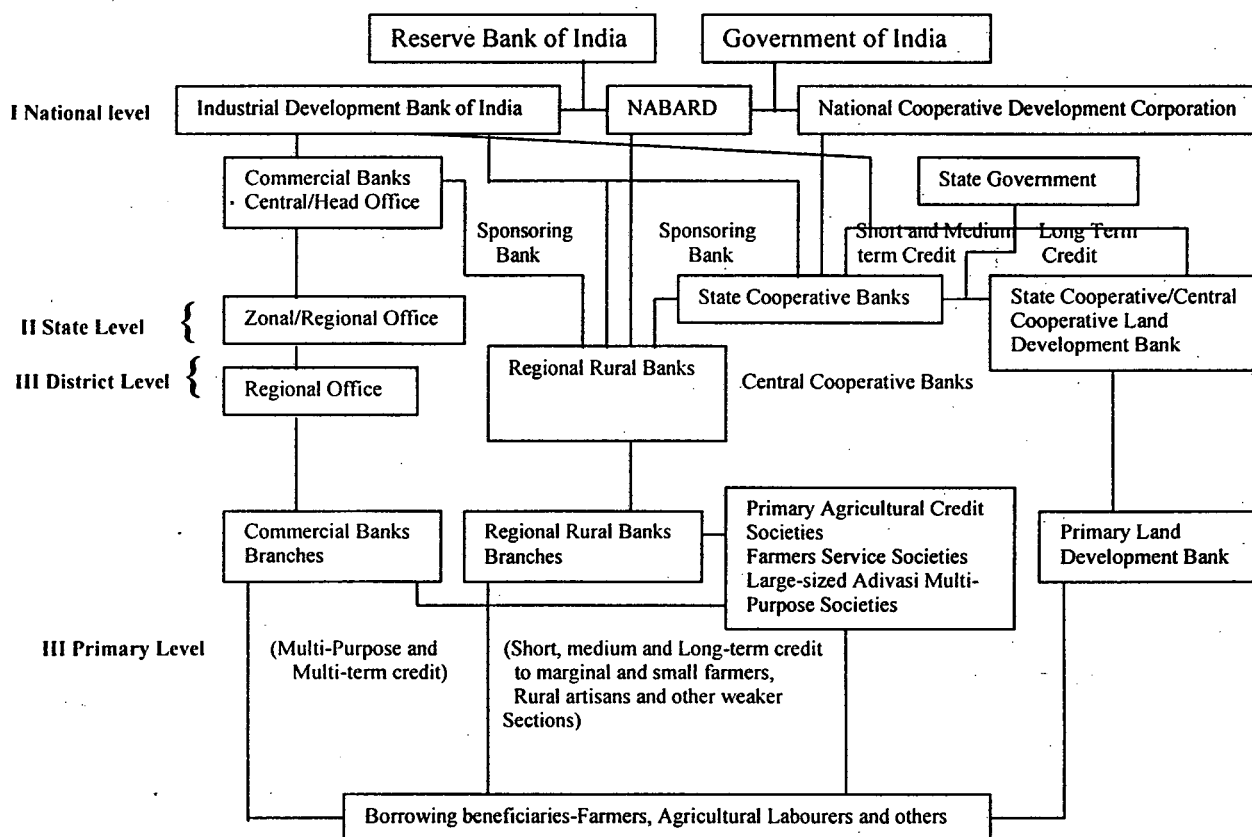
**Table 1.1: Flow of Institutional Credit to Agriculture**

(Rs.Crores)

Institutions	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Co-operatives banks	14085	15957	18363	20801	23604	24296
Regional Rural Banks	2040	2460	3172	4219	4854	5467
Commercial Banks	15831	18443	24733	27807	33587	41047
<b>TOTAL</b>	<b>31956</b>	<b>36860</b>	<b>46268</b>	<b>52827</b>	<b>62045</b>	<b>70810</b>
Share Of RRBs (%)	6	7	7	8	8	8

Source: National Bank for Agriculture and Rural Development (NABARD)

**RURAL FINANCE—INSTITUTIONAL SET-UP**



<sup>9</sup> (source- All India Debt Bulletin ,R.B.I, May 2003).

## **1.5. BANKS APPROACH TO AGRICULTURAL DEVELOPMENT POLICY IMPLICATION:**

One of the most important objectives of bank nationalization on July 1969 was to promote or accelerated the process of rural development through provision of banking facilities in rural areas their by ensuring that weaker sections of the society specially to the agrarian groups, are enabled to join the mention national development. It is therefore agriculturalist this background that on attempt is made here in brief to appreciate the approach adopted by the banking system to make rural development programmes more and most effective.

Identifying areas of investment; formulations and implementation of projects and programme; accepting the target of 40% of lending to priority sector specially 18 % of agricultural, supplementing its financial resources for lending through assets to refinance from agricultural refinance corporation / agricultural refinance development corporation now NABARD(national bank for agriculture and rural development), building of expertise and technology with the help of ARC/NABARD / ARDC/Government specialized officer, and participating in the production programme sponsored by the government in the field of food, oilseeds, pulses, etc have indeed resulted into the spectacular growth in agricultural and all aspects. Indian banking has the most unparallel distinction of going to the village agricultural for not only meeting the credit needs of the rural households but also providing requisite banking facilities.

A deliberate policy of achieving the 60per cent credit deposit ratio in rural semi- urban areas separately has created significant impact on the development of rural especially to agriculture. In view of the opening of the Indian economy and growth on Indian agriculture has accorded a new dimension of at least in the sphere of export of non-traditional commodities. To meet this kind of challenges, banks have now been opening specialized agricultural finance branch CSAFB in a potential areas for financing the high technology project, tissue culture, agricultural aquaculture, floriculture, mushroom etc.

But the target achievement of the commercial banks in rural and remote areas has failed. Experience has shown that the co-operative finance is inelastic, dilatory, and inadequate largely owing to the inefficiency, high handedness, and selfishness of the managing committees and hence maids of the affluent sections

of the society paying only lip sympathy to the poor and socially oppressed communities. The commercial banks are also biased in favour of the rich influenced at the cost of poor in respect of their loaning operations. It is aptly said by the former union finance ministers that though commercial banks and co-operatives have made deep in roads into the rural areas, the dependence of the rural masses on the un-organized banking sector is substantial. It was amidst all this chaos, the percentage of population suffocating below the poverty line has noticeable. This long standing grave injustice gross negligence of the rural poor compromising of small and marginal farmers, landless labourers artisans etc have moved the government to thrived for a novel credit institution for their exclusive services. The result of this was the establishment of RRBs in 1975.

#### **1.6 EVOLUTION, GROWTH OF RRB:**

The present day of RRB owe their origin to the recommendations of a working group on rural banks appointed by government under the chairmanship of Shri. M. Narashimam on July 1<sup>st</sup> 1975. The group has been asked to “examine in depth, the setting up on new rural banks as subsidiaries of the public sector banks to cater the credit needs for the poor people”. In an unusually quick report which the group submitted on July 30 1975, it observed, “in a country of the size and regional diversity as our no single pattern, be it commercial banks or cooperation credit, can be expected to meet all the emerging requirements in all areas”. A degree of adoption and improvisation is called for and the range of institutional alternative widened. It is in this context that we have come to the conclusion that a new type of institution is necessary, the group could not be quite sure about the optimum size of operations, coverage, etc; hence it favored a cautious approach by recommending the setting up five RRBs as pilot institutions in selected areas.

Accordingly, as per the recommendations of the Narashimham committee, the RRBs emerged on 26 September 1975. The government of India has promulgated on 26 September 1975, the RRB ordinance, 1975 to set up RRBs through out the country. Initially five RRBs were set up on 2<sup>nd</sup> October, 1975 at Morabadab and Gorakhpur in UP; Bhiwani in Harayana; Jaipur in Rajasthan and Malda in West Bengal. The RRBs have an important role to play in our rural economic as they have to act as alternative agencies to provide institutional credit

in rural areas. They have not been set up to replace co-operative credit societies and commercial banks but to supplement them.

#### **1.6.1 Constitution of RRBs:**

The authorized capital of a RRB is Rs. 1 crore and paid up capital Rs.25 lakh contributed in ratio of 50:15:35 by the central government, state government and the sponsoring commercial bank respectively. Each RRB will be managed by board off nine members consisting of a chairman appointed by the central government, three members nominated by the central government, three by the sponsoring banks and two by the state government concerned.

The RRBs are included in the second schedule to Reserve Bank of India Act and therefore, they enjoy the same privilege and facilities as the schedule banks, including access to the Reserve Bank for financial accommodation. They can avail advances from the Reserve Bank provided the sponsoring banks undertake the guarantee.

#### **1.6.2 RRBs special features:**

RRBs represent an innovation in Indian banking. Their innovation is not only institutional but relates to objective, functions, are of operation and its clientele. For this reason RRBs, regarded as specialized institutions. The important features are:

- (a) The objective of RRBs is to bring about progress with social justice to the rural poor, inconformity with the national objective of development with stability and social justice .RRBs are in other words an institutional device for taking banking services to the door steps of the poor especially rural poor people, and making available to them institutional credit.
- (b) As a matter of policy, RRBs are set up mainly under banked and unbanked regions of the country. This means that RRBs are to function in remote areas which lacked basic amenities like education, medical help, transport and communications. An important aspect of this locational policy is that RRBs would cover compact area of not more than two to three three districts where the weaker sections of the populations are dominant. It should also be noted that these districts do not have infrastructure needed for the development.

- (c) RRBs would function as low cost institution with staff drawn from the districts or the state in which the banks are located .The RRB staff would be paid salaries comparable to those of the respective state government functionaries.
- (d) The very approach of RRBs to rural credit specially to the priority sector, that they are to operate in a compact area of not more than two to three districts gives them no scope for neutralizing losses sustained in one area by the profits earned in other areas. Similarly, since their development approach is sectoral and not spatial, they can not spread their overheads and operational costs over a wider clientele.
- (e) Lastly, RRBs are expected to operate on low spreads or margin because they are to lend to weaker sections at low rates. As the clientele of RRBs belong to only one category that is weaker sections, there is little scope for cross sections and little scope for cross –subsidizations.

These essential features built into the concept as well as structure of RRBs make it difficult for these banks to break even right from the starting. Recognizing this limitation, Narashimham committee, which had recommended the setting up RRBs had categorically stated that RRBs were bound to make losses in the initial periods which are price worth paying, considering the benefits sought to be achieved through these banks.

### **1.6.3 Policy Issues:**

The basic policy questions which require an answer is whether it would recognize the role of RRBs in the rural credit delivery system .An answer to these questions should point to the directions of further policy actions. It is well known that RRBs were set up with the specific objective of serving if rural society as weaker sections and these institutions were structured to serve this objective. Inevitably, there were some weak points built into structured, as any other structure would have been less suitable for the purpose. The Kelkar committee (1986) which observed that RRBs as apart of the built agency approach to the rural credit, are eminently suitable to do the job envisaged for them, as they can be trusted to take banking closer to rural households and that as district level organizations. They can exist side by side with the co-operatives and commercial banks, playing supplementary role .The qualitative aspects and go by the mobilization of deposits and credit deployment and expansion if branch networks, RRBs have done well a

point which even Khusro committee accepts. Viewed in relation to the performance of the branch banking sector as a whole in respect of rural credit, the role of RRBs is indeed substantial, despite the fact that these institutions are of recent origin.

An important aspect of the role of RRBs in rural development which has not received sufficient attention is that, they are a powerful instrument of primary income distribution in rural areas –a point which was forcefully made by D.M.Nanjundappa in 1987, at Bangalore. Income distribution can be direct or indirect; given the failure of the indirect method, direct methods of income distribution become imperative and RRBs are become more important instrument for bringing about primary income distribution. Thus RRBs have an important role to play in rural development. RRBs are not just rural credit agencies. They are more than that: they have a fruitful exercise in banked rural growth.

## **1.7 REGIONAL VARIATION**

The problem of inter-regional economic disparities is widely observed phenomenon over the world, though the extent being much higher in the developing countries. The problem has been a major issue of concern since the implementation of the planning process in India in 1951. In fact, the problem is of regional economic disparity in general and that of inter-regional in particular.

## **1.8 OBJECTIVES OF THE STUDY**

The important objectives of the present study are:

- To study the temporal changes in the relative role of institutional sources of credit in various regions.
- To examine the contribution of Regional Rural Banks in agriculture, both directly and indirectly.
- To study the regional disparities on disbursement of RRBs agricultural credit supplied both directly and indirectly.

- To find out the degree of association between the availability of RRB credit in district level and agricultural growth in district level of Orissa.
- To analyse the performance of RRBs in Orissa at a district level during the past eighteen years.

### 1.9 DATA BASE AND METHODOLOGY:

The study is based on secondary data sources and it is mainly confined to Reserve Bank Of India (RBI), National Bank For Agriculture and Rural Development (NABARD), Ministry of Agriculture (MoA), Government of India, and Directorate of Economics and Statistics of Orissa. The major sources of data for major part of the study covered in this study is the “Statistics on Regional Rural Banks” published by NABARD for the concerned years for which the study is conducted. The “Statistics on Regional Rural Banks” provides the credit data given by different RRBs to different sectors specifically in rural areas. The other data collected for the study is also indirect. The other data sources are “RRBs key statistics” published by NABARD, “performance of RRBs” published by NABARD. For the agriculture data, various issues of “Agriculture at a Glance” published by Ministry of Agriculture (MoA), various issues of Agriculture abstract of India” have looked into.

The study is conducted for the period 1985-86 to 2002-03, the year for which the latest published data available. The study is mainly conducted by taking time series data for all-India and six time period 1986-87, 1989-90, 1992-93, 1995-96, 1998-99, and 2001-02 for states as well as for the districts of Orissa. The three year time periods have taken for the microscopic analysis of RRBs as it functioning in the dist level. Considering the state as a unit, major seventeen states Punjab, Himachal Pradesh (HP), Haryana, Utter Pradesh (UP) including Uttaranchl, Rajasthan ,Gujarat, Maharashtra, Kerala, Karnataka ,Tamil Nadu

(TN), Andhra Pradesh (AP), West Bengal (WB), Orissa , Assam Tripura, Bihar including Jharakhanda, Madhya Pradesh (MP) including Chhatisgarh. It has not been possible for us to include the North-eastern states except Tripura much due to in availability of required data. For district level analysis of performance of RRBs Orissa is taken as the case study.

**Methodology:**

For the different objectives different statistical tools have been used. For the purpose of our studies, to calculate the share of RRBs agricultural credit to total agricultural credit simple statistical measure like percentage is calculated by simple ratio.

**Compound growth rate:** compound growth rate is used where data available for two different periods of time.

For computing compound growth rate the following formula is used.

$$Y_t = Y_0 (1 + r)^t$$

Where  $Y_t$  = a current period value

$Y_0$  = value in the base year.

$r$  = growth rate

$t$  = Gap between the current period and base year time period.

**Trend Growth rate:** the Procedure adopted for calculating the log linear trend growth rate is as follows

$$Y_t = Y_0 (1 + r)^t$$

$$\text{Log } Y_t = \text{Log } Y_0 + t \text{ log } (1 + r)$$

Denoting  $\text{log } Y_t$  as  $Y_t^*$ ,  $\text{log } Y_0$  as  $\beta_1$  and  $\text{log } (1 + r)$  as  $\beta_2$  the above equation may be written as

$$Y_t^* = \beta_1 + \beta_2 t$$

$Y$  is known as  $Y_t^*$  can be calculated and find  $\beta_1$  and  $\beta_2$  by regressing  $Y^*$  on  $t$ .

Ordinary least square: Co-efficient variation (CV) can be algebraically expressed in the following form

$$CV = \frac{\text{Standard Deviation (SD)}}{\text{Mean}} \times 100$$

$$\text{Where SD} = \sqrt{\text{variance}} = \sqrt{\frac{\sum [(X_i - \bar{X})^2]}{N}}$$



$$\text{And mean} = \frac{\sum X_i}{N}$$

$$r_{xy} (\text{Karl Pearson's correlation co-efficient}) = \frac{\sum d_x \cdot d_y}{\sqrt{\sum d_x^2} \cdot \sqrt{\sum d_y^2}}$$

Where  $d_x$  and  $d_y$  denote the deviations of  $x$  and  $y$  values from their arithmetic means respectively.

Spearman's rank correlation co-efficient,

$$\rho = 1 - \frac{6 \sum d^2}{n(n^2 - 1)}$$

where 'd' is the difference between the pair of ranks of the same individual in the two characteristics and 'n' is the number of pairs.

### **THE STUDY PLAN:**

The delineation of chapters is as follows-

**Chapter-1** gives introduction, survey of existing literature, objectives of the study, data base and methodology used for the present study.

**Chapter-2** shows the share of RRBs agricultural credit to the total institutional credit, the growth rate of both source of credit in different states. In this chapter, comparison among the states regarding the agricultural credit and agricultural production are shown.

**Chapter-3** analyses the performances of RRBs in different district of Orissa.

**Chapter-4** shows the contribution of RRBs to agriculture sector of Orissa in a district level study

**Chapter-5** contains the conclusions of the study.

All these above chapters are followed by Appendix and Bibliography.

*Chapter II*

*Agricultural Growth  
and Performance of  
Regional Rural Banks  
– A Statewise  
Analysis*

One of the most important objectives of bank nationalization on July 19, 1969 was to promote or accelerate the process of rural development through provision of banking facilities in rural areas, thereby ensuring the weaker section of the society are enabled to join the mainstream of national development. It is, therefore this background that an attempt is made here in brief to appreciate the approach adopted by the banking system in this direction.

Keeping in view the above fundamental principles of the process of rural development where (i) Minimum Needs Programmes (MNPs) and infrastructure facility required in rural areas fall within the jurisdiction of the government and Non-governmental Organizations (NGOs), (ii) planning and implementations or programmes to accelerate the rural economic development best suited to rural communities having the legitimate responsibility of the Panchayatraj Institutions (PRIs), now more particularly of the village level PRIs, the banking system. More importantly public sector and their sponsored Regional Rural Banks (RRBs), have initiated a two pronged strategy: (i) accelerating or stimulating the overall growth of Indian economy and paying serious attention to the growth of agriculture, small scale units and small business in the sphere of primary, secondary and tertiary sectors respectively so as to expect that the growth would percolate downward and the rural poor also benefits simultaneously, (ii) attacking directly the poverty in rural areas so that target groups of poor rural households can acquire assets, improve their skills and participate in creating wealth and share the income so generated.

As agriculture is the primary sector of the Indian economy as 70 % of the people are dependant on agriculture, acceleration of the agricultural growth is necessary for overall growth performance. With a view to translating the strategy into result oriented action plan, the banking system initiated the following policies from time to time after the nationalization

## **2.1: NATIONALIZED BANK AND INDIAN AGRICULTURE**

Identifying areas of investment; formulation and implementation of projects and programmes; accepting the target of lending (from 14 to 18 % of net bank credit) to agriculture; supplementing the financial resources for lending

through assets to refinance from Agricultural Refinance Corporation (ARC), Agriculture Refinance Development Corporation (ARDC) and now National Bank for Agriculture and Rural Development (NABARD).

### ***2.1.1: Evolution of Regional Rural Banks***

Credit is a key factor in agricultural development and is necessary for technological upgradation of and commercialization of agriculture. In context of diversification technological upgradation and commercialization of agriculture which are capital intensive, timely and adequate credit support for agriculture sector would assume further importance in years to come. Several policy measures like expansion of commercial banking in rural areas, their support Credit Cooperatives, setting up to RRBs, setting targets for lending to agricultural sector and availability of refinance support to bank on softer terms have helped in expanding credit to substantial extent.

The objective of rural credit policy in India since 1951 has been to enlarge the role of institutional credit agencies and provide to the farmers and correspondingly reduces the role non-institutional credit agencies especially the primary money-lender.

The idea of setting of some sort of “rural banks” was suggested by the Banking Commission in its report in 1972. But after recommendation of Narasimham Committee 1975, Government of India promulgated RRB ordinance on 26 September 1975, to setup through out the country.

### ***2.1.2: Growth and Performance of RRBs***

The RRBs have an important role to play in Indian rural economy as they have to act as alternative agencies to provide institutional credits in rural areas. They have not setup to replace the Cooperative Credit Societies (CCSs) and commercial banks, but to supplement them. As a result over the period 1951 to 2001 the share of money-lenders in agricultural credit has declined considerably from 69.7 % to 16.5% where as the share of institutional credits increased from 7.3% to 66.3% during the same period<sup>1</sup>

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<sup>1</sup> (RBI, *All India Debt and Investment Survey 2002-2003*).

Initially, 5 RRBs were setup on 2<sup>nd</sup> October 1975 at Muradbad and Gorakhpur in Uttar Pradesh, Bhiwani in Haryana, Jaipur in Rajasthan and Malda in West Bengal. These banks were sponsored by Syndicate Bank, State Bank of India (SBI), Punjab National Bank (PNB), United Cooperative Bank (UCB), and United Bank of India (UBI). But now at the end of December 31<sup>st</sup> 2003 the number of RRBs extend to 196 and functioning in '14390' branches which was 17 in December 31<sup>st</sup> 1975.

Though it was aim to set up RRB in every district but due to size of district, the set up of RRB varied from district to district .One RRB financed more than one district, similarly one big district is financed by more than one RRB. In the following table it has given picture of growth of RRBs in various time periods in the national level.

**Table 2.1: Performance of RRBs in India**

(Rs.in lakhs)

Year	Number of RRBs	Dist. Covered	No. of Branches	Total Advances	Advance to Ag. Sector
1976-77	40	84	489	72	33
1986-87	194	351	12838	178484	71393.6
1989-90	196	369	14079	291825	13132.12
1992-93	196	392	14539	409086	204003
1995-96	196	450	14509	629096	270511.28
1998-99	196	451	14459	986081	246000
2000-01	196	501	14313	1581630	421900

Sources: RRBs key statistics; NABARD, various issues

### ***2.1.3: Credit Advances to Agriculture Sector***

RRBS, being an important segment of the Rural Financial Institutions in the country, have carved out a special place of them-selves in terms of client out reach, business volume and contribution for development of rural economy. The prime-function of RRBs is to accumulate deposits in the rural sector and out standing advances to the priority sector primarily to the agricultural sector.

The total advances and loans out-standing as on 31 March 2001- 02 stood at Rs. 1862922 lakhs as compared to 178484 lakhs during 1986—87. The total amount of deposits increased from 171494 lakhs to 3827 in lakhs.

As the sole aim of "RRB" is to outstanding advances to the priority sector, especially to the agricultural sector, "RRB" has given advances to the agricultural sector, 877609.49 lakhs out of 1722276.46 lakhs. Hence the 51% of the total advances given by all the RRBs provided to the agricultural sector both in terms of short terms i.e. crop-loans and term loans.

But the agricultural credit given by the other institutions in terms of State Co-operative Banks (SCB), Land Development Bank (LDB), Commercial Bank are also playing vital role in terms of Institutional credit. Hence it is important to compare the agricultural credit given by the "RRB" to the other institutional credit by different sources among the states. Though, there are different sources in terms of both Institutional and non-institutional, which – provide loans to agricultural sector, but here we take only institutional credit specially SCB which provided both "short term and medium term" and LDB, which disburse the 'long-term-credit' to the agricultural sector. The agricultural credit given in terms of direct and indirect by the different public sector commercial banks, also included in the total agricultural credit given in different states.

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***Total Institutional Agricultural credit = Agricultural Credit given by SCB + Agricultural credit given by LDB + Agricultural credit given by Commercial Bank + Agricultural Credit given by RRB***

***Credit per Hectare = Total Agriculture Credit  
Total area under cultivation***

***Credit per Hectare given by RRB = Total Agricultural Credit given by RRB  
Total area under cultivation***

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**Table2.2 (a): Share of Agriculture credit by RRB to Total Agriculture Credit**

(Rs. per hectare)

States/1986-87	Total Ag. Credit/Hectare	RRB Ag credit per hectare	per cent
Assam	281.42	29.53	10.49
Andhra	1533.17	121.37	7.92
Bihar	603.07	77.5	12.85
Gujarat	1033.53	19.71	1.91
Harayana	1270.72	55.56	4.37
Himachal	591.20	93.71	15.85
Karnataka	1184.12	114.50	9.67
Kerala	472.87	33.83	7.15
MP	381.13	32.73	8.59
Maharashtra	508.01	14.59	2.87
Orissa	743.96	53.02	7.13
Punjab	1139.38	9.93	0.87
Rajasthan	510.57	43.67	8.55
Tamilnadu	2051.11	26.73	1.30
Tripura	907.77	539.62	59.44
UP	619.96	67.59	10.90
WB	655.09	44.66	6.82

**Table2.2 (b): Share of Agriculture credit by RRB to Total Agriculture Credit**

(Rs. per hectare)

States/1989-90	Total Ag. Credit/Hectare (Rs.)	RRB Ag. credit per hectare (Rs.)	%
Assam	570.19	123.67	21.69
Andhra	2265.99	219.69	9.70
Bihar	1138.15	149.75	13.16
Gujarat	1977.31	783.89	39.64
Harayana	2113.15	101.96	4.83
Himachal	1326.84	86.84	6.55
Karnataka	1799.43	199.86	11.11
Kerala	723.33	49.45	6.84
MP	610.03	56.91	9.33
Maharashtra	1169.53	168.68	14.42

Orissa	504.02	55.70	11.05
Punjab	2130.30	36.93	1.73
Rajasthan	640.60	59.73	9.32
Tamilnadu	3019.10	45.15	1.50
Tripura	1557.32	667.41	42.86
UP	1042.77	129.29	12.40
WB	1073.57	96.39	8.98

**Table2.2 (c): Share of Agriculture credit by RRB to Total Agriculture Credit**

(Rs. per hectare)

States\1992-93	Total Ag. Credit/Hactare( Rs.)	RRB Ag credit per hectare (rupees)	%
Assam	626.36	150.20	23.98
Andhra	3083.06	350.83	11.38
Bihar	1253.83	186.50	14.87
Gujarat	1833.55	91.80	5.01
Harayana	2930.89	133.03	4.54
Himachal	1330.60	86.61	6.51
Karnataka	2094.16	250.93	11.98
Kerala	1089.97	90.98	8.35
MP	897.33	77.39	8.62
Maharashtra	1567.01	52.49	3.35
Orissa	656.40	86.57	13.19
Punjab	3110.57	66.25	2.13
Rajasthan	826.50	65.55	7.93
Tamilnadu	4460.48	65.34	1.46
Tripura	1352.99	537.92	39.76
UP	1497.65	191.71	12.80
WB	1148.24	121.25	10.56

**Table2.2 (d): Share of Agriculture credit by RRB to Total Agriculture Credit**

(Rs. per hectare)

States\1995-96	Total Ag. Credit/Hactare	RRB Ag credit per hectare	Per cent
Assam	1418.18	205.08	14.46
Andhra	3775.41	483.15	12.80



Bihar	1386.13	246.38	17.77
Gujarat	2617.04	141.23	5.40
Harayana	4020.60	215.63	5.36
Himachal	3527.02	113.23	3.21
Karnataka	3071.14	497.39	16.20
Kerala	4536.66	436.83	9.63
MP	909.26	114.39	12.58
Maharashtra	2181.10	73.91	3.39
Orissa	1262.31	235.79	18.68
Punjab	4373.70	96.99	2.22
Rajasthan	1048.26	120.68	11.51
Tamilnadu	7138.00	107.12	1.50
Tripura	1284.99	789.85	61.47
UP	1737.86	303.23	17.45
WB	1518.14	159.39	10.50

**Table2.2 (e): Share of Agriculture credit by RRB to Total Agriculture Credit**  
(Rs. per hectare)

States/1998-99	Total Ag. Credit/Hactare(Rs.)	RRB Ag credit per hectare(rupees)	%
Assam	1335.26	738.56	55.31
Andhra	7152.13	274.16	3.83
Bihar	1490.93	267.23	17.92
Gujarat	4022.24	407.25	10.13
Harayana	4515.97	152.96	3.39
Himachal	2242.45	773.46	34.49
Karnataka	5105.95	1616.32	31.66
Kerala	1722.21	181.59	10.54
MP	1600.05	111.97	7.00
Maharashtra	3627.41	384.70	10.61
Orissa	2343.82	154.62	6.60
Punjab	5508.95	212.51	3.86
Rajasthan	1565.64	187.18	11.96
Tamilnadu	8393.33	868.67	10.35
Tripura	2894.70	443.05	15.31
UP	2338.35	189.29	8.09
WB	2700.30	189.29	7.01

**Table 2.2 (f): Share of Agriculture credit by RRB to Total Agriculture Credit**

(Rs. per hectare)

States\ 2001-02	Total Ag. Credit/Hactare(Rs.)	RRB AG. Credit per Hectare(rupees)	%
Assam	8369.69	184.06	2.20
Andhra	2047.47	738.56	36.07
Bihar	5637.53	274.16	4.86
Gujarat	6920.82	267.23	3.86
Harayana	4691.15	407.25	8.68
Himachal	7276.47	152.96	2.10
Karnataka	4714.32	773.46	16.41
Kerala	3286.29	1616.32	49.18
MP	5147.29	181.59	3.53
Maharashtra	3587.67	111.97	3.12
Orissa	7946.32	384.70	4.84
Punjab	2711.76	154.62	5.70
Rajasthan	3118.26	212.51	6.82
Tamilnadu	4309.50	187.18	4.34
Tripura	3616.03	868.67	24.02
UP	5052.49	443.05	8.77
WB	5052.49	189.29	3.75

Sources: Banking Statistics, RBI; Statistics on RRBs, NABARD;

Agricultural Statistics at a Glance, Ministry of Agriculture,

Government of India; Cooperative Movement in India, NABARD

various issues.

**Table 2.2.3(a): Per cent Growth of Agriculture credit given by RRB and other institutions**

States/1989-90	GROWTH rate of total Ag. credit (%)	GROWTH RATE RRB credit (%)
Assam	26.59	61.19
Andhra	45.85	21.87
Bihar	27.30	24.54
Gujarat	26.37	241.33

Harayana	36.48	22.43
Himachal	16.04	-2.50
Karnataka	43.57	20.40
Kerala	43.03	13.49
MP	39.43	20.25
Maharashtra	14.50	126.10
Orissa	136.44	1.66
Punjab	27.95	54.94
Rajasthan	60.38	11.01
Tamilnadu	46.20	19.09
Tripura	34.14	7.34
UP	35.62	24.13
WB	37.60	29.23

**Table 2.2.3(b): Per cent Growth of Agriculture credit given by RRB and other institutions**

States/1992-93	GROWTH rate of total Ag. Credit (%)	GROWTH RATE RRB credit (%)
Assam	73.65	6.69
Andhra	52.96	16.89
Bihar	73.35	7.59
Gujarat	92.79	-51.08
Harayana	51.27	9.27
Himachal	83.61	-0.09
Karnataka	67.71	7.88
Kerala	44.26	22.54
MP	46.25	10.79
Maharashtra	54.33	-32.24
Orissa	56.91	15.84
Punjab	46.87	21.51
Rajasthan	57.77	3.15
Tamilnadu	45.89	13.11
Tripura	-4.58	-6.94
UP	48.26	14.03
WB	76.49	7.95

**Table 2.2.3(c): Per cent Growth of Agriculture credit given by RRB and other institutions**

States/1995-96	GROWTH rate of total Ag. credit	GROWTH RATE RRB credit
Assam	15.51	10.94
Andhra	62.70	11.26
Bihar	72.98	9.73
Gujarat	48.79	15.44
Harayana	52.24	17.47
Himachal	6.45	9.35
Karnataka	46.50	25.62
Kerala	-14.74	68.70
MP	82.44	13.91
Maharashtra	50.96	12.09
Orissa	26.01	39.65
Punjab	50.08	13.55
Rajasthan	59.36	22.56
Tamilnadu	39.44	17.91
Tripura	-35.21	13.66
UP	68.00	16.51
WB	55.53	9.55

**Table 2.2.3(d): Per cent Growth of Agriculture credit given by RRB and other institutions**

States\1998-99	GROWTH rate of total Ag. credit	GROWTH RATE RRB credit
Assam	90.96	-3.54
Andhra	27.04	15.20
Bihar	75.88	3.63
Gujarat	42.65	23.68
Harayana	71.33	23.61
Himachal	146.82	10.54
Karnataka	36.50	15.85
Kerala	-10.91	54.67
MP	32.27	16.65
Maharashtra	36.47	14.85
Orissa	28.44	17.72
Punjab	60.02	16.82

Rajasthan	44.99	20.76
Tamilnadu	66.68	20.45
Tripura	351.44	3.22
UP	53.95	13.47
WB	31.49	5.90

**Table 2.2.3(e): Per cent Growth of Agriculture credit given by RRB and other institutions**

States\2001-02	GROWTH rate of total Ag. credit	GROWTH RATE RRB credit
Assam	-29.42	56.32
Andhra	345.36	36.51
Bihar	-10.74	46.12
Gujarat	33.92	32.33
Harayana	79.67	28.42
Himachal	-3.82	161.61
Karnataka	-20.58	32.46
Kerala	521.98	60.81
MP	-3.41	42.10
Maharashtra	85.19	31.73
Orissa	-5.87	58.53
Punjab	195.26	92.11
Rajasthan	-37.90	13.04
Tamilnadu	186.48	53.10
Tripura	60.80	52.70
UP	18.39	22.91
WB	27.90	94.96

### Analysis

From the above tables, during 1986-87, the agricultural credit per hectare given by all the institutions in Tamil Nadu is Rs. 20511.11, which is highest, whereas total agricultural credit per hectare given in Assam is lowest (Rs.281.42). In case of RRB, the agricultural advances per hectare in Tripura were highest i.e. Rs. 539.62 per hectare as in case of Punjab it was Rs. 9.93 which was lowest among all the states. It has depicted in graph -2.1.

But in terms of share of the agricultural advances to total agricultural advances, in Tripura RRB contribute 59% to total agricultural advances. Where in case of Punjab the RRB contribute lowest share to total agricultural credit as comparison to other states RRB. The over-all share of RRBS agricultural advances to the total agricultural advances in India is 11% during 1986-87.

The total agricultural credit in 1989-90 per hectare in Tamil Nadu is still highest which increased from Rs. 2051.11 to 3019.10 per hectare at compound rate of growth of 45 per cent where as least agricultural credit per hectare given by Orissa. But incase of RRB agricultural advances per hectare is highest in Gujarat. But though Punjab has least per hectare credit provided by in Punjab RRB but it is more as compared to 1986-87. In terms of percent share of RRB agricultural credit to total agricultural credit per hectare, though Tripura is still remain highest but Assam, Gujarat states RRBs made a significance contribution to agricultural credit as compared to 1986-87. During 1989-90, the growth rate of agricultural credit by RRBs was highest in Gujarat. Whereas in case of total agricultural credit growth rate Orissa made a significance development. But in case of RRBs agricultural advances per hectare in HP has declined rate -2.5% followed by Orissa. During this period the share of RRBs agricultural advances in India to total advances in the agricultural sector slightly increase from 11% to 13%. During 1989-90, the growth rate of cultivated areas increased in all the states except Assam, which shows a negative growth rate of cultivated area.

In period 1992-93, the per hectare, total institutional agricultural advances comparison to 1989-90 increased in all the states, except Tripura, which has declined to Rs. 1352.99 per Hectare from Rs. 1557.32 per Hectare in 1989-90. During this period the growth rate of total agricultural advances in Assam is highest which is 73.6% were Tripura has lowest that is -4.55%.

But in case of RRB, agricultural credit the growth rate of RRB agricultural credit per hectare is has declined in case of Gujarat, Himachal and also – Tripura, where as highest growth rate is in Kerala (22.54%). Tripura RRB per hectare agricultural credit has declined more than the per hectare is- total agricultural credit. During this period the per-hectare total agricultural advances was highest still is Tamil Nadu I (Rs. 4460.40) but least in Assam where as the RRB per hectare agricultural advances is highest is in still Tripura. This has depicted in graph no 2.2 .

The share of RRBs credit in total state per hectare agricultural credit is highest in Tripura though declines as compared to previous year, where as increased in almost all the states. In this period, Punjab RRB has contributed to 2% of agricultural credit and Orissa has contributed 13.18% as compared to 11.05% in previous year. Over all contribution of RRB credit to the total per hectare credit has declined to 8.75% from 12.8% was in 1989-90

The growth rate of total institutional of credit per hectare has increased as compared to RRB per hectare – credit, especially in Bihar (72.98%), Andhra Pradesh (62.70%) and Tripura (68%) where as the growth of RRB per hectare credit had increased in Kerala (68%) and Orissa (39%). The total agricultural credit per hectare growth has increased except Kerala and Tripura. Whereas, in West Bengal and Himachal Pradesh per hectare RRB credit has least growth during this period. In terms of absolute value in 1995-96 per hectare total agricultural credit is highest in Tripura as well as in RRB per hectare- credit. In the case of RRB agricultural credit to the total credit per hectare, has declined in over all states as comparison to previous year. The overall contribution of RRB agricultural credit to total agricultural credit was 7.75%, which is more or less same to the previous years to total share. But in terms of state there is large variation in case of share of RRB agricultural credit to total per hectare credit. State like Orissa, (18%), Bihar (17.76%) Tripura (17.45%), Karnataka (16.20%) has to total institutional credit, where as the states like Punjab least contribution to the total agricultural per hectare Credit.

During 1998-99, the total per hectare credit, growth has increases in most of the states. Tripura had made a great impact in the per hectare agricultural credit growth rate which 35.44% as compared to the previous period. During this period per hectare total agricultural credit for Tripura is RS. 2338.95 as compared to RS.1284.89 in previous period, which has shown in graph 2.3.

In this period Kerala is the only state in which per hectare total credit has declines simultaneously with decline of the production area which mean there is sharp decline per – h hectare credit.

Simultaneously there is great achievement in the RRB per hectare credit. During this period per hectare RRB credit is higher in Karnataka is amount Rs. 1616.32) is followed by Tamil Nadu, Assam, Himachal Pradesh, where least in

Madhya Pradesh (Rs. 111.92) per hectare followed by Orissa and Haryana. Though Assam was leading per hectare agricultural credit, but the growth rate of RRB agricultural credit had declined as compared to previous period contradicting to total per hectare credit Kerala had significance development in the growth of agricultural per hectare credit (54.67%) followed by Gujarat and Haryana.

Assam's RRB contribute a large share, that is more than 50% agricultural credit supplied by RRB, as compared to the total agricultural credit followed by, HP (31.99%), and Karnataka RRB (34.49%) contribute. Though many states had significance share to the agriculture credit through RRB but over all shares of agricultural credit in India was 10% as states in AP, Punjab, (3.5%). RRB contributes very small share to the total credit. More than ten states contribute more than 10% of RRB agricultural credit to the total agricultural credit.

In 2001-02, there negative, growth rate in per hectare total credit comparison to the previous period. During this time period more than 6 states has negative per hectare total credit. But the state like Kerala, AP, Punjab, made a positive agricultural growth rate compared to the previous period. Growth of RRB per hectare as compared to previous years was positive in that period all the state had a positive RRB credit growth rate. It has graphical presented in graph 2.4 .

Though Assam is top in per-hectare total credit among all the state, out the share of RRB credits per hectare just more 2% to total per hectare credit. In case of RRB per hectare credit, Kerala was top among all the states, followed by Tripura (Rs. 868) per hectare and A P (Rs. 738.62). The percent share of RRB per hectare credit to the total per hectare credit was close to 50% by A.P. Tripura. But the states like WB, Orissa contribute less share of RRB compared to previous period. During this period the contribution of RRB per hectare credit to the total credit was 8.57% in over all state.

From the above tables by analysis and comparing the per hectare credit given by RRB to total per hectare credit, it has found that though per heft credit of RRB had increased, but there was still variation in the distribution across the states. RRB had increased, but there was still variation in the distribution across the states.



## 2.2. Regional Disparities:

To compare the change in regional disparity among the different states regarding to the total institutional credit and RRB agricultural advances. For the analysis on regional disparities we have taken *co-efficient variation. (C.V.)*

For comparing the variability of two distributions compute the co-efficient variations for each distribution. A distribution with smaller C.V. (co-efficient variation) is said to be more homogenous or more uniform or less variable than other and the series with greater C.V. is said to more heterogeneous or more disperse than other.

C.V, Expressed in terms of percentage. To show the regional disparities in the variations of per hectare total and RRB credit it has e taken two cases in first case, it has shown the variation in a particular states at different time period, in the second cases we have to show the regional variation among different states at a particular time period.

**Table 2.2.4 (a): Regional Variation across states (s.d., mean, c.v.)**

States/1986-87	TOTAL AG CREDIT/HACTARE	RRB Ag. credit per Hactare
stand deviation	465.45	122.72
mean	852.18	81.07
c.v (%)	54.62	151.4

**Table 2.2.4 (b): Regional Variation across states (s.d., mean, c.v.)**

States/1989-90	TOTAL AG CREDIT/HACTARE)	RRB Ag credit per Hectare)
stand deviation	726.33	214.11
mean	1391.86	178.31
c.v (%)	52.18	120.08

During 1986-87 time period Standard Deviation (SD) of total per hectare credit of the different states is 465.453 whereas the MEAN. Is 852.18 and C.V. 54.62% where as the S.D. Of RRB per hectare credit is 122.72 and means 81.07 and C.V. 151.4%.

From the above analysis it has concluded that during this period, in case of total per hectare credit, the value of C.V. is smaller which imply that during this time period, the consistence of the total per hectare credit is more, less scatters that is less regional disparities. Where as in case of RRB per hectare credit C.V is larger which implied more disparities.

During period 1989-90 S.d Of per hectare total credit is 726.33, mean is 1391.86, and thus C.V. 52.18% where S.D. of is per hectare RRB credit is 214.10 and mean 178.31 and C.V. is 120.08% , which implied during this time period C.V. of per hectare total credit was less than C.V. of per hectare RRB credit which implies the former was more consistent then the latter meant there is more disparities in RRB credit as compare to total per hectare credit . But it also found that C.V. of RRB credit during 1989-90, was less than C.V. of RRB credit during 1986-87 which implies the disparities declined and the consistence increased. Where C.V. of total per hectare credit is more or less same with C.V. In. 1986-87

**Table 2.2.4 (c): Regional Variation across states (s.d., mean, c.v.)**

States/1992-93	TOTAL AG CREDIT/HACTARE)	RRB Ag credit per hact)
stand deviation	1060.89	126.49
mean	1750.56	153.26
c.v (%)	60.60	82.54

In case of per hectare total credit S.D. 1060.89 mean 1750.56 and C.V. 60.60% whereas in case of per hectare RRB credit S.D. was 126.49 mean. 153.26 and C.V. 82.54. Though in this period C.V. is more consistence and latter which is former is more consistent than the latter. But C.V. Of RRB per hectare credit is less than C.V. in 1989-90. C.V. of per hectare total credit in 1992-93 is greater 1989-90 implied that RRB per hectare credit flow going to more consistence than per hectare total credit. During this period S.D. of per hectare total credit was 2454 mean is 33367 and C.V. 73.57% and S.D. of per hectare RRB credit was 193.00 amean, .IS258.45 and C.V. 74.70% which implied consistency of per hectare credit and also more or less similar with per hectare RRB credit which show less regional disparities.

But when compare these two C.V. With the previous time period we conclude that RRB credit per hectare credit going to towards consistency as compared to total per hectare credit.

**Table 2.2.4 (d): Regional Variation across states (s.d., mean, c.v.)**

States/1995-96	TOTAL AG CREDIT/HACTARE	RRB Ag credit per hectare
stand deviation	2454.96	193.06
mean	3336.73	258.45
c.v (%)	73.57	74.70

**Table 2.2.4 (e): Regional Variation across states (s.d., mean, c.v.)**

States/1998-99	TOTAL AG CREDIT/HACTARE	RRB AG credit per hectare
stand deviation	4419.31	406.71
mean	4356.63	420.75
c.v (%)	101.44	96.66

S.D. of per hectare total credit is 4419.31 mean. 4356.63 and C.V. 101.44% S.D. of per hectare RRB credit was 406.71 A.M. 420.75 Whereas C.V. was 96.66%. In this time period per hectare total credit was diversified was scattered as compared to RRB per hectare credit. Though both C.V. of time periods are increased but RRB credits more consistence through this period as compared to per hectare total credit.

**Table 2.2.4 (f): Regional Variation across states (s.d., mean, c.v.)**

States/2001-02	TOTAL AG CREDIT/HACTARE)	RRB Ag credit per hectare
stand deviation	5347.56	387.71
mean	6675.62	420.45
c.v (%)	80.11	92.21

S.D. of per hectare credit was 5347.56 mean., 6675.62 and C.V. is 80.11% where S.D. of per hectare RRB credit is 387.71, A.M., 420.41 and C.V. Is 92.21%, during this period both per hectare RRB credit and per hectare total credit was less disbursed as compared to 1998-99. But the RRB per hectare credit was less consistency as compared to per hectare total credit.

## Case - II

**Table 2.2.5: Regional Variation across states (s.d., mean, c.v)**

Total per Hectare Credit				Total per Hectare Credit given by RRB		
State/ ALL PERIOD	SD	MEAN	CV%	SD	MEAN	CV%
ASSAM	3104.12	2100.18	147.80	252.50	238.52	105.86
AP	2043.09	3309.54	61.73	220.20	364.63	60.39
BIHAR	1848.16	1918.27	96.35	77.31	200.26	38.60
GUJARAT	2135.92	3067.41	69.63	280.19	285.19	98.25
HARAYANA	1384.55	3257.08	42.51	124.42	177.73	70.00
HIMACHAL	2451.28	2715.76	90.26	273.37	217.80	125.51
KARNATAKA	9110.98	6328.19	143.97	563.48	575.41	97.93
KERALA	6410.87	4555.72	140.72	613.34	401.50	152.76
MP	1789.93	1590.85	112.51	52.53	95.83	54.82
MAHARASTRA	1283.49	2106.79	60.92	133.45	134.39	99.30
ORISSA	2873.61	2242.81	128.13	129.58	161.73	80.12
PUNJAB	1570.81	3162.44	49.67	75.89	96.21	78.88
RAJASTAN	4994.40	2951.64	169.21	71.19	114.89	61.97
TAMIL NADU	2425.19	4895.25	49.54	324.46	216.70	149.73
TRIPURA	3506.98	3435.63	102.08	164.18	641.09	25.61
UP	1584.94	2048.18	77.38	134.07	220.69	60.75
WB	1638.85	2024.64	80.95	57.12	133.38	42.83

In this section it has shown which state is more consistency in terms of source of supply of agricultural credit i.e. Either total institutional agricultural credit or RRB per hectare credit.

### Assam

By taking amount of flow of agricultural per hectare credit from period 1986-87 to 2001-02 we found co-efficient C.V. of total per hectare credit is 147.80% where as C.V. of RRB per hectare credit 105.86% implied Assam is more co consistency in case of per hectare RRB credit has compared to per hectare total credit.

### Andhra Pradesh

In case of AP C.V. of per hectare total credit is 61.73% and C.V. of RRB per hectare credit 60.39%. Thus, AP was more consistency in RRB per hectare

credit though consistency in both per hectare total credit and per hectare RRB credit during concerned time period.

### **BIHAR**

C.V. of total per hectare credit is 96.35% where RRB per hectare credit is 38.60% implying more consistency in case of RRB per hectare credit as compared to total per hectare credit.

### **GUJARAT**

In case of Gujarat C.V. of total agricultural credit per hectare is 69.63% when RRB per hectare credit during same time period is 98.25% implying Gujarat is more uniform in case of total agriculture per hectare credit as compared to RRB per hectare credit.

### **HARYANA**

C.V. of total per hectare credit is 42.51% as compared to less than RRB per hectare credit which is 70%, during this period RRB per hectare credit is less uniform than total per hectare credit.

### **HIMACHAL PRADESH**

Total Institutional agricultural credit is more consistency than RRB per hectare credit

### **KARNATAKAA**

C.V. of total per hectare credit was greater than C.V. of RRB per hectare credit implying Karnataka is more consistency in terms of RRB per hectare credit than the former.

### **KERALA**

C.V. of total per hectare credit is 140.72% whereas C.V. of RRB per hectare credit is 152.76%. Though C.V. of former is greater than latter, but both reflects uniformity as they were very close to each other.

### **MADHYA PRADESH**

In case of M.P. RRB per hectare credit is more consistency through out the period as compared to per hectare total credit as C.V. of per hectare total credit (112.51%) was greater than C.V. Per hectare RRB credit (54.82%)

## **MAHARASHTRA**

Maharashtra is less constituency in case of RRB per hectare credit as compared to total per hectare credit due to the reason C.V. of total per hectare credit is less than RRB per hectare credit.

## **ORISSA**

Orissa, during this time period the flow of RRB per hectare credit is more uniform as compared to total per head credit the difference between the two C.V. insignificant. Cluster ness of RRB credit is greater as compared to total flow of per hectare credit.

## **PUNJAB**

Punjab is consistency in case of flow of total per hectare credit as compared to RRB per hectare credit. Due to reason C.V, of per hectare total credit is less than C.V, of RRB per hectare credit.

## **RAJASTHAN**

During this time period there had more uniformity in case of RRB as compared to per hectare total credit.

## **TAMIL NADU (TN)**

TN was more scattered in case of RRB per hectare credit compare to per hectare total credit. There was significance difference between the two difference types of CV it is found that incase of RRB flow of agricultural per hectare credit to the per hectare credit is more disburse as compare to former.

## **TRIPURA**

The reverse of TN is found when we studied about Tripura. In case of Tripura the flow of RRB per hectare credit is more uniform than total per hectare credit. The gap between the two sources of credit is very significant throughout the period.

## **UTTAR PRADESH**

Comparing the co-efficient variance (CV) of both sources of credit we found that in both cases UP was more consistent, though it had more uniformity in case of RRB per hectare credit. Rather to total flow of per hectare credit. But the difference of C.V, is not so- significant.

## **WEST BENGAL (WB)**

As 80.95% is the C.V. of total per hectare credit where as 42.83% is C.V. of RRB credit. Implying in WB was more scatter in case of former as compared to latter throughout the period.

In case of all these states at once and compare the C.V. of both per hectare total credit, the uniformity of the per hectare credit is highest in case of Haryana, which had C.V. is 42.51% and Rajasthan least consistence in case of total per hectare credit which has C.V. 169.25%.

Similarly Tripura has highest uniformity in case of RRB per head credit which had C.V. 25.61% and Kerala has highest scatter ness as C.V is highest i.e. 152.67% throughout the period.

### **2.3: Relation between growth of Agriculture productivity and growth of credit supply by RRB:**

As said in previous chapter, RRB would function as low cost institutions, and the very approach of RRBs to rural credit is sectoral and RRB are expected to operate on low spreads or margin because they are to lend to weaker section at low rates of interest.

Agriculture, in a narrow sense, is referred to crop production, while in its wider sense; it not only included crop production but also other allied activities. Where biological transformation was the process of production. Following the National Commission of Agriculture 1976,<sup>2</sup> "agriculture was defined to include activity like cultivation of crops, cattle rearing and dairy farming raising poultry, bee keeping and development of fisheries and forestry and also activities connected with their improvements"

Hayami and Ratan pointed out that<sup>3</sup> "agricultural development was nothing but an increase in the productivity growth brought about by a continuous stream of new technical knowledge and flow of industrial inputs in which the new knowledge was embodied. National Commission of Agriculture also defined agriculture development as the maximization of out put through modernisation of agriculture and allied activities. Modernization of agricultural activities can

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<sup>2</sup>National Agricultural Commission, 1976

<sup>3</sup>Yujro Hayami and Vernon W. Ruttan, Agricultural Development-An International Perspective p.3

brought through credit flow to the agricultural sector by which the new technology can be purchased.

Impact of credit is usually studied on the basis of pre-investment and post investment impact of credit on pre-investment and post investment can be studied through co-relating agricultural credit and agricultural development.

RRB is sole aim to provide the credit to the priority sector in this section we had analysis the impact of growth in flow of RRB power hectare credit and growth of per hectare agricultural development.

It would be interesting to observe the relation between agricultural development and credit supply both term loans and crop loans given by RRB. The index of agricultural development has productivity i.e. yield for hectare is or production for hectare is as one of the Parameters though the index is influenced by many other sectors. As in provisos sections we have chance the credit flow of RRB to per hectare credit. To obtain impact of credit supply on production per say it has taken growth of out put of agriculture in different states change into per hectare out put. In case of agricultural out put it has taken all the food grains, oil seeds, and three cash crops are: sugar can, Jute and Cotton respectively.

**Table.2.3.1: Correlation Co-efficient**

YEAR/ALL STATE	$r_{xy}$	$r_{xz}$
1989-90	-0.22	-0.45
1992-93	0.16	-0.07
1995-96	0.89	-0.21
1998-99	0.74	-0.16
2001-02	0.18	0.46

As correlation analysis enabled to have an idea about the degree and direction of the relationship between the two variables understudy. However, it fails to reflect open the cause and effect relationship between the variables. But in case of bivariate distribution if the variables have the cause effect relationship they are bound to very in sympathy with each other. Therefore there is a high degree of correlation between them.



Here 'Karl Pearson's co-relation co-efficient' has been taken which is known as Pearson's co-relation, co-efficient. It is denoted  $r(x, y)$ , or  $r_{xy}$ , or  $r$  which is a numerical measure of linear relationship between two variables.

Calculating co-relation, co-efficient ( $r$ ) between the two variables in one case growth rates of RRB credit supplied to agriculture in different states and agricultural growth rate of productivity of the different state in that period of time which is denoted by  $r_{xy}$  and in another co-relation we calculate the co-relation between one of the growth in input of agriculture here i.e. Fertilizer consumption per hectare and growth of agricultural productivity which is denoted by  $r_{yz}$ .

$x$  = credit supply to the agriculture by RRB in their respective states

$y$  = growth agricultural productivity

$z$  = growth in fertilizer consumption per hectare. During 1989-90 overall growth rate of agricultural credit in all the states is positive whereas the growth rate agricultural productivity except Orissa which decline (-10.47%) rate, whereas Kerala has declined in the agriculture productivity. The growth rate of credit supply of RRB was more than agricultural productivity.

During this period the co-relation co-efficient between the growth of agricultural credit supplied by RRB and growth of agricultural productivity in all the states was  $r_{xy} = -0.2$  which implied there is a negative co-relation between variables. But the value is very less which implied there is least negative co-relation between the two variables,  $x$  &  $y$ .

During this period co-relation, co-efficient between the growth rate of agricultural productivity and growth rate of per hectare consumption of fertilizer was also negative i.e.  $r_{yz} = -0.45$

During this period as there is less negative co-relation between  $x$  &  $y$  and also  $y$  &  $z$  implied the other socio-economic factor like land reforms, land holdings, cropping patterns and other inputs playing a vital role for the development of agriculture

During this time period rate of growth of RRB credit declines in case of Gujarat and Maharashtra which influence the agricultural growth as a result the agricultural growth decline as compared to previous time period. Whereas in case of Kerala the growth rate of agricultural credit supply by RRB was

highest as well as. growth in agricultural productivity increased from 2.67% to 9.48% as comparison to previous period.

During this period  $r_{xy} = 0.16$  which was positive indicating that there was positive co-relation between the two variable x & y, hence in this period the impact of agricultural credit of RRB to agricultural growth was more than the previous period.

During this period growth there is negative co-relation between z & y which implied there was not so impact of fertilizer on agriculture growth during this period. Though  $r_{yz}$  declined as compare to previous period it implied the impact of fertilizer on agriculture going up.

### **1995-96**

The value of  $r_{xy}$ , during this period was "0.82 which was very close to 1" which implies that there was a positives and close and perfect co-relation between this two variables.

The co-relation between the growth rate of fertilizers consumption per hectare to the agricultural growth was negative but value of  $r_{yz} = -0.17$  which very small and hence there was a less negative co-relation between y & z.

### **1998-99**

As  $r_{xy} = 0.74$ , which implied that there was strong positive co-relation between the two co-relation. As the growth credit supplies going up growth agricultural productivity also going up remaining all other factors constant.

There is though negative co-relation between y and z as value  $r_{yz}$  is  $-0.16$  which implied the consumption of fertilizer was important during this period for the growth of agricultural productivity. Though agriculture credit is more impact than fertilizer.

### **2001-02**

During 2001-02 the respective state the growth rate of credit supply of rural bank in the agricultural sector is positive but the growth rate of agricultural development for decline. So there was negative or less co-relation between x & y. As value of  $r_{xy} = 0.18$ , which is very less, where as the co-relation between growth agricultural productivity and growth of fertilizer consumption was higher than credit. During this period  $r_{yz}$  is graters than  $r_{xy}$

Like the demand for other firm inputs, demand for credit would also be derived demand derived from the demand for the products that it would help properly. Credit would a critical inputs in farm production but with a difference other inputs such as seeds, fertilizer and pesticide as its contribute increase productivity of land indirectly.

As it is concluded in previous section that there is a positive and linear correlation between growth rate of agricultural productivity and the growth rate of per hectare credit given by RRBS. Hence the estimation of the agricultural production keeping credit supply as independent variable can be done through regression analysis, in which consumption fertilizer is used as an independent for the variable to estimate the value of agricultural product.

*Chapter III*

*Performance of  
Regional Rural Banks  
in Orissa —  
Districtwise Analysis*

Banks occupy an important place in the economic development as they provide credit which lubricates the wheels of agricultural and industrial enterprises. They mobilize savings, allocate funds for different productive activities and if they open branches in rural areas, they get a channel for making credit available for rural development. It is, therefore, said “ banks are not just the store house of countries wealth but are reservoirs of resources for economic development”.<sup>1</sup>

In the previous chapter it has shown RRBs are playing a major role for meeting the requirement of the credit of cultivators and artisans. But it is very vital to look into the performance of “RRBs at the district level, as the prime aim of set-up of “RRBs” was to provide credit at district level. But due to cumbersome, and the splits of the district by the period of time, the number of districts increasing, so it is difficult to examine performance of RRBs in district level in all over India. Due to the size of the “districts” the single RRB can finance credit to more than one or two districts, whereas two to three RRBs can finance one district at once. Till March 2004, there are ‘196” RRB’s in 496 districts and 5164643 branches in all Indian level<sup>2</sup>

Though, it is very cumbersome to look into the functioning of all the RRBs in the district level in all over India, To scrutinize the performance of RRB at the ground level at district level, Orissa is taken as a case study where 9 RRB’s functioning in 13 districts in the initial period i.e. 1986-87, which has increased to 30 districts in December 2003.

Before, looking in to the performance of RRBs at district level, in our case study i.e. Orissa, lets a birds eye view about Orissa.

### 3.1. PHYSIOLOGY OF ORISSA

Orissa, the land of “Lord-Jagnnath” extends from 17<sup>0</sup> 49’ N to 22<sup>0</sup> 34’ N latitude and from 81 29’ E to 87<sup>0</sup> 29’ E longitude in the eastern coast of India. It has an area about 155,707 sq.km according to census to 2001. It is bounded by West Bengal in the north east Jharkhand in the north, MP, in the

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<sup>1</sup> Dr Baidyanath Mishra (July 1995 ), *Banking and Rural Development; with Reference to Orissa, Kurukeshtra*, pp.9.

<sup>2</sup> (Source: Performance of RRBs, NABARD)

west, AP in south and the Bay of Bengal is in the east. The capital Orissa of is Bhubaneswar.

Though, Orissa is now divided into 30 districts, but due to comparison between the different time periods, for the performance of RRBs, 13 undivided districts has taken, which are financed by 9 RRBs till 1995, after that, it has splitted into 30 districts which is clubbed into 13 districts.

### 3.2. ECONOMY OF ORISSA

Way back in 1939, Mahatma Gandhi was stunned to see the utter poverty of an old lady in a village of Delang in Puri District. He wrote in Harijan Orissa is the epitome of the Indian's poverty"<sup>3</sup>. India has implemented its 10<sup>th</sup> Five year Plan during the past five decades of planning, Orissa too has implemented 9 five year and 3 annual plans keeping in tune with national planning.

In Orissa 63% people live in villages as per 2001 census. Orissa having more rural areas than India as whole as 82% of the population lives in villages, only 18% in towns and cities, which is less than the percentage of the urban population of the country.

Regarding the occupation structure, most of the people depend on agriculture and on artisans, where tribal people depend on forest and cultivation. So mostly economy of Orissa depends on agricultural and minerals and forests.

As in Orissa though there is 4202, co-operative societies<sup>4</sup> are functioning and commercial banks are also functioning. The RRB's are also functioning as complementary to the commercial and co-operative bank. In the previous chapter it has been observed that the RRB's contribution especially to agriculture is great achievement. So before looking into performance of RRB in district level in Orissa, some words about the evolution and growth of RRBs in Orissa.

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<sup>3</sup> Mahatma Gandhi(20April,1939), Harijan

<sup>4</sup> source:Register,Co-operative Societies,Orissa,Bhubaneswar

### 3.3 EVOLUTION AND GROWTH OF RRB'S IN ORISSA

After the recommendation of Narasimham committee<sup>5</sup>, to examine in depth the setting up of new rural banks as subsidiary of the Public sector banks to cater the credits needs of the rural people. The group submitted it's within a sub-period identifying the various loopholes of the co-operative credit agencies and the commercial banks. The group help that the existing credit institutions, would not able to fill the regional and functional gap in the rural credit institutional system within a reasonable period of time even with such adoption, re-organization and restructure may be considered.

Some of the weaknesses of the commercial banks were that, their advances largely confined to the commercial and large scale industries who could give adequate security. Accordingly, as per the recommendation of the committee, RRBs emerged on 26 September 1975 on the basis of RRB ordinance.

Comparing, the growth of RRB in Orissa to the national level it found, that the growth of RRBs in Orissa as compared national level is not so resultant. During 1986-87 the initial period the number of RRB in India was 194, functioning in 351 district with 12838 branches where in till 2003 December 196 functioning in 511 districts, 14390 branches. During this same period in Orissa the RRBs has increased from 5 to 9 functioning in 30 districts 872 branches<sup>6</sup>.

#### 3.3.1. *Performance of RRBs in Orissa:*

“RRBs are not set up to complete with the co-operative societies and commercial banks rather to supplementary and completely to each other as it has seen RRB plays a lead role in rural economy especially for the growth of agriculture”<sup>7</sup>.

This situation deals with growth, achievement, and performance of RRBs in district level in Orissa. There are 9 RRBs functioning in 30 districts till December 31st, 2003. This increased from 4 RRBs functioning only in 4 districts during the period 1976-1977. Oldest one is Puri Gramya Bank (PGB). There are 8 other RRBs named as Cuttack Gramya Bank (CGB), Balas ore Gramya Bank (BGB), Rashikulya Gramya Bank (RGB), which function in four undivided coastal districts, viz. Puri, Cuttak, Balas ore, Ganjam respectively.

<sup>5</sup>.Report of The Committee On the Rural Credit(1974),Narasimham Committee.

<sup>6</sup>(Sources>Returns of RRBs NABARD )

Dhenkanal Grameen Bank, (DGB) operates in undivided Dhenkanal District, where as Baitarani – Grameen Bank (BGB) functioning in undivided Keonjar and Mayur Bhanj. These districts are less developed than the coastal districts. The remaining Grammen Banks Koraput Panchabati Grammen Bank, (KPGB), serving the least developed undivided district, Koraput, whereas Kalahandi Agrina Grameen Bank, (KAGB) functioning in Kalahandi (undivided). The Bolangir Grammen Bank (BOGB) caters undivided Bolangir and Sambalpur districts. For the analysis, the above districts are clubbed into 13 districts and categorized into three categories, on the basis of geographical situation, and development.

Zone I: Puri, Cuttak, Bales war, Ganjam

Zone II: Dhenkanal, Keonjar and Mayur Bhanj

Zone III: Koraput, Kalahandi, Sambalpur, Bolangir and Sundargarh

**Table 3.1: Functioning of the RRBs in Different Districts in Orissa**

Zones	Name of the Districts	RRBs
Zone I	Puri, Cuttak, Balasore, Ganjam	Puri gramya Bank (PGB) Cuttack gramya Bank (CGB) Balasore Gramya Bank (BGB), Rushikulya Gramya Bank (RGB)
Zone II	Dhenkanal, Keonjhar, Mayurbhanj	DhenknaI Gramya Bank (DGB) Baitarani Gramya Bank
Zone III	Koraput, Phulbani, Kalahandi, Balangir, Sambalpur, Sundergarh	Koraput Panchbati Gramya Bank (KPGB) Kalahandi Agreeana Gramya Bank (KAGB) Balangir Agreeana Gramya Bank (BAGB)

Source: NABARD, *Review of the Performance of RRBs*.

### ***Performance of RRBs***

<sup>7</sup> DrS.K.Gupta. And Prof.A.N.Sadhu,(1995),Economic Liberalization And Rural Credit,Kurukshetra



The performances of RRBs in Orissa can be studied with reference to following variables:

- a. Credit-Deposit ratio
- b. Loans issued – Loans disbursed
- c. Loan issued - Recovery performance

### 3.3.1 (a). Credit- Deposit Ratio

The credit deposit ratio (CDR) refers to credit advanced for each 100 rupees of deposit. It implies that in particular district for each 100 rupee deposit credit given are as compared to the 100 rupees deposit. If the credit deposit ratio is more, then it is favorable as the credit given is more than deposits mobilized. In this section the credit advanced per 100 rupees deposit, for a particular time period. Credit deposit ratio is an important indicator of the performance of RRB, as RRB not only giving credit to rural people at lower cost, but also receiving small amounts.

**Table 3.2.(a):Credit Deposit Ratio across the zones(1986-87)**

	Credit	Deposit	C/D Ratio (in percent)
<b>Zone-I</b>			
PURI GB	1911.77	1291.75	148.00
CUTTACK GB	3416.33	2444.05	139.78
BALASORE GB	462.14	642.31	71.95
RUSHIKULYA GB	608.77	674.57	90.25
AVEAGE	1599.75	1263.17	126.65
<b>Zone-II</b>			
DHENKANAL GB	498.28	571.18	87.24
BAITARANI GB	1082.34	720.74	150.17
AVEAGE	1368.48	1086.82	125.92
<b>Zone-III</b>			
KORAPUT PANCHABATI GB	1923.27	1189.75	161.65
KALAHANDI AGB	686.68	702.5	97.75
BOLANGIR AGB	1167.52	3232.04	36.12
AVEAGE	1338.67	1256.26	106.56

*Source: Statistics on RRBs, NABARD, Mumbai*

**Table 3.2.(b):Credit Deposit Ratio across the Zones (1995-96)**

(rupees in lakh)

	Credit	Deposit	Percent
<b>Zone-I</b>			
PURI GB	4916.60	7783.54	63.17
CUTTACK GB	8819.60	11800.46	74.74
BALASORE GB	2755.30	3306.19	83.34
RUSHIKULYA GB	3444.46	6177.11	55.76
AVERAGE	4983.99	7266.82	68.59
<b>Zone-II</b>			
BAITARANI GB	2868.41	6370.18	45.03
DHENKANAL GB	2996.99	4111.70	72.89
AVERAGE	4397.91	6688.00	65.76
<b>Zone-III</b>			
BOLANGIR AGB	5252.04	9581.20	54.82
KORAPUT PANCHABATI GB	5084.33	8733.74	58.21
KALAHANDI AGB	2566.69	3860.96	66.48
AVERAGE	4371.48	6879.99	63.54

*Source: Statistics on RRBs, NABARD, Mumbai***Table 3.2.(c):Credit Deposit Ratio across the Zones (1998-99)**

(rupees in lakh)

	Credit	Deposit	C/D(%)
<b>Zone-I</b>			
PURI GB	10784.04	19467.96	55.39
CUTTACK GB	10214.58	20373.63	50.14
BALASORE GB	2868.73	5931.98	48.36
RUSHIKULYA GB	6341.63	14468.64	43.83
AVERAGE	7552.24	15060.55	50.15
<b>Zone-II</b>			
BAITARANI GB	5733.02	13767.81	41.64
DHENKANAL GB	6927.90	9612.98	72.07
AVERAGE	7203.16	14097.65	51.09

Zone-III			
BOLANGIR AGB	6966.07	16554.98	42.08
KORAPUT PANCHABATI GB	9353.46	13814.05	67.71
KALAHANDI AGB	4705.53	7414.65	63.46
AVERAGE	7150.03	13687.72	52.24

**Table 3.2.(d):Credit Deposit Ratio During across the zones( 2001-02)**

	Credit	Deposit	C/D Ratio
<b>Zone-I</b>			
PURI GB	22712.84	34857.76	65.16
CUTTACK GB	19769.90	37125.03	53.25
BALASORE GB	3147.21	11451.19	27.48
BAITARANI GB	13593.38	24811.03	54.79
AVERAGE	14805.83	27061.25	54.71
<b>Zone-II</b>			
RUSHIKULYA GB	10856.14	27086.52	40.08
DHENKANAL GB	14689.33	19603.93	74.93
AVERAGE	14224.95	25999.53	54.71
<b>Zone-III</b>			
BOLANGIR AGB	11911.37	27630.03	43.11
KORAPUT PANCHABATI GB	12708.65	20394.31	62.31
KALAHANDI AGB	8239.61	14262.19	57.77
AVERAGE	13967.88	26180.70	53.35

*Source: Statistics on RRBs, NABARD, Mumbai*

### **Explanation**

During the period 1986-87, the CDR in zone-I is 126.65 % which implies that in that period Rs 126.65 is given to Rs.100 deposit. In this case, the CDR is more favorable as credit given is more than deposit mobilized. During the same period in case of zone-II CDR was 125.92 % which is also favorable as Rs.125.92 credit given for Rs. 100 deposit. CDR of zone-III is lowest among all zones which is 106.56 %. But the CDR shows a gradual declining trend from

the period 1986-87 to 1995-96 in all zones as it decreased from 126.65% to 68.59%, 125.92% to 65.75% and 106.56% to 54.71% in zone-I, zone-II and zone-III respectively. The trend of decline also continued till the end of the time period 2001-02, as it decreased 54.71% incase of zone-I, 54.26% incase of zone-III, which has shown in graph 3.1 and 3.2 respectively.

#### **Compound rate of Growth:**

The compound rate of Growth (CRG) has been calculated to see the rate of growth of credit and deposit respectively.

$$P_t = P_0 (1 + r)^t$$

Where  $P_t$  = Value in the time period  $t$

$P_0$  = Value in the base period

$r$  = rate of growth

$t$  = time difference

In 1989-90 the CRG of credit declined in all the "RRBs" where the CRG of deposit in most of the RRB of all zones increased compared to 1986-87. But KGB of zone-III has highest growth incase of deposit, whereas incase of credit PGB of zone-I has highest growth rate incase of credit. Though during 1992-93, the deposit CRG increased in all the RRBs it is less as compared to 1989-90. The decline trend of growth rate continued up to 2001-02, in both the cases of credit and deposit but the CRG of credit is lower than the CRG of deposit in all the RRBs which implies the credit given as compared to mobilized deposit is unfavorable, hence the CDR declined.

As, the expansion of deposit and credit is one of the important indicator of performance of banking system, the steps should be taken by the RRB and government to expand both deposit mobilization and credit expansion. The important factors for the rapid deposit which has influenced the deposit mobilization and deposit multiplication in India are:

#### **(i) Rapid Branch Expansion:**

Banking services given by RRBs, should almost taken to the door to door of the people in rural areas. They should encouraged the lower group, specially the cultivators and rural artisans for the saving and deposit in the banks through innovative saving schemes.

#### **(ii) Increase in the amount of the cash with the banking system:**

The larger cash reserve with the RRBs, the larger the credit they can give and larger the deposits they can multiply.

*(iii) High rate of interest:*

RRBs should give high rate of interest in the savings to attract the deposits in rural and remote branches as compared other saving institutions.

*Expansion of bank credit*

Side by side with the expansion of bank deposits, reflecting the rapid expansion rural industries and agricultural out put. In the sphere of bank credit ,it should be given to all the groups rather to be only one group of people with out much difficulty ,the credit should also given to tiny and small business man residing in the villages and remote areas

### **3.3.1 .(b) . Loan Issued and Loan disbursed**

Loan issued is defined as, the amount of the credit or loan issued for particular time period, generally up to 1 year. It can be divided into two types of loans, short term loan varied from 6 months to 1 year and long term loan varied from 1 to 5 years. Whereas loan disbursed the amount that the actually flow to loanee. In Orissa there is substantial gap between the amount on loan issues and actually the loan disbursed during a period of time.

As the total districts divided into three zones, regarding the development of districts and there geographical situation and urban rural area. In the above Zone-1 RRBs which are advanced, and developed and functioning in coastal districts. As compared to Zone-1, Zone-II RRBs functioning in Dhenkanal Keonjhar is less developed as compared to Zone-1. In Zone-III it has taken KBK districts (Koraput, Bolangir, and Kolahandi) which are backward as compared to Zone-I, and Zone-III.

It has compared the gap between the amount of loan issued and actually disbursed within the district in Zone and also comparison between the two zones on the basis of, credit issued and disbursed. The time period divided into 1986-87, 1989-90, 1992-93, 1995-96, 1998-99 and 2000-01.

**Table 3.2.(e): Loan issued-Loan Disbursed Across The Zones (1986-87)**

(in Lakhs)

	<b>Zone- I</b>	<b>Zone- III</b>	<b>% Zone III to Zone I</b>
TOTAL CREDIT ISSUE	7600.15759	3777.48	49.70
TOTAL DISBURSED	3456.755569	2519.37	72.88
	<b>Zone- I</b>	<b>Zone- II</b>	<b>%Zone-II to Zone-I</b>
TOTAL CREDIT ISSUE	7600.15759	1580.63	20.80
TOTAL DISBURSED	3456.755569	1297.24	37.53

*Source: Statistics on RRBs, NABARD, Mumbai*

In 1986-87 during the initial phase, Zone-II which consists more proportionate of credit disbursed (66.7%) as compared to total credit issued. Where Zone-I is content 45.58% of total credit issued. Whereas on the basis of individual RRB, Dhankal Gramya Bank (DGB) has highest percentage, that is 94.07% of credit disbursed as compared credit issued. But if it is compared on the basis of zone wise, in absolute number all the RRBs functioning in coastal districts are issued highest amount of credit. But less amount of credit disbursed graph 3.5 to 3.7 reflects the diagrammatic presentation of above analysis.

On the basis of comparison regarding to the bank it has observed that both in the case of total amount credit issued, and disbursed the Zone-III banks, have more proportionate to loan disbursed as comparison to loan issued to other Zones.

During this period the RRBs in coastal area as compared to backward area not functioning properly. It may be due to the availability of commercial banks in these districts and dependency on agricultural and other rural artisans is very low. As compare to interior districts in the advance districts there is already commercial bank which only giving the industrial loans as little percent to agricultural loan, where as in case of backward and less developed district there are few number of commercial banks, they are not willing to go to the interior area where profit is very less. But RRBs is not set up for the

profit earning rather for the welfare of the rural people. Hence RRB is bound to act as both commercial bank and rural development institution.

**Table 3.2.(f): Loan issued-Loan Disbursed Across The Zones(1989-90)**

	<b>Zone-I</b>	<b>Zone- II</b>	<b>Percent of Zone- II to Zone- I</b>
TOTAL CREDIT ISSUE	94648.30	23451.20	24.78
TOTAL DISBURSED	4695.35	1309.57	27.89
	<b>Zone-I</b>	<b>Zone- III</b>	<b>Percent of Zone- III to Zone -I</b>
TOTAL CREDIT ISSUE	94648.3	79250.60	83.73
TOTAL DISBURSED	4695.35141	2554.75	54.41

*Source: Statistics on RRBs, NABARD, Mumbai*

During the period 1989-90 over all the banks in the respective zones regarding to the percentage of loan disbursed to loan issued is very low, as it is lowest PGB in coastal area. Where as highest is in case of RSGB (Rushi Kulyua Grameen Bank) which is disbursed only 15.19% of the total loan issued. This reflects that the lack of awareness about the banks in rural areas, or by the people. Still depends on their landlords, neighbors, family friends, and other credit societies and banks.

But there is a significant achievement in the reduction of regional disparity among the different RRBs in different regions. During this period though the proportionate declined as compare to the previous year regarding the disbursed loan as compared to total loan but the proportionate total loan issued by Zone-III as compared to Zone-I has increased from 49.39% to 83.73%, where as incase of disbursement it has decreased from 72.88% to 54.41% during this same period. It shows that during this period the zone -1 banks has disbursed more credit than the zone-III RRBs, where as in the comparison of Zone-I to Zone-II, both have increased during this period as compared to previous period.

It can be concluded that the rate of growth actual credit disbursed as compared to issued is very low, which may be due to the lack co-ordination in the management of bank in remote area. Still the amount of disburse credit as proportionate to credit issued is very low, which is lowest in case of PGB (0.43%) where as highest in RSB (5.45%). During this period the regional disparities among zones declined and run towards convergence rather than towards diversions. (Reference growth model - Solow) Between Zone-I and Zone III the convergence is more as compared Zone – I and Zone-II. Zone-III issued 54.19% of loan issued by Zone-I whereas disbursement is 55.07% as comparison to loan disburse of Zone-1, But Zone-II has issued more than 100% loan as compared to Zone-1. But the disbursement is just 67.7% of Zone-I in other wards the rate of growth disbursement of credit as compared to the credit issued is highest in comparison to other two zones.

**Table 3.2.(g):Loan issued-Loan Disbursed Across The Zones(1992-93)**

	Zone- III	Zone-I	Percent of Zone-III to Zone-I
TOTAL CREDIT ISSUE	17183.66	31711.57	54.19
TOTAL DISBURSED	387.37	703.41	55.07
	Zone- II	Zone-I	Percent of Zone-II to Zone- I
TOTAL CREDIT ISSUE	48636.51	31711.57	153.37
TOTAL DISBURSED	475.07	703.41	67.54

*Source: Statistics on RRBs, NABARD, Mumbai*

**Table 3.2. (h):Loan issued-Loan Disbursed Across The Zones(1995-96)**

	Zone- II	Zone-I	Percent of Zone-II to Zone-I
TOTAL CREDIT ISSUE	9899.86	18991.13	52.13
TOTAL DISBURSED	960.17	1736.80	55.28



	Zone- III	Zone-I	Percent of Zone-III TO Zone-I
TOTAL CREDIT ISSUE	25437.51	18991.13	133.94
TOTAL DISBURSED	1599.35	1736.80	92.09

*Source: Statistics on RRBs, NABARD, Mumbai.*

**Table 3.2.(i): Loan issued-Loan Disbursed Across The Zones(1998-99)**

	Zone- II	Zone-I	Percent of Zone-II to Zone-I
TOTAL CREDIT ISSUE	12936.37	24788.26	52.19
TOTAL DISBURSED	3290.75	3593.93	91.56
	Zone- III	Zone-I	Percent of Zone-III to Zone-I
TOTAL CREDIT ISSUE	33496.96	24788.26	135.13
TOTAL DISBURSED	3238.91	3593.93	90.12

*Source: Statistics on RRBs, NABARD, Mumbai*

**Table 3.2.(j): Loan issued-Loan Disbursed Across The Zones (2001-02)**

	Zone- II	Zone-I	Percent of Zone-II to Zone-I
TOTAL CREDIT ISSUE	14141.36	14121.52	100.14
TOTAL DISBURSED	6929.00	7039.92	98.42
	Zone- III	Zone-I	Percent of Zone-III to Zone-I
TOTAL CREDIT ISSUE	10953.21	14121.52	77.56
TOTAL DISBURSED	5395.14	7039.92	76.64

*Source: Statistics on RRBs, NABARD, Mumbai*

With the introduction of liberalization around the country, privatization of bank was permitted with the passing of a bill in Parliament on May 11, 1994. As the

Economic survey 1994-95, has commended that with the entry of 6 new private banks during the financial year which had spur competition, cost consciousness in banking sector. This has set a new trend; banking sector i.e. competitiveness is not just only what they are providing in term of efficient services but also in multivation of promotion of profitability of a private enterprise.

During this period RRB has changed their policy regarding to the priority sector .The banks have been given the task of drawing up schemes to extent credit to small sector borrowers like agriculture small scale industries etc. Though the liberalization has initiated during 1992-93 but actual result or outcomes of liberalization reflects after 1995-96 onwards. During this period remarkable achievement has made in the rate of disbursement of credit of as compared to credit issued.

During 1995-96 all the zones have increased there disbursement rate of growth as compare to rate of growth of total credit issued and there is the flow of credit towards convergence among the regions rather to divergence. During this period every zone has increased its disbursement contribution as compared to rate of growth of credit issued. Zone-III achieved highest disbursement rate growth of credit issued as compared to other zones. Zone-I issued 133% of credit of Zone-III but as compared to previous year. Zone II banks has just achieved 52.12% of total loan issued in zone-1, 55.28% in case of credit disbursement.

Thus, from above findings it can be said that “awareness among the people about the RRBs has increased and due to smoother credit policies of RRBs towards the rural sector fascinated the growth rate in credit disbursement as compared to credit issued”. But due to some external factors and internal factors like lack of coordination management of banks in the rural sector, which is the main reason of the poor disbursement of credit as compared to credit issued.

During 1998-99, there is more convergence in case loan disbursement percentage between Zone 1 and Zone-II and also Zone-III and Zone-I where is more divergence in case of credit among the all zones. There is increasing growth rate of percentage of credit disbursed as compared to credit issued in all RRBs but “PGB’ of Zone-I is lagged behind by Dehnkanal DGB of zone-

II, in case of loan disbursement. Where as in Zone-III the KPGB lead in case of the proportionate disburse credit as compared to credit issue.

In 2000-2001 the percentage in the disbursement, credit growth compared to initial time period has increased. During this time the disbursement ratio to the total credit issued in every zone has crossed 40% that is more than 40% of credit is disbursed during this period. At the end of this period, the Zone-II and Zone-I are neck to neck in both the cases i.e. amount total credit issue as comparison to total credit disbursed where as among Zone-III and Zone-1, there is also convergence in both the cases i.e. amount of credit issued and amount of credit disbursed.

From the above analysis, it is concluded that during the initial period that there is much awareness among rural people about the performance of rural banking system which turns down the low rate of disbursement as compared to loan issued. The case of the low percentage of loan disbursed as comparison to loan issued is due to the complexity and bureaucratic way of functioning of the banks. Illiteracy among the rural people is also an important cause for the low turn though the sole aim to set up RRB is to provide credit to rural people at low cost but the rate of cost in RRB is high as comparison to other credit institution and the requirement of modgage for security, required for the disbursement loan is the another cause of the low disbursement rates.

During the flow time the awareness among the people about the functioning of RRB fascinated the credit disbursement in the rural and agrarian area. Policy like re-paid of loan in post harvest period, insurance of crops, and the availability of new technology and smooth procedure of credit facility increase the growth rate of credit disbursement.

### **3.3.1. C. Credit disbursed Recovery Performance**

In an economically backward state like Orissa, mere expansion the of commercial banks may not meet the emerging requirements of the rural areas. The RRBs aim to give credit the rural agrarian groups. But after 30 years (1975-2004) of set up RRB many RRBs have so poor performance having large NPA (non performing assets) period of time, the bank management of public sector have been re-organised to make them professional. However the

chief executive of the bank cannot take any decision on his own nor can he make his own interpretation particular banking policy. In practices therefore, he enjoy less freedom owing to lack of autonomy. So, the management should be such that bank should show-profit which can be achieved by increasing the rate of recovery of credit.

From the graph number 3.8 to 3.10 shows the performance of RRBs in respect of loan issued and recovered.

So recovery performance is an important indicator of the performance of RRBs.

**Table.3.3a: Loan Disbursed-Recovery across the Zones (1986-87)**

Zone-1	LOAN(LAKH)	DISBURSED	RECOVERY	Percent
PURI	PURI GB	257.06	136.65	53.25
CUTTACK	CUTTACK GB	2301.07	463.61	20.14
BALASORE	BALASORE GB	288.8	87.61	30.25
GANJAM	RUSHIKULYA GB	108.57	43.58	40.14
	AVERAGE	738.875	182.81	24.74
<b>Zone-2</b>				percent
DHENKANAL	DHENKANAL GB	455.96	206.27	45.24
KEONJHAR	BAITARANI GB	828.74	308.95	37.28
	AVERAGE	642.35	257.61	40.10
<b>Zone-3</b>				percent
	KORAPUT			
KORAPUT	PANCHABATI GB	1275.98	512.56	40.17
KALAHANDI	KALAHANDI AGB	440.93	177.03	40.15
BOLANGIR	BOLANGIR AGB	802.45	281.98	35.14
	AVERAGE	839.79	323.86	38.56

Source: Statistics on RRBs, NABARD, Mumbai

**Table.3.3b: Loan Disbursed-Recovery across the Zones (1992-93)**

ZONE-1	DISBURSED	RECOVERY	Percent
PURI GB	133.26	80.99	60.77712
CUTTACK GB	133.26	56.46	42.3659

BALASORE GB	173.71	71.01	40.87606
RUSHIKULYA GB	1111.92	522.61	47.00033
average	388.04	182.77	<b>47.10</b>
DHENKANAL GB	280.61	141.83	50.54
BOLANGIR AGB	494.12	288.37	58.36
average	774.73	430.20	<b>55.53</b>
KORAPUT PANCHABATI GB	755.58	453.45	60.01
KALAHANDI AGB	265.18	142.31	53.67
BOLANGIR AGB	404.46	178.82	44.21
average	475.07	258.19	<b>54.35</b>

*Source: Statistics on RRBs, NABARD, Mumbai*

**Table.3.3c: Loan Disbursed-Recovery across the Zones (1998-99)**

<b>ZONE-1</b>	<b>DISBURSED</b>	<b>RECOVERY</b>	<b>percent</b>
PURI GB	6991.94	5497.35	78.62
CUTTACK GB	3614.40	1871.40	51.78
BALASORE GB	697.02	266.35	38.21
RUSHIKULYA GB	3072.35	2166.06	70.50
average	14375.71	9801.16	<b>68.18</b>
DHENKANAL GB	3933.89	2845.79	72.34
BOLANGIR AGB	2647.60	1549.46	58.52
average	5047.56	3428.23	<b>67.92</b>
KORAPUT PANCHABATI GB	4557.31	2986.03	65.52
KALAHANDI AGB	2209.97	1434.80	64.92
BOLANGIR AGB	2949.46	1728.36	58.60
average	4554.29	3052.27	<b>67.02</b>

*Source: Statistics on RRBs, NABARD, Mumbai*

**Table.3.3d: Loan Disbursed-Recovery across the Zones (2001-02)**

<b>ZONE-1</b>	<b>DISBURSED</b>	<b>RECOVERY</b>	<b>percent</b>
PURI GB	10945.27	8473.45	77.42
CUTTACK GB	9975.10	5124.16	51.37
BALASORE GB	1475.99	470.55	31.88
RUSHIKULYA GB	5763.33	3748.00	65.03
average	7039.92	4454.04	<b>63.27</b>
DHENKANAL GB	7604.21	6298.47	82.83
BOLANGIR AGB	6253.78	4205.60	67.25
average	7008.23	4682.04	<b>66.81</b>
KORAPUT			
PANCHABATI GB	6602.62	3344.22	50.65
KALAHANDI AGB	2997.82	1998.09	66.65
BOLANGIR AGB	6584.98	4245.82	64.48
average	6568.30	4276.77	<b>65.11</b>

*Source: Statistics on RRBs, NABARD, Mumbai*

In this section it has shown the ratio or percentages of loan disburse and loan recovered by banks from period to period. It is an important indicator of the performance of banks either low NPA or profit of RRB. During period, 1986-87, RRBs in zone-1 has the poorest performance in case of credit recovery as comparison to other zones i.e. zone-III and zone ,during this period PGB, in zone-1 has performed tremendously in case of loan recovery .It has recovered 53% of loan disbursed to agricultural sector. During this period expect PGB most RRBs recovered less than 50% loan disbursed, which reflects the poor performance of RRBs.

It may be occurred due to crop failure, or strict legal action has not taken place against the defaulter. Cuttak Grammeen Bank, during this period has shown very poor performance regarding to recovery of loans. During 1989-90 the growth rate of recovery of loans has increased during this period as compared to previous period. The Koraput panchabati Grameen bank has recovered 48.2% of loan, which is less than 50% .But PGB has increased the recovery performance to 57.41% which reflects the growth rate has increased and the numbers of defaulter has decline from time to time. "CGB" has also

remained constant in growth of recovery of loan performance during this period. The RRBs have faced problems in both organizational and operational, which are considered for convenience under certain heads. The heavy incidence of overdue is attributable to a host of internal and external factor. The internal factor contributing to low recovery have been defective loaning policies, weak monitoring and supervision apathy towards recovery.

From the above recovery performance it is found that the develop and advanced agricultural sector in coastal districts like Puri, Balasore, Ganjam, except Cuttack, the growth rate of recoverance credit has increased, but the districts like KBK has recovery performance very low during this period. From the period 1989-90 to 1992 both growth rate recovery as well as disbursement of decline sources that not only disbursement but also recovery performance also less only Panchavati Grammen Bank recovery performance has increased. The growth rate of recovery performance is due to good monsoon and free drought period.

In 1992-93 the external factors which decline the non-performance of the recovery like natural calamity draught were not present as a result there is a good crop which increase the growth rate of loans during this period PGB in Zone-1 and KPGB (Zone-II) has recovered 60% of the loan disbursed. Zone -II has recovered 55% of the loan was slightly grater than the other zone of recoverance.

After the liberalization started there is change in credit policy of the banks and various committees set up for the good performance of RRB the policy recommended decreasing the rate of defaulter and increasing the recovery rate. ECRC<sup>8</sup> has advised for the prompt and full recovery of the loan funds is the key to success of any financial intermediation. Legal formalities of executing prescribed documents are thus essential art of the borrowing process. This could be quite comber sum since nationalized of banks change the base of the system from classes to masses there have been some simplifications.

The other recommendations made by ECRC for the rapid recover the default loans i.e. for any credit institution capacity to lend increases with

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<sup>8</sup> NABARD, Report of the Expert Committee on Rural Credit (23 July, 2001): Summary and Core Recommendations (Mumbai: NABARD).

recycling of funds gains by recovery of its earlier loans and vice versa. It has found that the state have been more efficient legal and other support mechanism for recovery of and rural ethos conducting to repayment of loans.

Again to increase the pace of recovering, RBI appointed M.C. Bhandari committee to suggest major for restructuring RRBS and the most of the recommendation of Bhandari committee implemented. In the post liberalization period specially, after 1995-96 the growth rate of recovery is more than the growth rate of disbursement. During this period RRBs in zonal-I has higher growth rate both in loan disbursement which varied from 0.54% 1.58 percent but CGB of Zonal-I, and PGB of Zonal-I, has achieved tremendous in case of growth rate of RRB recoverance whereas the zonal-II has less growth in recoverance of credit.

All the RRBs in three different zones i.e. Zonal-1, Zonal-II & Zonal –III has recover more than 60% of the loan during 1995-98. There is convergence in the case of recovery of loans as compared to previous period. The zones are more uniform in the recovery of RRB credit. PGB of Zonal-1 recovered more than 78.62% of disbursed loan where as Rushikulya Grammen Bank has recovered 70.50% loan disbursed.

Except Balasore Grameen bank all the other RRBs has a “positive” growth rate during this period Cuttack Grameen bank has increased increased growth rate from 0.132% 0.4% whereas PGB has decreased from 0.42% to 0.1% but in case of growth, zonal – III RRBs which operate in backward compare to zone-I, except Kalahandi Grameen bank all other banks have reported a decreasing growth rate of loan recovery, as compared to disbursement.

The percentage of recovery of credit is still less than 90% where as in case of Balasore the recovery performance is just 40% which shows the poor performance of this Grammen Bank, whereas the other GB shows more or less 60% of the recovery of loans though increased as comparison to the previous period but still not satisfactory

But, in the period 2003 both there is legal provision and strict rule for the RRB to recover loans, the recovery rates is going down in Zone-II, from 67% to 66%. Whereas in case of Zone-III, it has declined from 66% - 65% which show the negative growth rate of credit has comparison 1998-1999 thus



in above analysis, it is found that the recovery growth rate has increase but not achieve the target.

It has been also seen that the districts in Zonal-1 which are in coastal regions ,loans disbursed used for the investment purposes like irrigation tube-wells, purchases of tractors and agricultural implements shows better recovery as performed by PGB, CGB, RGB, in Zonel-1 whereas RRB in backward zones – III (KBK) which have no irrigation facilities, no highly equipment, no transportation and communication to transfer their agricultural product to market shows poor recovery of loans.

Accumulated non –recovery of the credit is an importance cause of the loss which lead to capital erosion, apart from this over dues result in non-cycling of funds which in turns necessities increasing dependent of the bank on external sources particularly refinancing which increasing the borrowing rate of the RRB from the other financial institution, like NABARD sponsored commercial bank, and concerned states.

The basic policy question which requires an answer is whether it could recong nise the role of RRBs in the rural credit system of the country and whether the institutions should continue as an important part of rural credit delivery system. An answer to this question should point to the directions of further policy actions. Though there are loopholes in performance RRBs, but RRBs done very well a point which even Khusro committee accepts albeit reluctantly. Viewed in relation to the performance of the banking system as a whole respect of rural credit, the role of RRBs is indeed substation, despite the fact that these institutions are of recent origin.

*Chapter IV*

*Impact of Regional  
Rural Banks' Finance  
on Agricultural  
Growth in Orissa*

The setting up of RRBs constitutes an important innovation in the history of Rural Banking in India. They are setup in areas where the existing institutional arrangements for the credit are weak and inadequate. The RRBs setup in India on the lines of the people's Bank in Ceylon<sup>1</sup>. The objective of the rural credit Policy in India since 1951 has been to enlance the role of institutional credit agencies and provide credit to the farmers, artisans and other weaker sections at their door step so to say, and to reduce the role of non institutional credit agencies specially the primary money lenders.

In an economically backward state, like Orissa where 63% people are living in rural area and depend on agriculture, mere credit expansion on the commercial banks may not meet the emerging requirements of the rural areas. The RRBs were setup in Oct. 1975 with the aim of increasing banking facilities in rural areas and serving more specially to poorer sections of the rural population. The banks are expected to concentrate their activities in one or two districts.

The train and growth of bank offices by RRBs,<sup>2</sup> shows that in the 1976 there were four RRBs with 43 Branches by 1989 which increased to nine RRBS and 816 branches. There was also improvement in the number of villages served for Branches and average rural population served per branches during the same period.

As stated above and previous section, the Prime objective of RRBs is to lend the priority sector special to agriculture sector. Though it is very difficult to relate between the RRB and Agriculture sector in district level in all over India during a short span of time Orissa has taken the case study ,where 9 RRBs

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<sup>1</sup> Banoo Prem Kumar(July,1995),Regional Rural Banks:An analysyis.Kurukeshtra

<sup>2</sup> Source:Performance of RRBs,(1985),NABARD,Mumbai

financing 13 districts in initial period that is 1985-86 which increased to 30 districts after 1995-96.

In this chapter it has to locate to what extent RRB's contribute agriculture development in Orissa both directly and indirectly, before analyzing the relation or contribution of RRB's to agriculture let us have birds eye view on the agriculture situation of Orissa during last 18 years. That is from 1985 to 2003.

#### **4.1 AGRICULTURE SITUATION IN ORISSA**

Agriculture sector is the be all and the end on all of Orissa economy. Land is the chief source of income for an Oriya farmer. Therefore agriculture economy of the state is much dependent on the productivity of land Orissa which eats total geographical area of 15,540 thousand hectares, the net soon area cover under different crops to agriculture purpose accounts for 59.90 thousand hectors, the net of which the gross irrigated area what's out of 18.54 thousand hectares with a gross cropped area of 82.75 thousand hector<sup>3</sup>. Nearly 64% of the working population is engaged either directly or indirectly in this sector. Some distinguished feature of agriculture in Orissa which have relevance to planning period.

Agriculture in Orissa continues to be characterized by low productivity due to traditional Agriculture practices in declarer capital formation and low investment, inadequate irrigation facilities and un economical size of holdings. Nearly 62% of the cultivable lend is rain fed and exposed to the verges of monsoon. The percapita availability of cultivable land which was 0.39 hectares in 1950-51 hectares declined to 0.17 hectares in 2001-02. Out of the total number of operation holding of 39.66 lacs 81.98 % is held by small and marginal farmers as

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<sup>3</sup> (Source: Agriculture census of Orissa, 2000)

for agriculture census 1995-96 most of these small and marginal farmers do not have the means to make adequate investment in agriculture due to poverty<sup>4</sup>.)

Recognizing the importance of this sector to the State's economy, the State government has come up with a comprehensive Agriculture Policy according agriculture the status of an industry. The objectives of the above policy shall be pursued vigorously during the Tenth Plan to make Agriculture sector one of the growth engines for accelerating the pace of development of the State. The State Agriculture Policy 1996 aims at doubling the population of food grains and oil seeds, generation of adequate employment opportunities in the rural sector and eradication of rural poverty with in a specific time frame. The main objectives setouts in the State Agriculture Policy 1996 are as follows:

- i. To enhance the status of Agriculture from the present level of subsistence agriculture to a profitable and commercial venture, so that young persons can accept agriculture as a means of self employment.
- ii. To generate adequate employment opportunities.
- iii. To adopt integrated programs for problem soils such as water logged areas, areas with soil erosion, dry rain fed areas, area under shifting cultivation, waste land, saline and-alkaline soil etc
- iv. To create entrepreneurship in the field of agriculture and horticulture.
- v. To create skilled laborers for management of modern agriculture.
- vi. To help mechanization of agriculture to increase productivity.
- vii. To establish Agro-based Industries and Food Processing Industries.
- viii. To provide irrigation facilities to 50% of cultivable and through completion of incomplete irrigation projects and promotion of individual and group enterprise.

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<sup>4</sup> (source: economic survey of Orissa,2002-03)

- ix. To promote private enterprise in the marketing of agricultural produces.
- x. To identify and promote thrust crops in different agro-climatic zones of the State.
- xi. To reorient agriculture towards export.

#### **4.2 .PRODUCTION OF FOODGRAINS:**

Table 4.1 presents data on production of food grains in the State during the last five years i.e. 1997-98 to 2001-02. Production of food grains has fluctuated over the years. There was a bumper harvest during 1997-98 with a production of 66.11 lakh metric tonnes of which the share of rice alone was 93.86%. But the production declined to 57.88 lakh MT during 1998-99 and 1999-00 respectively. The low production of food grains during 1999-00 was on account of the devastation caused by the Cyclones that hit the 14 fertile coastal districts of the State in October 1999. During 2000-01, the food grains production declined further to a very low level of 49.75 lakh MT as the State experienced a drought situation due to erratic and early cessation of monsoon which affected 12.19 lakh hectares of crop land. However during 2001-02, there was again a record production of food grains of 75.47 lakh M.T. on account a bumper production of rice (71.49 lakh MT) in spite of an unprecedented devastating floods during 2001.<sup>5</sup> It was possible due to concerted efforts made by the State Government by giving incentive support to the farmers and also by generating a climate of awareness among the farming community.

Rice is principal food crop of the State. The average yield rate of rice in Orissa which was 10.41 quintal per hectares. In 2000-01 increased to 24.07 quintal per hectares. During 2001-02, the percapita availability of food grains per annum

which was 189 kg in 1997-98 increased to 204 in 2001-02. The contribution of Orissa to the food grain basket of the country which was 2.41% in 1996-97 is estimated at about 2.54% in 2000-01.

**Table 4.1: Food grain Production in Orissa**

		(in lakh MT)				
Sl. No.	Food Crop	1997-98	1998-99	1999-00	2000-01	2001-02
1	Rice	62.05	53.91	51.87	46.13	71.49
2	Total cereals	63.51	55.43	53.58	47.67	72.81
3	Total pulses	2.60	2.45	2.44	2.08	2.66
	Total foodgrain (Sl,2+3)	66.11	57.88	56.02	49.75	75.47

*Source: Directorate of Economics and Statistics, Orissa, Bhubaneswar.*

#### **4.3 AGRICULTURE PROBLEMS:**

A part from irrigation, floods, droughts, low yield for hectare and division and fragmentation of holdings are the most important agriculture problems of the state

##### **(a) Low Yield**

Low yield per hectare in Orissa is one of the major worries in agriculture. In cereal crop like rice, maize, and wheat, the yield per hectare is lower than other majority of the states. The yield of pulses is also lower than the national average. Low per hectare yield in Orissa is primarily due to the low consumption of fertilizers in state.

##### **(b) Sub Division and Fragmentation of Holdings**

The unbalanced population growth and expansion of cultivated land on the one hand and the slow rate of development of other industries have exerted extra

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<sup>5</sup> (source: Agricultural Statistics Orissa ,various issues)

pressure on agriculture. The rate of fragmentation is higher in the case of economic holdings there is a trend towards consolidation. Surprisingly in Orissa, the pressure of agricultural population has not adversely affected the size of holdings.

**(c) Crop concentration and Diversification:**

As for as crop diversification in Orissa is concerned, rice ranks first in all the districts of the state. There is some diversity in the second ranking crops, gram, and jowar. Ragi, seasmum, and maize are the major second rank crop in Orissa. In crop diversification Baud, Phulbani, again comes into the picture as the district alone 'little diversification' 'in other districts alone has "little diversification".

In this situation the Govt. policies play an important role in the contribution of agriculture growth among them institutional credit one of the most important features, in above, table which depicts, the different sources of both institutional credit flow to agriculture. As on of the main objective of the state agriculture policy is to provide agriculture credit to the required farmer at subsidized rate of interest

**4.4. AGRICULTURAL CREDIT**

**TABLE 4.2: Agricultural Credit Advanced in Orissa from 1997-98 to 2002-03**  
(Rs. in crore)

Year	Commercial Banks	RRBs	Co-operative Banks	Total	Percent of RRB to total credit
1997-98	163.3	79.18	225.48	467.96	16.92
1998-99	172.82	101.9	349.33	624.05	16.33
1999-00	197.3	95.14	467.48	759.92	12.52
2000-01	206.23	134.1	442.38	782.73	17.13
2001-02	266.4	129.8	532.25	928.45	13.98
2002-03	286.47	140.14	480.17	906.78	15.45

Source: State Level Bankers Committee, Bhubaneswar, Orissa



The total amount of agricultural credit advanced, by different Commercial Banks, RRBs, Co-operative Banks and OSFC (Orissa State Financial Corporation) during 2001-02 was to the tune of Rs. 928.99 crore as compared to Rs. 783.21 crore in 2000-01. Out of the total agricultural loan financed during 2001-02, the share of Co-operative Banks was 57.29 % followed by Commercial banks (28.68%), RRBs (13.97%) and OSFC (0.06%).<sup>6</sup> The investment made by different financing agencies in the agricultural sector in 2001-02 has increased by 18.61% over the previous year. The amount of loans financed by Co-operative banks and Commercial Banks has increased substantially by 20.32% and 29.18% respectively in 2001-02 in comparison to the previous year, but financing by Regional Rural Banks has registered a decrease of 3.44% during the same period.

#### **4.5. Agricultural Credit Supplied By RRBs and Agricultural Growth:**

In this section, it has to be analyze the contribution of RRB to agriculture growth in Orissa at district level to following parameters-

1. Value of the agriculture output per hectare –agriculture credit given for hectare by RRBs in different districts.
2. Rate of growth of agriculture credit disburse and recover it and agriculture credit per hectare.
3. Impact of agriculture credit recovery and the flow of the agriculture credit on agriculture production.

##### **(i) Value of agriculture out put per hectare:.**

In this section only of the value of the food grains produced during the period of time has been calculated. It is due to the reason the principles crops of Orissa is food grains as compare to oil seeds and caps crops. The important food grains are

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<sup>6</sup> (SOURCE: State Level Bankers Committee, Bhubaneswar)

rice, wheat, jawar, Bajra, Maize, Arhar, Moong, etc. has most of the agricultural producer produce food grains for the self consumption so in this section here to analyze impact of RRB credit on food grain production.

*Minimum support price:* For the calculating the value of food grains, minimum support price (MSP) has taken instead of open market prices due to reason that MSP announced by the Government includes all the cost of the production and induce the farmer to produce more crops. MSP of the Government is directed at providing insurance to agriculture producer against any start fall in prices. The MSP are fixed to set a floor below which market prices cannot fall. The MSP served as the floor prices and were fixed by the Government, in the nature of a long term guarantee for investment decisions of producers, by lending credit from different institutions and non-institutions. The another important cause to take MSP into account due to uniformity of prices of different crops all across the states and every districts though market price may be higher or lower. but to bring comparison among various districts it is a suitable parameters.

To estimate the impact of RRB credit on the agriculture growth rank correlation of Pearson has taken

$$\rho = 1 - \left[ \frac{6 \sum d^2}{n^3 - n} \right]$$

*Where d = Deviation between two ranks*

*n = No. of observations*

*ρ = Spear sans Correlation Co-efficient*

After ranking the district in terms of descending order regarding the position of there per hectare credit and the value of agriculture output (only food grains) per hectare during the different time period taken 1986-87, 1992-93, 1995-96, 2001-02.

**TABLE 4.3: Rank correlation coefficient between RRBs credit and value of output**

1986-87	ag credit given by RRB	VALUE OF OUTPUT PER HECT	Pearson ( $\rho$ ) Correlation
	RANK	RANK	
PURI GB	4	4	<b>.08</b>
BOLANGIR AGB	2	2	
CUTTACK GB	3	9	
KORAPUT PANCHABATI GB	1	3	
KALAHANDI AGB	7	8	
BAITARANI GB	5	5	
BALASORE GB	8	6	
RUSHIKULYA GB	9	1	
DHENKANAL GB	6	7	
1992-93	ag credit given by RRB	VALUE OF OUTPUT PER HECT	
PURI GB	1	1	<b>.48</b>
BOLANGIR AGB	2	4	
CUTTACK GB	7	9	
KORAPUT PANCHABATI GB	6	7	
KALAHANDI AGB	4	8	
BAITARANI GB	5	2	
BALASORE GB	9	3	
RUSHIKULYA GB	3	6	
DHENKANAL GB	8	5	
1995-96	ag credit given by RRB	VALUE OF OUTPUT PER HECT	
PURI GB	1	9	<b>.43</b>
BOLANGIR AGB	6	5	
CUTTACK GB	8	8	
KORAPUT PANCHABATI GB	4	2	
KALAHANDI AGB	5	4	
BAITARANI GB	7	7	
BALASORE GB	9	6	

RUSHIKULYA GB	3	1	
DHENKANAL GB	2	3	
	<b>ag credit given by RRB</b>	<b>VALUE OF OUTPUT PER HECT</b>	
2001-02	<b>RANK</b>	<b>RANK</b>	
PURI GB	1	6	0.41
BOLANGIR AGB	4	2	
CUTTACK GB	2	1	
KORAPUT PANCHABATI GB	7	5	
KALAHANDI AGB	6	7	
BAITARANI GB	9	9	
BALASORE GB	8	3	
RUSHIKULYA GB	3	4	
DHENKANAL GB	5	8	

To evaluate the rank correlation of the districts between the agriculture credit supply per hectare and the value of agriculture output above formula given by Charles Edward Spearman Used.

During the time period 1986-87,  $\rho = 0.08$  which indicate there is list correlation between the two value that is value of agriculture output and credit per hectare of among districts.

During this period Koraput Panchwati GB is lee among the entire district RRB incase of agriculture credit supply where as Ganjam district which is financed by Rushikulya GB is leading the entire district in terms of value of agriculture output per hectare.

In period 1989-90 that is during this period there is an inverse relation ship between two variables but value of  $\rho$  is very less though is negative that means there is a list negative co-relation between value of agriculture output and agriculture credit. During this period PGB is leading incase of per hectare credit but rant 7<sup>th</sup> incase of Productivity. This analysis reflects that during this period all other infrastructural factors in monsoon natural calamities affect the production

rather than credit supply. In 1992-93 Period the  $\rho$  has increased to 0.48 which indicates that during this period there is more positive correlation between the two indicators as compared to the previous period. Though there is not so high correlation but change from negative to positive reflects there is increasing correlation between then before. During this period there is a large gap between rank of one district except Balasore which shows increase of the concern districts as compared to credit other institutional factors are more responsible for the agriculture growth.

As going towards the end time period we have taken the correlation coefficient between the two variables going up as in period 2001 in which rank correlation is 0.41, which is greater than 0.3, thus it can be concluded though other factors responsible for the agriculture growth the RRB credit also play major role providing inputs in rural areas through term and crop credit which directly influence the agriculture of growth.

**(ii) .Agriculture credit given – Recovery by RRB;**

If (Agriculture credit per hectare disbursed)  $t = F(\text{Agriculture credit per hectare recovered by RRB})_{t-1}$

Above functional relation between two indicators of RRB shows that disbursement of agriculture credit in time period “t” is depends on agriculture credit recovery during the time period “t-1”.

To evaluate the correlation between this two variables again rank correlation method has taken place the RRB's in different districts are ranked in descending order both in the capacity to flow agriculture credit and efficient to recover disbursement. In this subsection it is analyzed the impact of the recovery of loans in t-1 period on the disbursement of credit in 't' period.

During the initial period by observing,  $\rho = 0.98$ , which explain during the initial period there is no so much influence of recovery of credit on the disburse of credit though the relation between them is positive. It may be due to RRB policy during the initial period to attract more customer and the Govt. Policy towards RRB as not a profit making public sector rather welfare of poor and agricultural groups in remote and rural areas where other profit making institutes are not willing to deliver their services., this has expressed in diagrammatic form in graph number 4.1 .

But in the next period the value of  $\rho$  is 0.93 which explain that there is a high positive correlation between the two variables. during 1989-90 the recovery performance of credit in Dehankanal GB has notable as compare to other banks where as incase of disburse of the credit during this period the same GB has lead all the RRB's which implied the positive and perfect correlation between these two indicators of RRB remaining other things constant.

During the period 1992-93 spearman's coefficient is very close to 1 which implied that there is a positive correlation between the disburse credit during time period  $t$  and the recover performance of RRB during the time period  $t-1$ . But during 1998-99the correlation coefficient is equal to 0.95 which indicate the recovery performance of agriculture credit by RRB explaining only about that credit disbursement during the next period, which expressed in graph 4.2 .

Thus from above analysis it is found that the performance of RRB incase of recovery which is an important reflector of RRB has positive impact on credit disbursement.

**TABLE 4.4: Rank correlation coefficient between RRBs credit disbursed and recovered across the RRBS(During Different Time Periods)**

ag credit given by RRB	1986-87(RUPEES)	rank	Rs recovery	rank	p
PURI GB	34061417	4	18137704	4	0.98
BOLANGIR AGB	54639267	3	19200238	2	
CUTTACK GB	91216893	2	18371082	3	
KORAPUT PANCHABATI GB	97173125	1	39034444	1	
KALAHANDI AGB	19522982	7	7838477	7	
BAITARANI GB	26384963	5	9836314	5	
BALASORE GB	14307720	9	4328085	9	
RUSHIKULYA GB	14465910	8	5806616	8	
DHENKANAL GB	21233117	6	9605862	6	
<b>1989-90(RUPEES)</b>					
PURI GB	28453100	3	16334925	2	0.93
BOLANGIR AGB	35067500	2	11716052	4	
CUTTACK GB	4595160	8	1078484	7	
KORAPUT PANCHABATI GB	25942400	4	12496454	3	
KALAHANDI AGB	1824070	7	757719	8	
BAITARANI GB	231912	9	89170	9	
BALASORE GB	8239300	6	2648111	6	
RUSHIKULYA GB	11989800	5	4932604	5	
DHENKANAL GB	47109200	1	22240253	1	
<b>1992-93</b>					
PURI GB	32881520	4	19984439	3	0.9
BOLANGIR AGB	32309732	5	14284961	5	
CUTTACK GB	24930000	6	10010931	8	
KORAPUT PANCHABATI GB	41596053	3	24963010	2	
KALAHANDI AGB	23638985	7	12685918	6	
BAITARANI GB	18162275	8	10599679	7	
BALASORE GB	6063590	9	2478557	9	
RUSHIKULYA GB	41667877	2	19584040	4	
DHENKANAL GB	75228900	1	38022891	1	
<b>1998-99</b>					
PURI GB	248285787	1	174246966	1	1
BOLANGIR AGB	118539348	4	73684059	5	
CUTTACK GB	56070480	9	13154135	8	
KORAPUT PANCHABATI GB	159436805	2	103920909	2	
KALAHANDI AGB	124194152	3	79670548	3	

2001-02				
PURI GB	235414437	1	160482022	1
BOLANGIR AGB	214084277	2	141852242	2
CUTTACK GB	70911981	8	25074477	8
KORAPUT PANCHABATI GB	163459518	3	93744034	3
KALAHANDI AGB	110682632	6	72552465	6
BAITARANI GB	104642961	7	59437202	7
BALASORE GB	20573165	9	4746229	9
RUSHIKULYA GB	134055317	4	88275426	4
DHENKANAL GB	131008013	5	84578773	5

$\rho=1$

Thus from above analysis it is found that the performance of RRB incase of recovery which is an important reflector of RRB has positive impact on credit disbursement. The ratio or efficiency of RRBs in Orissa in respect of agricultural credit supply and recovery has shown in graph 4.3 and 4.4 for the year 1998-99 and 2001-02 respectively.

**(iii). Impact of agriculture credit recovery and the flow of the agriculture credit on agriculture production.**

If (productivity per hectare) is a function of credit provided by RRB, lag credit given by RRB and recovery of agriculture credit which can be written in terms of "regression" which can be written as follow.

$$Y = \beta_0 + \beta_t C + \beta_{t-1} C + \beta_r + U$$

$\beta_0$  = Coefficient interpreted as production elasticity.

$\beta_t$  = coefficient interpreted as current year agricultural credit

$\beta_{t-1}$  = coefficient interpreted as lag credit in time period

$\beta_r$  = coefficient interpreted as recovery of lag credit

U = stochastic term

If growth rate of agricultural productivity is a dependent variable which depends on the credit during the current period and the credit during the previous period



and the rate of recovery during the previous period. The regression among this variables has been calculated where the number of observation is very small that is 9 and number of independent variable is 3.

Model Summary

Model	R	R Squar	Adjusted R Square	Std. Error of the Estimate
1	.376	.14	-.144	1.6411

a Predictors: (Constant), VAR00002, VAR00003

Coefficients

Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig
Model		B	Std. Error	Beta		
	(Constant)	2.771	1.06		2.601	.04
	VAR00003	-.178	.29	-.546	-.603	.56
	VAR00002	.165	.76	.197	.217	.83

a Dependent Variable: VAR00001

1986-87 :-During this period  $R^2 = 0.142$  which is less than 0.5 hence the result is insignificant. In this period the independent variables explain 14.2% above the dependent variable.

Model Summary

Model	R	R Squar	Adjusted R Square	Std. Error of the Estimate
1	.385	.14	-.363	.2203

a Predictors: (Constant), VAR00004, VAR00003, VAR00002

Coefficients

Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig
Model		B	Std. Error	Beta		
	(Constant)	1.011	.16		6.096	.00
	VAR00003	.146	.16	2.541	.877	.42
	VAR00004	-.278	.33	-2.398	-.827	.44

	2					
	VAR00004	2.823E-03	.01	.070	.169	.87

a Dependent Variable: VAR00001

1989-90 : As  $R^2$  value is greater than value of 1986-89, thus in during this period the independent variable explain much more above dependent variable that is growth of agriculture productivity as comparison to 1986-87.

#### 1992-Model Summary

Model	R	R Squar	Adjusted R Square	Std. Error of the Estimate
	.861	.74	.587	.7307

a Predictors: (Constant), VAR00004, VAR00002, VAR00003

#### Coefficients

Model	Unstandar dized Coefficie nts	Std. Erro	Standardi zed Coefficie nts	t	Sig
Mode	B		Beta		
(Constant)	1.470	.44		3.289	.02
VAR00003	-.214	.38	-.907	-.559	.60
VAR00002	-.230	.72	-.503	-.319	.76
VAR00004	.713	.24	2.064	2.926	.03

a Dependent Variable: VAR00001

During 1992-93, value of  $R^2$  is equal to 0.742 which explain the above taken independent variable explain 74.2% about the dependent variable.

#### Model Summary

Model	R	R Squar	Adjusted R Square	Std. Error of the Estimate
1	.581	.33	-.059	3.2119

a Predictors: (Constant), VAR00004, VAR00002, VAR00003  
Coefficients

		Unstandar dized Coefficie nts	Std. Erro	Standardi zed Coefficie nts	t	Sig
Mode		B		Beta		
	(Constant )	4.392	3.37		1.302	.25
	VAR0000 3	-.314	1.10	-.761	-.284	.78
	VAR0000 2	.754	1.44	1.353	.521	.62
	VAR0000 4	-.476	.33	-.735	-1.409	.21

a Dependent Variable: VAR00001

1995-98 : As  $R^2 = 0.338$  is less than significant value 0.5 which means the independent variable explains very little about the dependent variable. As compared to the previous year, the independent variable explains very little about the dependent variable during this period.

#### Model Summary

Model	R	R Squar	Adjusted R Square	Std. Error of the Estimate
1	.927	.86	.776	34.8057

a Predictors: (Constant), VAR00004, VAR00003, VAR00002  
Coefficients

		Unstandar dized Coefficie nts	Std. Erro	Standardi zed Coefficie nts	t	Sig
Mode		B		Beta		
	(Constant )	-2.968	24.66		-.120	.90
	VAR0000 3	8.505	1.75	2.366	4.834	.00
	VAR0000 2	-9.760	3.07	-1.850	-3.170	.02
	VAR0000 4	-.855	1.12	-.209	-.762	.48

a Dependent Variable: VAR00001

**2000-01:** The value  $R^2 = 0.86$  is greater than 0.5 which is significant and hence explain about 86% of dependent variable.

Though, other factors playing major role in the growth of agricultural production, credit given by RRBs plays an important determinant to purchase inputs and technology required for production of agriculture.

**Concluding Observations:**

The scope of the credit and other facilities provided by RRBs to the rural masses in Orissa is not limited .But the function of branches were very limited that is in terms of agricultural credit these are only collected deposits and provide crop loan only. But the analysis indicated that agrarian people prefer this rural bank in which recovery of loans are though flexible during initial period but latter it is very strict. From above analysis it is indicated that there is a strong positive co relation between recoverance of credit in previous period to disbursement of credit during the current period.

*Chapter V*

*Conclusion*

It would suggest specific strategies for managing institutional credit to serve the farmers needs with emphasis to help to the small & marginal- farmers. Activities other than crop production, such as animal husbandry, inland and marine fisheries, silviculture including farm forestry, will also grow significantly. These activities offer large scope for credit support. Rural Finance Institutions (RFI) are mainly geared to finance crop production loans. Special efforts are needed to finance these non crop activities. Hurdles such as in adequacy of feed and fodder, poor quality livestock, insufficient veterinary services and limited processing facilities hamper animal husbandry, poultry and fisheries. Successful pursuit of forestry requires public participation as well As technical support. Credit institutions can play their important role in the progress of these activities only after these initial hurdles are removed.

There had been a large flow of institutional credit to agriculture and allied activities still – the non institutional sources continued to have some hold on the rural masses. This was mainly due to they are supply of crediting for all purposes. Sufficiency is an important criterion in reliving farmers from the clutches of usurious of money lenders sufficiency implies meeting all the credit farmers and also timely supply there for institutional sources should provide credit for consumption purpose also.

There was a large credit gap specially in the permanent invest programme of the agriculture hence the institutional sources at the earliest should better equip themselves in terms of quantum of funds, men power and the technical resources to cater out the requirement of agriculture with greater priority further cause f marginal and small farmers and also the agricultural laborer there is an urgent needs to take stock of over dues and strong policy directions becomes imperatives to iron out the root causes of the problem of over dues.

Institutional credit supply should be need based , covering both short term capital requirement medium and long term demand for investment on farm assets different institution agencies exist for creating to the needs of this two types of credits .

Among these institutions RRB is an important source of agricultural credit to the rural sector. This scope of credit and other felicities provided by RRB to rural masses is not limited. The function of branches are limited that is in collection of deposits and provide crop land only but with introduction of IRDP

and all other development programmes. The functions of RRB were extended to the issue of liberal finance to artisans and other weaker sections of rural sections for various purposes under the IRDP this banks provide petty loans to the rural people. At the present RRBs have been involving with the some other bank business like commercial banks, state Governments and NABARD have assigned many functions to the RRBs .

As agricultural sector is the primary sector in India, the growth of agricultural sector has great impact on the Indian economy. Agricultural productivity is the production per hectare which increased mean there is a growth in the agricultural sector now so many advance technology and inputs are required to compete with the external advance agricultural sector hence in this sense, credit place an important role.

In the previous chapters it has analyse how RRBs functions and give service to the agriculture. After analyzing the performance of RRB in the state level in chapter2 it can be concluded that RRB place a minor role to provide agricultural credit during the initial phase, but letter the contribution of RRB is significant. States in the eastern region special Tripura, Assam Orissa, RRB plays a vital role in the agricultural credit but letter the contribution in allover India has increased. Though during initial period RRBs agricultural credit as compare to total Institutional agricultural credit is very less but in latter stage former share as compare to latter is increasing .In this chapter it has shown the variation among the states regarding to the flow of RRB and total institutional agricultural credit. From this chapter it has concluded that in eastern region states ,RRB playing major role in supplying of credit as compare to other regions.

In third chapter the function and performance of RRB at district level has analyse special reference to Orissa from the analysis the conclusion has drown that RRB should structured in such a way that they should to provide gain full employment create productivity asset and. The RRBs are likely to be bogged down in the morass of controversy on low rates of interest on their advances. It has been said that charging rates less than the normal would postpone the date of reaching their viability and therefore, the burden on the government and sponsoring banks would increase. All that the farmer wants is adequate credit at reasonable rate of intrest, which invariably is lower than the extortionate rate he was paying to the money lenders. The poorer he was, the higher the rate of interest he paid. Instances

of marginal farmers and agricultural workers borrowing grains after the monsoon and repaying double the quantity after harvest are many. It is also essential to strengthen the resources of the RRBs.

Their so many defaulters loanee and banks make loan in so many branches. Their should be mono control rather than multi control as a result of which RRB should uniform in the entire district. Management should be such that the bank will not bring so many irregularities.

From the fourth chapter the conclusion derived that in Orissa "RRB played an important role in the case of institutional agricultural credit but RRB should help to provide employment and achieved integrated rural development. Though the scope of the credit and other facilities provided by RRBs to the rural masses specially to the farmers in Orissa is not limited ,but the function of branches were very limited that is in terms of agricultural credit these are only colleted deposits and provide crop and term loans. But the analysis indicated that agrarian people prefer this rural bank in which recovery of loans are flexible.

All the government programme both central and state that is TRYSEM, DPAP , JRY etc. should be intervene with RRBs. Political interference in the function of RRB should be avoided. Bureaucratic attitude should be minimized. Timely and required amount of loans should be given. If need be instead giving a loan in the form of cash it should be subsisted for a loan in the form of physical items that is fertilizers pesticides, seeds and agricultural equipment's.



# *Appendix*

**Table 2.1: Yield per Hactare across the States (1986-87, 1989-90, 1992-93, 1995-96, 1998-99, 2001-02)**

STATE	1986-87( 000 TONNES)	AREA(000 HECT)	KG PER HECTRE
ASSAM	5997.00	3201.17	1.87
AP	21759.23	10543.73	2.06
BIHAR	15703.13	9884.00	1.59
GUJARAT	15871.80	6886.77	2.30
HARAYANA	14140.00	4631.67	3.05
HIMACHAL	1112.00	1154.63	0.96
KARNATAK	24965.30	10259.20	2.43
KERALA	4847.97	14999.33	0.32
MP	17607.63	22105.97	0.80
MAHARASTRA	36112.03	18539.13	1.95
ORISSA	10460.03	10664.47	0.98
PUNJAB	23976.07	6389.23	3.75
RAJASTAN	9126.60	14639.31	0.62
TAMIL NADU	30184.10	5944.20	5.08
TRIPURA	503.03	401.43	1.25
UP	116501.13	23486.93	4.96
WB	17020.10	7428.27	2.29
1989-90	( 000 TONNES)	AREA(000 HECT)	KG PER HECTRE
ASSAM	5760.8	3060.97	1.88
AP	27180.3	11835.80	2.30
BIHAR	19710.23	9947.97	1.98
GUJARAT	19536.47	8614.73	2.27
HARAYANA	16990.22	5102.57	3.33
HIMACHAL	1344.93	910.23	1.48
KARNATAK	29767.40	10610.67	2.81
KERALA	5910.23	16771.60	0.35
MP	21094.30	22596.66	0.93
MAHARASTRA	48008.53	20252.11	2.37
ORISSA	11963.08	16998.27	0.70
PUNJAB	25295.10	6521.13	3.88
RAJASTAN	13194.93	15401.07	0.86
TAMIL NADU	32498.97	5796.07	5.61
TRIPURA	600.40	318.51	1.89
UP	129404.00	24086.93	5.37
WB	17999.83	7360.1	2.45
1992-93	AREA(000 HECT)	AREA(000 HECT)	KG PER HECTRE
ASSAM	6090.63	3173.74	1.92
AP	28794.87	11349.97	2.54
BIHAR	17784.60	9200.69	1.93
GUJARAT	19698.60	8410.70	2.34
HARAYANA	18176.84	5150.67	3.53
HIMACHAL	1348.68	895.63	1.51
KARNATAK	34094.30	11260.63	3.03
KERALA	5912.80	12788.33	0.46

MP	22968.63	23467.42	0.98
MAHARASTRA	47026.39	19272.70	2.44
ORISSA	10983.23	11858.97	0.93
PUNJAB	26975.13	6667.27	4.05
RAJASTAN	12708.47	16027.53	0.79
TAMIL NADU	35344.87	6096.27	5.80
TRIPURA	584.37	317.27	1.84
UP	151622.53	24015.70	6.31
WB	61256.11	10622.09	5.77
1998-99	AREA(000 HECT)	AREA(000 HECT)	KG PER HECTRE
ASSAM	5901.17	3192.97	1.85
AP	33894.73	11024.07	3.07
BIHAR	20150.77	10400.77	1.94
GUJARAT	25532.40	8100.13	3.15
HARAYANA	20929.97	5586.97	3.75
HIMACHAL	1487.95	867.73	1.71
KARNATAK	44163.37	10834.05	4.08
KERALA	7189.53	1439.02	5.00
MP	27317.70	25542.37	1.07
MAHARASTRA	62993.70	19485.07	3.23
ORISSA	7657.23	6172.63	1.24
PUNJAB	30608.83	6946.78	4.41
RAJASTAN	18317.00	17456.60	1.05
TAMIL NADU	48205.83	5664.67	8.51
TRIPURA	605.33	276.37	2.19
UP	163792.53	24315.83	6.74
WB	24536.60	7644.70	3.21
2001-02	AREA(000 HECT)	AREA(000 HECT)	KG PER HECTRE
ASSAM	6289.5	3663.5	1.72
AP	37581.5	11076.5	3.39
BIHAR	20563.25	11005.5	1.87
GUJARAT	21146	8038	2.63
HARAYANA	23823	5533.5	4.31
HIMACHAL	1672.15	886.4	1.89
KARNATAK	58916.5	10637	5.54
KERALA	4978.6	1330.6	3.74
MP	21362.75	22178.2	0.96
MAHARASTRA	62759	19200.5	3.27
ORISSA	7359.5	5866.5	1.25
PUNJAB	34751.305	6993.5	4.97
RAJASTAN	14562.2	15768.55	0.92
TAMIL NADU	45718.6	5375	8.51
TRIPURA	584.4	340.5	1.72
UP	160780.25	24637	6.53
WB	25602.5	7785.35	3.29

**Table 2.2: Change in Area of Agricultural Production across the States  
(During Different Time Periods)**

STATE	AREA(000 HECT)		GROWTH RATE PERCENT
ASSAM	1986-87	1989-90	1989-90
AP	10543.73	11835.80	3.93
BIHAR	9884.00	9947.97	0.22
GUJARAT	6886.77	8614.73	7.75
HARAYANA	4631.67	5102.57	3.28
HIMACHAL	1154.63	910.23	-7.62
KARNATAK	10259.20	10610.67	1.13
KERALA	14999.33	16771.60	3.79
MP	22105.97	22596.66	0.73
MAHARASTRA	18539.13	20252.11	2.99
ORISSA	10664.47	16998.27	16.81
PUNJAB	6389.23	6521.13	0.68
RAJASTAN	14639.31	15401.07	1.71
TAMIL NADU	5944.20	5796.07	-0.84
TRIPURA	401.43	318.51	-7.42
UP	23486.93	24086.93	0.84
WB	7428.27	7360.1	-0.31
	1989-90	1992-93	
ASSAM	3060.97	3173.74	1.21
AP	11835.80	11349.97	-1.39
BIHAR	9947.97	9200.69	-2.57
GUJARAT	8614.73	8410.70	-0.80
HARAYANA	5102.57	5150.67	0.31
HIMACHAL	910.23	895.63	-0.54
KARNATAK	10610.67	11260.63	2.00
KERALA	16771.60	12788.33	-8.64
MP	22596.66	23467.42	1.27
MAHARASTRA	20252.11	19272.70	-1.64
ORISSA	16998.27	11858.97	-11.31
PUNJAB	6521.13	6667.27	0.74
RAJASTAN	15401.07	16027.53	1.34
TAMIL NADU	5796.07	6096.27	1.70
TRIPURA	318.51	317.27	-0.13
UP	24086.93	24015.70	-0.10
WB	7360.1	10622.09	13.01
	1992-93	1995-96	
ASSAM	3173.74	3143.95	-0.31
AP	11349.97	11264.70	-0.25
BIHAR	9200.69	9429.97	0.82
GUJARAT	8410.70	8479.80	0.27
HARAYANA	5150.67	5417.23	1.70
HIMACHAL	895.63	871.11	-0.92
KARNATAK	11260.63	10602.80	-1.99
KERALA	12788.33	3633.97	-34.26

MP	23467.42	24171.35	0.99
MAHARASTRA	19272.70	19700.40	0.73
ORISSA	11858.97	6452.95	-18.36
PUNJAB	6667.27	6830.28	0.81
RAJASTAN	16027.53	16894.53	1.77
TAMIL NADU	6096.27	5535.30	-3.17
TRIPURA	317.27	288.20	-3.15
UP	24015.70	23945.37	-0.10
WB	10622.09	9791.37	-2.68
	1995-96	1998-99	
ASSAM	3143.95	3192.97	0.52
AP	11264.70	11024.07	-0.72
BIHAR	9429.97	10400.77	3.32
GUJARAT	8479.80	8100.13	-1.52
HARAYANA	5417.23	5586.97	1.03
HIMACHAL	871.11	867.73	-0.13
KARNATAK	10602.80	10834.05	0.72
KERALA	3633.97	1439.02	-26.57
MP	24171.35	25542.37	1.86
MAHARASTRA	19700.40	19485.07	-0.37
ORISSA	6452.95	6172.63	-1.47
PUNJAB	6830.28	6946.78	0.57
RAJASTAN	16894.53	17456.60	1.10
TAMIL NADU	5535.30	5664.67	0.77
TRIPURA	288.20	276.37	-1.39
UP	23945.37	24315.83	0.51
WB	9791.369167	7644.70	-7.92
	1998-99	2001-02	
ASSAM	3192.97	3663.5	4.69
AP	11024.07	11076.5	0.16
BIHAR	10400.77	11005.5	1.90
GUJARAT	8100.13	8038	-0.26
HARAYANA	5586.97	5533.5	-0.32
HIMACHAL	867.73	886.4	0.71
KARNATAK	10834.05	10637	-0.61
KERALA	1439.02	1330.6	-2.58
MP	25542.37	22178.2	-4.60
MAHARASTRA	19485.07	19200.5	-0.49
ORISSA	6172.63	5866.5	-1.68
PUNJAB	6946.78	6993.5	0.22
RAJASTAN	17456.60	15768.55	-3.33
TAMIL NADU	5664.67	5375	-1.73
TRIPURA	276.37	340.5	7.20
UP	24315.83	24637	0.44
WB	7644.70	7785.35	0.61

**Table2.3: Total Institutional and RRBs Agricultural Credit across the States (During Different Time Periods)**

1986-87	RRB AG CREDIT	TOTAL INSTITUTIONAL AG CREDIT
ASSAM	127228000	7698972000
AP	133375000	13800340000
BIHAR	845357000	4952009000
GUJARAT	128098000	7023229000
HARAYANA	218294000	8927106000
HIMACHAL	49345000	749322000
KARNATAK	1210323000	14010141000
KERALA	404013000	7440790000
MP	703382000	10578514000
MAHARASTRA	262159000	8899883000
ORISSA	665909000	3574851000
PUNJAB	51628000	14749916000
RAJASTAN	686023000	7507299000
TAMIL NADU	154126000	10152305000
TRIPURA	98626000	241762000
UP	1260369000	83051690000
WB	397267000	3813844000
1989-90	RRB AG CREDIT	TOTAL INSTITUTIONAL AG CREDIT
ASSAM	425600000	1762378180
AP	3003000000	26790508900
BIHAR	1461000000	11831498720
GUJARAT	409200000	5909108000
HARAYANA	539800000	10415105000
HIMACHAL	75200000	1264952000
KARNATAK	2491600000	18434157260
KERALA	848900000	12475970940
MP	1362400000	14247651830
MAHARASTRA	8882700000	30303905330
ORISSA	1023800000	4145479300
PUNJAB	243900000	15760032080
RAJASTAN	1200000000	9919554440
TAMIL NADU	264000000	9729367570
TRIPURA	225900000	542330110
UP	3118000000	25466944180
WB	646700000	7815677000
1992-93	RRB AG CREDIT	TOTAL INSTITUTIONAL AG CREDIT
ASSAM	492400000	1955200000
AP	4030600000	34870000000
BIHAR	1721400000	11754200000
GUJARAT	799300000	15933600000
HARAYANA	659700000	15960800000
HIMACHAL	77300000	1066200000
KARNATAK	2766100000	21606800000
KERALA	1155100000	18425100000

MP	1789700000	19356800000
MAHARASTRA	1015600000	27860200000
ORISSA	1041500000	12093000000
PUNJAB	449900000	16057500000
RAJASTAN	1020000000	13865700000
TAMIL NADU	437100000	25032400000
TRIPURA	170400000	385300000
UP	4460600000	35645000000
WB	916900000	8700900000
1995-96	RRB AG CREDIT	TOTAL INSTITUTIONAL AG CREDIT
ASSAM	681000000	2845300000
AP	5376500000	46490800000
BIHAR	2303400000	13288000000
GUJARAT	1145600000	22720600000
HARAYANA	1120200000	22048500000
HIMACHAL	99900000	1260300000
KARNATAK	5320800000	32218900000
KERALA	1535600000	15800900000
MP	2835500000	25157200000
MAHARASTRA	1455800000	42586900000
ORISSA	1502200000	8591500000
PUNJAB	605100000	27628000000
RAJASTAN	2035300000	17586500000
TAMIL NADU	589400000	39517100000
TRIPURA	240400000	624000000
UP	7288500000	43623300000
WB	1227800000	12401400000
1998-99	RRB AG CREDIT	TOTAL INSTITUTIONAL AG CREDIT
ASSAM	674100000	4965100000
AP	7151500000	64486000000
BIHAR	2880200000	14752600000
GUJARAT	1860000000	30334400000
HARAYANA	1971700000	26213900000
HIMACHAL	120800000	1727700000
KARNATAK	7354500000	44828800000
KERALA	238600000	23932600000
MP	4079600000	35949500000
MAHARASTRA	1985000000	58948200000
ORISSA	2087000000	14924800000
PUNJAB	1024100000	36274800000
RAJASTAN	3186300000	23418600000
TAMIL NADU	937800000	28807800000
TRIPURA	239500000	747500000
UP	9424200000	51098800000
WB	1377700000	16308100000
2001-02	RRB AG CREDIT	TOTAL INSTITUTIONAL AG CREDIT
ASSAM	518203000	3762503000
AP	12598982000	94509482000
BIHAR	4147920000	18398320000
GUJARAT	3486203000	42171703000

HARAYANA	2995708000	41582908000
HIMACHAL	3361253000	5575553000
KARNATAK	12721011000	73690511000
KERALA	5792994000	27373194000
MP	5990228000	51118828000
MAHARASTRA	3069755000	1.30004E+11
ORISSA	4207642000	17492642000
PUNJAB	1910403000	51113603000
RAJASTAN	6410941000	42800241000
TAMIL NADU	1832948000	70147148000
TRIPURA	340408000	1001708000
UP	19589785000	84043585000
WB	8435896000	39515696000

**Table 3.1:Rate of change in Credit Disburse across the RRBs (During various period of time)**

CREDIT	1986-87	1989-90	Gr(%)
PURI GB	1911.77	1190.45	-14.61
BOLANGIR AGB	1167.52	1326.61	4.35
CUTTACK GB	3416.33	2800.16	-6.41
KORAPUT			
PANCHABATI GB	1923.27	1462.33	-8.73
KALAHANDI AGB	686.68	782.93	4.47
BAITARANI GB	1082.34	822.17	-8.76
BALASORE GB	462.14	755.09	17.78
RUSHIKULYA GB	608.77	862.01	12.29
DHENKANAL GB	498.28	486.45	-0.80
CREDIT	1989-90	1992-93	Gr
PURI GB	1190.45	2445.00	27.11
BOLANGIR AGB	1326.61	3021.00	31.56
CUTTACK GB	2800.16	5302.00	23.71
KORAPUT			
PANCHABATI GB	1462.33	2867.00	25.16
KALAHANDI AGB	782.93	1505.00	24.34
BAITARANI GB	822.17	1366.00	18.44
BALASORE GB	755.09	1492.00	25.48
RUSHIKULYA GB	862.01	1863.00	29.29
DHENKANAL GB	486.45	1390.00	41.90
CREDIT	1992-93	1995-96	Gr
PURI GB	2445.00	4916.60	29.03
BOLANGIR AGB	3021.00	5252.04	42.92
CUTTACK GB	5302.00	8819.60	-1.39



KORAPUT PANCHABATI GB	2867.00	5084.33	-3.62
KALAHANDI AGB	1505.00	2566.69	23.98
BAITARANI GB	1366.00	2868.41	26.35
BALASORE GB	1492.00	2755.30	32.17
RUSHIKULYA GB	1863.00	3444.46	17.17
DHENKANAL GB	1390.00	2996.99	29.19
CREDIT	1995-96	1998-99	Gr
PURI GB	4916.60	10784.04	29.93
BOLANGIR AGB	5252.04	6966.07	9.87
CUTTACK GB	8819.60	10214.58	5.02
KORAPUT PANCHABATI GB	5084.33	9353.46	22.53
KALAHANDI AGB	2566.69	4705.53	22.39
BAITARANI GB	2868.41	5733.02	25.96
BALASORE GB	2755.30	2868.73	1.35
RUSHIKULYA GB	3444.46	6341.63	22.56
DHENKANAL GB	2996.99	6927.90	32.22
CREDIT	1998-99	2001-02	Gr
PURI GB	10784.04	22712.84	28.18
BOLANGIR AGB	6966.07	11911.37	19.58
CUTTACK GB	10214.58	19769.90	24.62
KORAPUT PANCHABATI GB	9353.46	12708.65	10.76
KALAHANDI AGB	4705.53	8239.61	20.53
BAITARANI GB	5733.02	13593.38	33.35
BALASORE GB	2868.73	3147.21	3.14
RUSHIKULYA GB	6341.63	10856.14	19.63
DHENKANAL GB	6927.90	14689.33	28.47

**Table 3.2:Rate of change in Deposit across the RRBs (During various period of time)**

DEPOSIT	1986-87	1989-90	Gr(%)
PURI GB	1291.75	2845.31	30.11
BOLANGIR AGB	3232.04	3506.75	2.76
CUTTACK GB	2444.05	4595.61	23.43
KORAPUT PANCHABATI GB	1189.75	2594.24	29.67
KALAHANDI AGB	702.5	1824.07	37.45
BAITARANI GB	720.74	1449.45	26.22

BALASORE GB	642.31	823.93	8.65
RUSHIKULYA GB	674.57	1199.98	21.17
DHENKANAL GB	571.18	895.67	16.18
	1989-90	1992-93	Gr(%)
PURI GB	2845.31	3959.9	11.65
BOLANGIR AGB	3506.75	4863.55	11.52
CUTTACK GB	4595.61	5403.24	5.54
KORAPUT PANCHABATI GB	2594.24	3287.42	8.21
KALAHANDI AGB	1824.07	1875	0.92
BAITARANI GB	1449.45	2487	19.72
BALASORE GB	823.93	2154	37.76
RUSHIKULYA GB	1199.98	3147	37.90
DHENKANAL GB	895.67	2147	33.83
	1992-93	1995-96	Gr(%)
PURI GB	3959.9	7783.54	25.27
BOLANGIR AGB	4863.55	9581.20	25.36
CUTTACK GB	5403.24	11800.46	29.74
KORAPUT PANCHABATI GB	3287.42	8733.74	38.50
KALAHANDI AGB	1875	3860.96	27.22
BAITARANI GB	2487	6370.18	36.82
BALASORE GB	2154	3306.19	15.35
RUSHIKULYA GB	3147	6177.11	25.21
DHENKANAL GB	2147	4111.70	24.18
	1995-96	1998-99	Gr(%)
PURI GB	7783.54	19467.96	35.74
BOLANGIR AGB	9581.20	16554.98	20.00
CUTTACK GB	11800.46	20373.63	19.97
KORAPUT PANCHABATI GB	8733.74	13814.05	16.51
KALAHANDI AGB	3860.96	7414.65	24.30
BAITARANI GB	6370.18	13767.81	29.29
BALASORE GB	3306.19	5931.98	21.51
RUSHIKULYA GB	6177.11	14468.64	32.80
DHENKANAL GB	4111.70	9612.98	32.72
	1998-99	2001-02	Gr(%)
PURI GB	19467.96	34857.757	0.21
BOLANGIR AGB	16554.98	34857.76	0.28
CUTTACK GB	20373.63	27630.03	0.11
KORAPUT PANCHABATI GB	13814.05	37125.03	0.39
KALAHANDI AGB	7414.65	20394.31	0.40
BAITARANI GB	13767.81	14262.19	0.01
BALASORE GB	5931.98	24811.03	0.61
RUSHIKULYA GB	14468.64	11451.19	-0.08

DHENKANAL GB	9612.98	27086.52	0.41
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Table 3.3:Rate of change in Loan issued across the RRBs (During various period of time)

Loan Issued	1986-87(LAKH)	1989-90	Gr
PURI GB	1911.77	28453.10	1.46
BOLANGIR AGB	1167.52	35067.50	2.11
CUTTACK GB	3416.33	45956.10	1.38
KORAPUT			
PANCHABATI GB	1923.27	25942.40	1.38
KALAHANDI AGB	686.68	18240.70	1.98
BAITARANI GB	1082.34	14494.50	1.37
BALASORE GB	462.14	8239.30	1.61
RUSHIKULYA GB	608.77	11999.80	1.70
DHENKANAL GB	498.28	8956.70	1.62
Loan Issued	1989-90	1992-93	Gr
PURI GB	28453.10	29761.94	0.02
BOLANGIR AGB	35067.50	73992.43	0.28
CUTTACK GB	45956.10	63419.42	0.11
KORAPUT			
PANCHABATI GB	25942.40	35800.51	0.11
KALAHANDI AGB	18240.70	36116.59	0.26
BAITARANI GB	14494.50	19857.47	0.11
BALASORE GB	8239.30	13265.27	0.17
RUSHIKULYA GB	11999.80	20399.66	0.19
DHENKANAL GB	8956.70	14509.85	0.17
Loan Issued	1992-93	1995-96	Gr
PURI GB	29761.94	20042.27	-
BOLANGIR AGB	73992.43	36742.48	0.21
CUTTACK GB	63419.42	37597.28	0.16
KORAPUT			
PANCHABATI GB	35800.51	21222.06	0.16
KALAHANDI AGB	36116.59	18347.99	0.20
BAITARANI GB	19857.47	11811.44	0.16
BALASORE GB	13265.27	7322.24	0.18
RUSHIKULYA GB	20399.66	11002.74	-

			0.19
DHENKANAL GB	14509.85	7988.28	0.18
Loan Issued	1995-96	1998-99	Gr
PURI GB	20042.27	26085.77	0.09
BOLANGIR AGB	36742.48	48600.80	0.10
CUTTACK GB	37597.28	48990.93	0.09
KORAPUT PANCHABATI GB	21222.06	27654.99	0.09
KALAHANDI AGB	18347.99	24235.09	0.10
BAITARANI GB	11811.44	15387.80	0.09
BALASORE GB	7322.24	9608.94	0.09
RUSHIKULYA GB	11002.74	14467.40	0.10
DHENKANAL GB	7988.28	10484.94	0.09
Loan Issued	1998-99	2001-02	Gr
PURI GB	26085.77079	22712.84	0.05
BOLANGIR AGB	48600.80222	11911.37	0.37
CUTTACK GB	48990.93393	19769.897	0.26
KORAPUT PANCHABATI GB	27654.99126	12708.653	0.23
KALAHANDI AGB	24235.09185	8239.61	0.30
BAITARANI GB	15387.80037	13593.383	0.04
BALASORE GB	9608.936889	3147.2067	0.31
RUSHIKULYA GB	14467.40111	10856.137	0.09
DHENKANAL GB	10484.94437	14689.333	0.12

**Table 3.4:Rate of change in Loan Disbursed across the RRBs  
(During various period of time)**

Loan Disbursed	1986-87(LAKH)	1989-90	Gr
PURI GB	257.06	258.06	0.13
BOLANGIR AGB	802.45	813.23	0.45
CUTTACK GB	2301.07	2313.68	0.18
KORAPUT PANCHABATI GB	1275.98	1288.30	0.32
KALAHANDI AGB	440.93	453.22	0.92

BAITARANI GB	828.74	841.08	0.49
BALASORE GB	288.80	300.95	1.38
RUSHIKULYA GB	1809.92	1822.65	0.23
DHENKANAL GB	455.96	468.49	0.91
Loan Disbursed	1989-90	1992-93	Gr
PURI GB	258.06	133.26	0.20
BOLANGIR AGB	813.23	404.46	0.21
CUTTACK GB	2313.68	1394.75	0.16
KORAPUT PANCHABATI GB	1288.30	755.58	0.16
KALAHANDI AGB	453.22	265.18	0.16
BAITARANI GB	841.08	494.12	0.16
BALASORE GB	300.95	173.71	0.17
RUSHIKULYA GB	1822.65	1111.92	0.15
DHENKANAL GB	468.49	280.61	0.16
Loan Disbursed	1992-93	1995-96	Gr
PURI GB	133.26	2289.64	1.58
BOLANGIR AGB	404.46	1865.87	0.66
CUTTACK GB	1394.75	2453.69	0.21
KORAPUT PANCHABATI GB	755.58	2148.02	0.42
KALAHANDI AGB	265.18	784.17	0.44
BAITARANI GB	494.12	1365.59	0.40
BALASORE GB	173.71	640.19	0.54
RUSHIKULYA GB	1111.92	1563.67	0.12
DHENKANAL GB	280.61	554.75	0.26
Loan Disbursed	1995-96	1998-99	Gr
PURI GB	2289.64	6991.94	0.45
BOLANGIR AGB	1865.87	2949.46	0.16
CUTTACK GB	2453.69	3614.40	0.14
KORAPUT PANCHABATI GB	2148.02	4557.31	0.28
KALAHANDI AGB	784.17	2209.97	0.41
BAITARANI GB	1365.59	2647.60	0.25
BALASORE GB	640.19	697.02	0.03
RUSHIKULYA GB	1563.67	3072.35	0.25
DHENKANAL GB	554.75	3933.89	0.92
Loan Disbursed	1998-99	2001-02	Gr
PURI GB	6991.94	10945.27	0.16
BOLANGIR AGB	2949.46	6584.98	0.31
CUTTACK GB	3614.40	9975.10	0.40

KORAPUT PANCHABATI GB	4557.31	6602.62	0.13
KALAHANDI AGB	2209.97	2997.82	0.11
BAITARANI GB	2647.60	6253.78	0.33
BALASORE GB	697.02	1475.99	0.28
RUSHIKULYA GB	3072.35	5763.33	0.23
DHENKANAL GB	3933.89	7604.21	0.25

**Table-4.1; Disburse And Recovery of Agricultural Credit Given  
BY RRBS(from 1986-87 to2001-02)**

	ag credit given by RRB	RUPEES(RECOVERY)	percent
PURI GB	34061416.67	18137704.38	53.25
BOLANGIR AGB	54639266.67	19200238.31	35.14
CUTTACK GB	91216893.33	18371082.32	20.14
KORAPUT PANCHABATI GB	97173125	39034444.31	40.17
KALAHANDI AGB	19522982.13	7838477.327	40.15
BAITARANI GB	26384963.33	9836314.331	37.28
BALASORE GB	14307720	4328085.3	30.25
RUSHIKULYA GB	14465910	5806616.274	40.14
DHENKANAL GB	21233116.67	9605861.98	45.24
<b>1989-90</b>			
PURI GB	28453100	16334924.71	57.41
BOLANGIR AGB	35067500	11716051.75	33.41
CUTTACK GB	4595160	1078484.052	23.47
KORAPUT PANCHABATI GB	25942400	12496454.08	48.17
KALAHANDI AGB	1824070	757718.678	41.54
BAITARANI GB	231912	89170.164	38.45
BALASORE GB	8239300	2648111.02	32.14
RUSHIKULYA GB	11989800	4932603.72	41.14
DHENKANAL GB	47109200	22240253.32	47.21
<b>1992-93</b>			
PURI GB	32881520	19984439.38	60.77
BOLANGIR AGB	32309732.47	14284960.61	44.21
CUTTACK GB	24930000	10010931.5	40.15
KORAPUT PANCHABATI GB	41596053.33	24963009.6	60.01
KALAHANDI AGB	23638984.6	12685918.35	53.66
BAITARANI GB	18162274.7	10599679.46	58.36
BALASORE GB	6063590	2478556.62	40.87
RUSHIKULYA GB	41667876.67	19584040.42	47.33
DHENKANAL GB	75228900	38022890.88	50.54
<b>1995-96</b>			
PURI GB	112850000	73273505	64.93
BOLANGIR AGB	81213694.57	47834866.1	58.9
CUTTACK GB	34775960	8137574.64	23.4
KORAPUT PANCHABATI GB	131131840	83911264.42	63.99
KALAHANDI AGB	76619886.93	47121230.46	61.5
BAITARANI GB	40024182.53	20192200.09	50.45
BALASORE GB	8676546.667	1936605.216	22.32

RUSHIKULYA GB	68498193.33	48640567.09	71.01
DHENKANAL GB	56940775	35986569.8	63.2
2001-02			
PURI GB	235414437.1	160482021.8	68.17
BOLANGIR AGB	214084276.7	141852241.7	62.16
CUTTACK GB	70911981.17	25074476.54	23.46
KORAPUT PANCHABATI GB	163459518.3	93744033.75	65.18
KALAHANDI AGB	110682631.7	72552465.06	64.15
BAITARANI GB	104642961.4	59437202.06	54.09
BALASORE GB	20573165.4	4746229.258	25.16
RUSHIKULYA GB	134055317	88275426.22	67.65
DHENKANAL GB	131008013.3	84578773.41	69.52

**Table-4.2: Per Hactre Credit Given BY Different RRBS in  
Orissa(FROM 1986-87 TO2001-02)**

dist//1986-87	RUPEESag credit by RRBs	AREA OF FOOD GRAINS/hectares	rupees per hectare
BALASORE	582618803.3	508276666.7	1.15
BOLANGIR	1519497561	474946666.7	3.20
CUTTACK	461772974.7	884980000	0.52
DHENKANAL	436194236	440886666.7	0.99
GANJAM	3316607248	627276666.7	5.29
KALAHANDI	413525832.4	610610000	0.68
KEONJHAR	409728396.2	313690000	1.31
KORAPUT	1506655113	596916666.7	2.52
PURI	789025355.5	511530000	1.54
1989-90	RUPEESag credit by RRBs	AREA OF FOOD GRAINS/hectares	
BALASORE	613317870	532820333.3	1.15
BOLANGIR	1623581605	1193683333	1.36
CUTTACK	981753408	889996666.7	1.10
DHENKANAL	474745796	445616666.7	1.07
GANJAM	770046601.4	683553333.3	1.13
KALAHANDI	444927389.1	640876333.3	0.69
KEONJHAR	914955265.9	730103333.3	1.25
KORAPUT	1314581006	1383866667	0.95
PURI	635412952.2	606326666.7	1.05
1992-93	RUPEESag credit by RRBs	AREA OF FOOD GRAINS/hectares	
BALASORE	1171906319	540195000	2.17
BOLANGIR	772618798	486335000	1.59
CUTTACK	590384300.1	1474125000	0.40
DHENKANAL	456849976.1	447930000	1.02
GANJAM	592146694.2	667570000	0.89

KALAHANDI	266653300.8	646110000	0.41
KEONJHAR	1862077624	582600000	3.20
KORAPUT	1101671753	1453905000	0.76
PURI	1373116083	408675000	3.36
1995-96	RUPEESag credit by RRBs	AREA OF FOOD GRAINS/hectares	
BALASORE	880568406.7	441700000	1.99
BOLANGIR	1618662888	790500000	2.05
CUTTACK	887757381.3	534600000	1.66
DHENKANAL	1253399089	258700000	4.84
GANJAM	4119971245	377900000	10.90
KALAHANDI	2228348412	518600000	4.30
KEONJHAR	1015262731	564900000	1.80
KORAPUT	4010212276	805900000	4.98
PURI	293717428.8	459400000	0.64
2001-02	RUPEE Sag credit by RRBs	AREA OF FOOD GRAINS/hectares	
BALASORE	28989557240	402220000	72.07
BOLANGIR	57534198713	466530000	123.32
CUTTACK	35674236568	141980000	251.26
DHENKANAL	7017760183	306780000	22.88
GANJAM	18440943056	290130000	63.56
KALAHANDI	10665147135	261400000	40.80
KEONJHAR	26955300598	2562980000	10.52
KORAPUT	33974311391	721790000	47.07
PURI	17463973855	375930000	46.46

**Table-4.2:Change in rate of recovery of agricultural credit across the RRBs(During Different time periods)**

RRBS	1986-87(RECOVERY of Ag Credit)	1989-90	GR(%) (RECOVERY)
PURI GB	18137704.38	16334924.71	-3
BOLANGIR AGB	19200238.31	11716051.75	-15
CUTTACK GB	18371082.32	1078484.05	-61
KORAPUT PANCHABATI GB	39034444.31	12496454.08	-32
KALAHANDI AGB	7838477.33	757718.68	-54
BAITARANI GB	9836314.33	89170.16	-79



BALASORE GB	4328085.30	2648111.02	-15
RUSHIKULYA GB	5806616.27	4932603.72	-5
DHENKANAL GB	9605861.98	22240253.32	32
	1989-90	1992-93	1992-93
PURI GB	16334924.71	19984439.38	7
BOLANGIR AGB	11716051.75	14284960.61	7
CUTTACK GB	1078484.05	10010931.50	110
KORAPUT PANCHABATI GB	12496454.08	24963009.60	26
KALAHANDI AGB	757718.68	12685918.35	156
BAITARANI GB	89170.16	10599679.46	392
BALASORE GB	2648111.02	2478556.62	-2
RUSHIKULYA GB	4932603.72	19584040.42	58
DHENKANAL GB	22240253.32	38022890.88	20
	1992-93	1995-96	1995-96
PURI GB	19984439.38	73273505.00	54
BOLANGIR AGB	14284960.61	47834866.10	50
CUTTACK GB	10010931.50	8137574.64	-7
KORAPUT PANCHABATI GB	24963009.60	83911264.42	50
KALAHANDI AGB	12685918.35	47121230.46	55
BAITARANI GB	10599679.46	20192200.09	24
BALASORE GB	2478556.62	1936605.22	-8
RUSHIKULYA GB	19584040.42	48640567.09	35
DHENKANAL GB	38022890.88	35986569.80	-2
	1995-96	1998-99	1998-99
PURI GB	73273505.00	174246965.53	33
BOLANGIR AGB	47834866.10	73684058.72	15
CUTTACK GB	8137574.64	13154134.61	17
KORAPUT PANCHABATI GB	83911264.42	103920909.37	7
KALAHANDI AGB	47121230.46	79670548.19	19
BAITARANI GB	20192200.09	37524884.13	23
BALASORE GB	1936605.22	2248040.46	5
RUSHIKULYA GB	48640567.09	73673550.55	15
DHENKANAL GB	35986569.80	77646383.98	29
	1998-99	2001-02	2001-02
PURI GB	174246965.53	160482021.79	-3
BOLANGIR AGB	73684058.72	141852241.72	24
CUTTACK GB	13154134.61	25074476.54	24
KORAPUT PANCHABATI GB	103920909.37	93744033.75	-3
KALAHANDI AGB	79670548.19	72552465.06	-3
BAITARANI GB	37524884.13	59437202.06	17
BALASORE GB	2248040.46	4746229.26	28
RUSHIKULYA GB	73673550.55	88275426.22	6
DHENKANAL GB	77646383.98	84578773.41	3

**TABLE 4.4: Recovery-Flow of Agricultural Credit Per Hactre(From 1986-87 to 2001-02)**

1986-87		
ag credit given by RRB	RECOVERY/HECT	CREDIT/HECT
PURI GB	3.55	6.66

BOLANGIR AGB	4.04	11.50
CUTTACK GB	2.08	10.31
KORAPUT PANCHABATI GB	6.54	16.28
KALAHANDI AGB	1.28	3.20
BAITARANI GB	3.14	8.41
BALASORE GB	0.85	2.81
RUSHIKULYA GB	0.93	2.31
DHENKANAL GB	2.18	4.82
1989-90		
ag credit given by RRB	RECOVERY/HECT	CREDIT/HECT
PURI GB	2.69	4.69
BOLANGIR AGB	0.98	2.94
CUTTACK GB	0.12	0.52
KORAPUT PANCHABATI GB	0.90	1.87
KALAHANDI AGB	0.12	0.28
BAITARANI GB	0.01	0.03
BALASORE GB	0.50	1.55
RUSHIKULYA GB	0.72	1.75
DHENKANAL GB	4.99	10.57
1992-93	RECOVERY/HECT	CREDIT/HECT
PURI GB	4.89	8.05
BOLANGIR AGB	2.94	6.64
CUTTACK GB	0.68	1.69
KORAPUT PANCHABATI GB	1.72	2.86
KALAHANDI AGB	1.96	3.66
BAITARANI GB	1.82	3.12
BALASORE GB	0.46	1.12
RUSHIKULYA GB	2.93	6.24
DHENKANAL GB	8.49	16.79
1995-96	RECOVERY/HECT	CREDIT/HECT
ag credit given by RRB	15.95	24.56
PURI GB	6.05	10.27
BOLANGIR AGB	1.52	6.51
CUTTACK GB	10.41	16.27
KORAPUT PANCHABATI GB	9.09	14.77
KALAHANDI AGB	3.57	7.09
BAITARANI GB	0.44	1.96
BALASORE GB	12.87	18.13
RUSHIKULYA GB	13.91	22.01
1998-99		
ag credit given by RRB	RECOVERY/HECT	CREDIT/HECT
PURI GB	43.47	61.94
BOLANGIR AGB	6.38	10.27
CUTTACK GB	1.60	6.84
KORAPUT PANCHABATI GB	8.09	12.41
KALAHANDI AGB	14.00	21.83
BAITARANI GB	5.30	9.80
BALASORE GB	0.46	1.84
RUSHIKULYA GB	12.53	18.52
DHENKANAL GB	19.17	27.58
2001-02		
ag credit given by RRB	RECOVERY/HECT	CREDIT/HECT

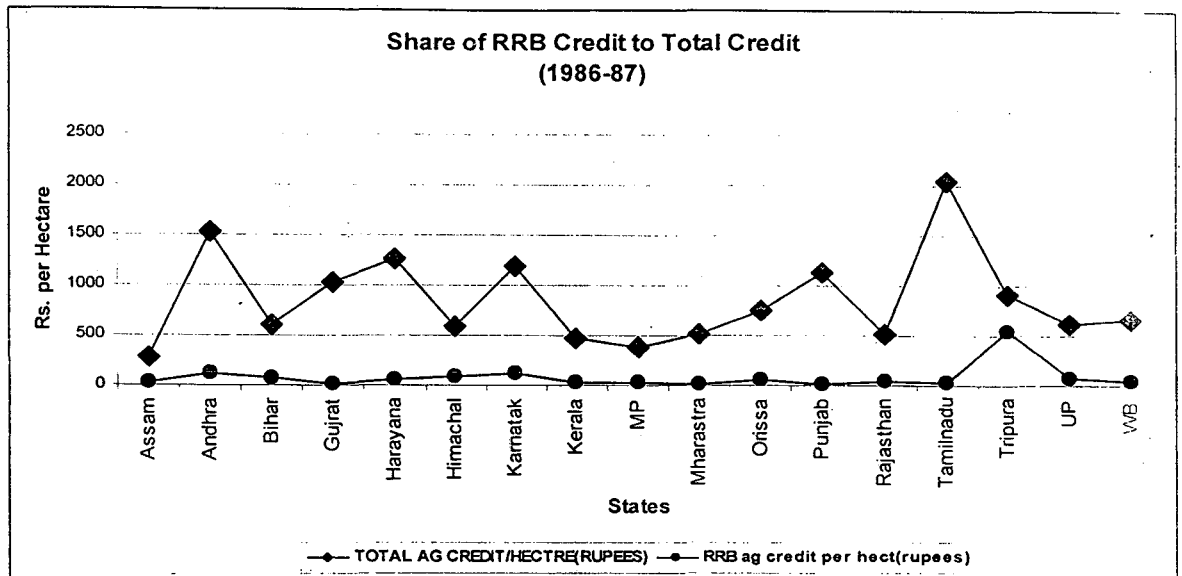
PURI GB	42.69	62.62
BOLANGIR AGB	30.41	45.89
CUTTACK GB	17.66	49.95
KORAPUT PANCHABATI GB	12.99	22.65
KALAHANDI AGB	27.76	42.34
BAITARANI GB	2.32	4.08
BALASORE GB	1.18	5.11
RUSHIKULYA GB	30.43	46.21
DHENKANAL GB	27.57	42.70

**Table.4.5: MINIMUM SUPPORT PRICES OF DIFFERENT  
FOOD GRAINS (RS.PER  
QUINTAL)**

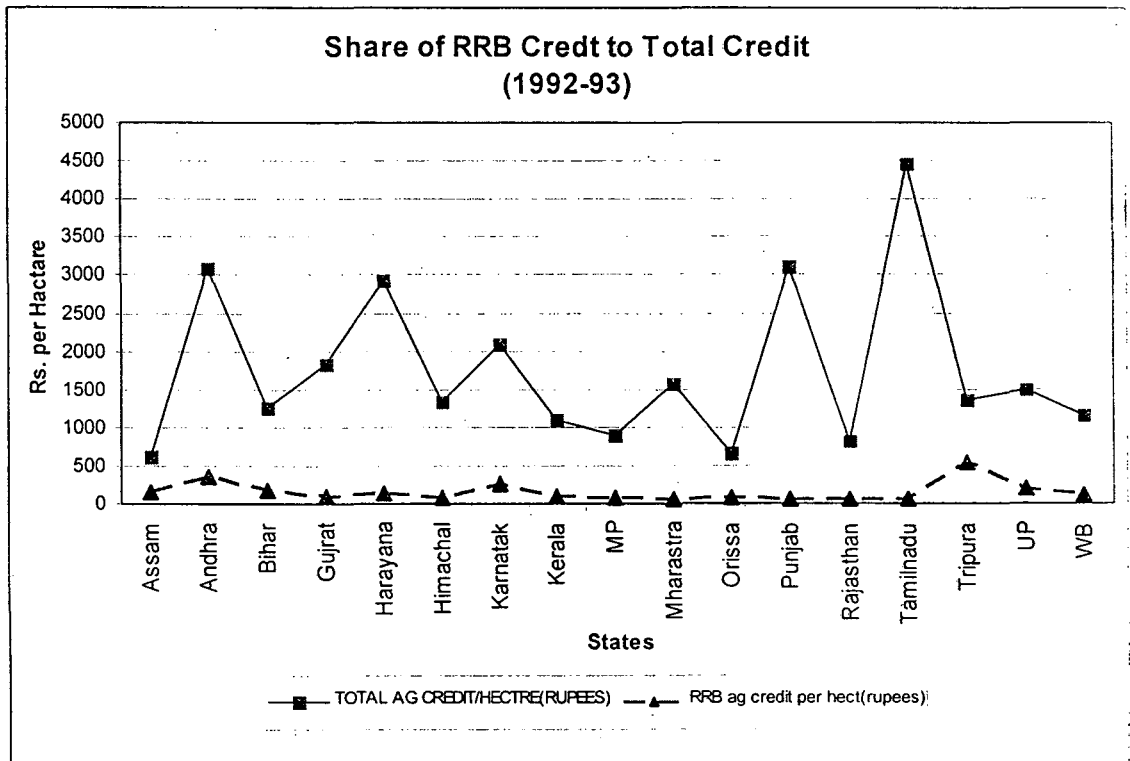
food grains	1986-87	1989-90	1992-93	1995-96	1998-99	2001-02
Rice	146	185	270	360	440	510
Wheat	166	215	275	360	550	610
Cereals	132	165	240	300	390	445
Maize	132	169	245	310	390	445
Barley	135	180	210	285	385	500
Gram	280	421	500	670	895	1100
Arhar	320	425	640	800	960	1200
Moong	320	425	640	800	960	1200
Urad	320	425	640	800	960	1200

SOURCE: CACP REPORTS, MINISTRY OF AGRICULTURE, GOI

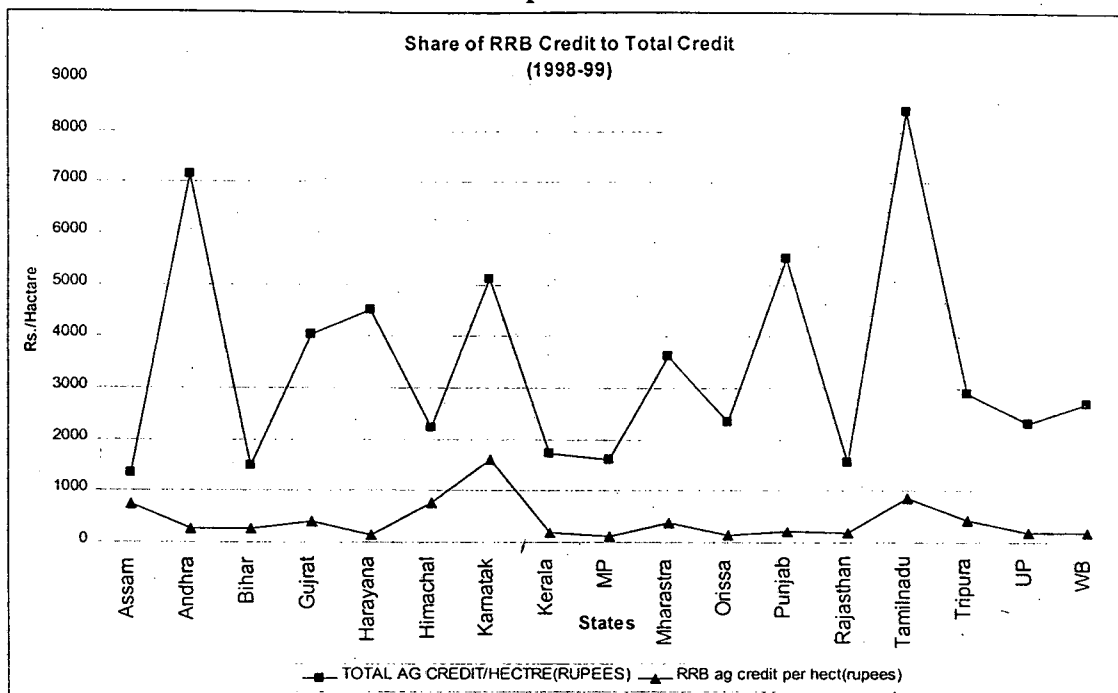
Graph2.1



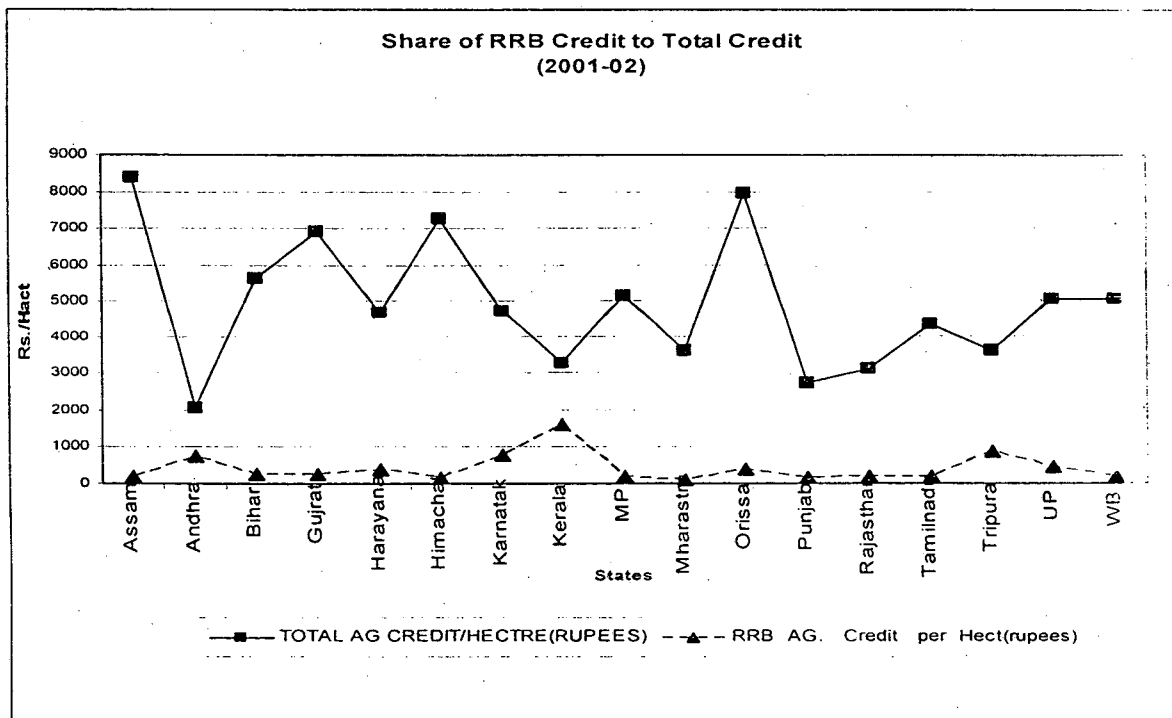
Graph 2.2



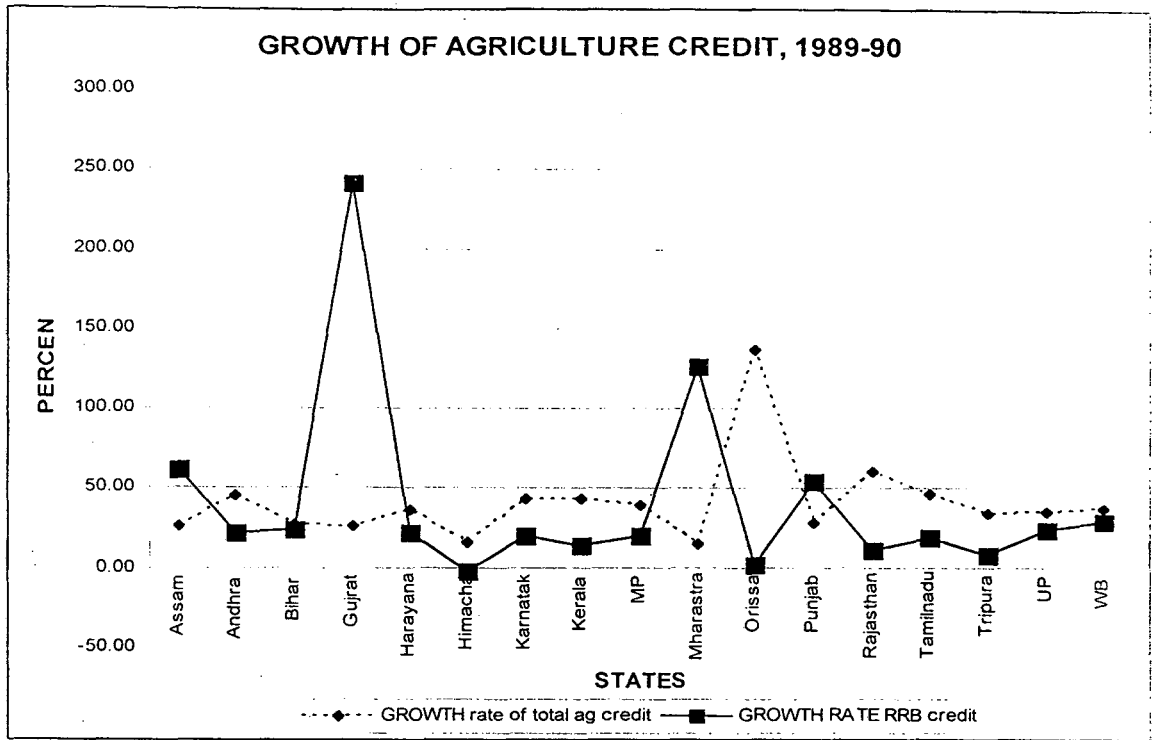
Graph 2.3



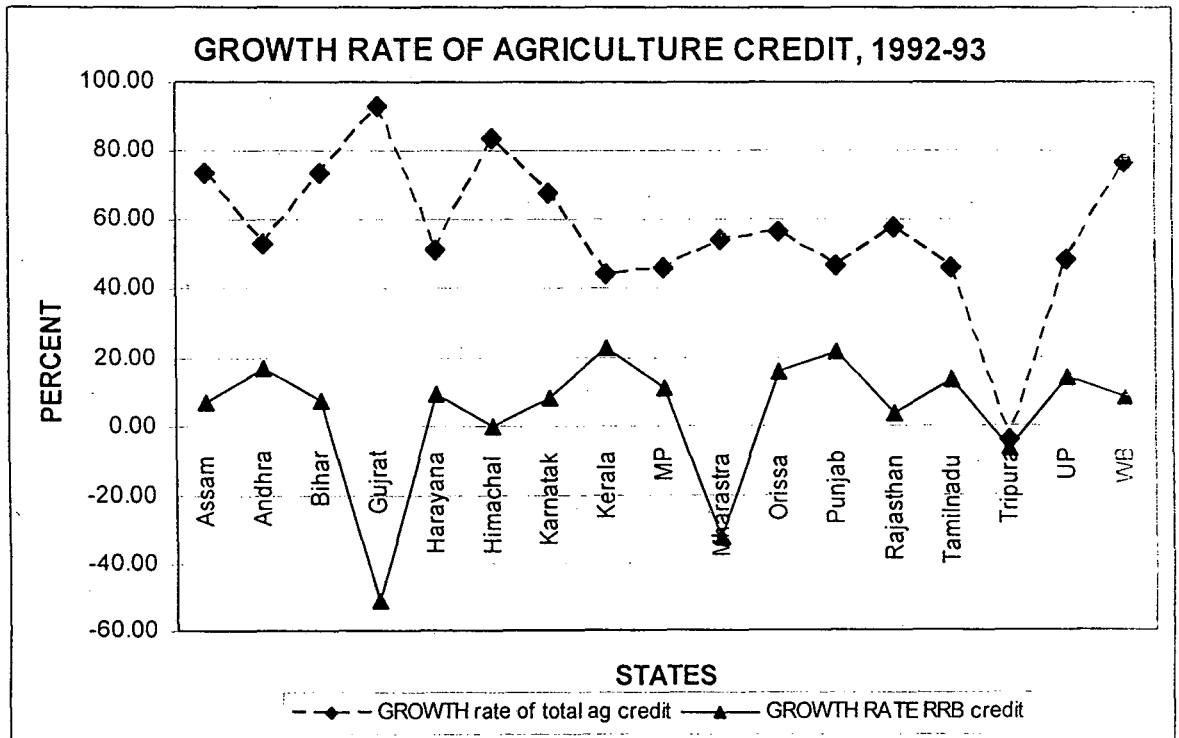
Graph 2.4



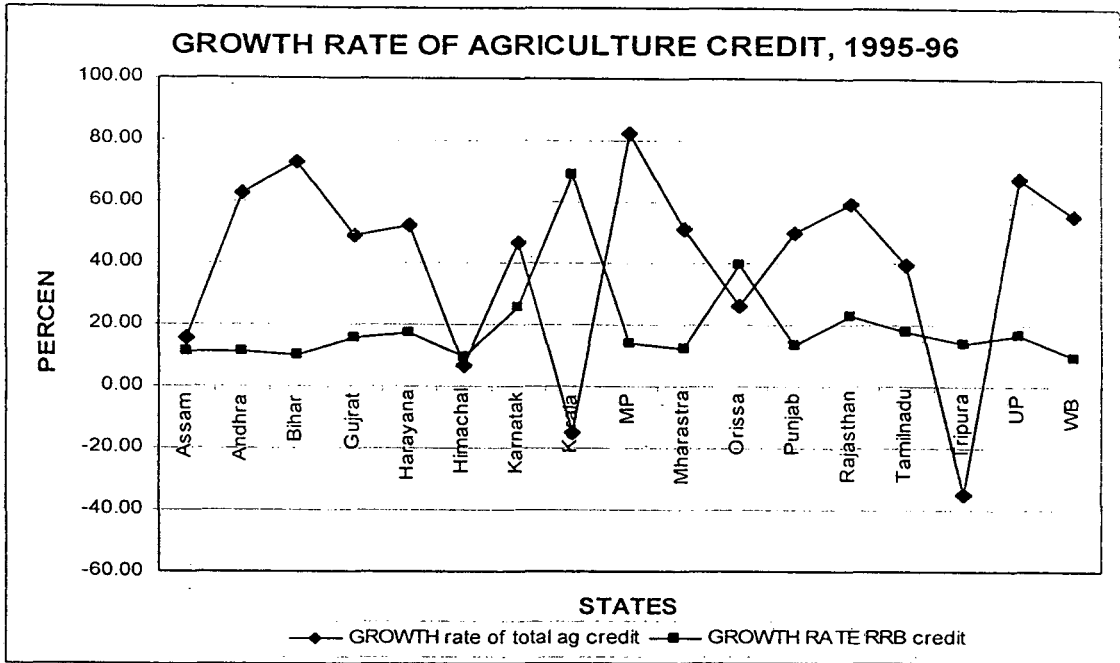
Graph2.5



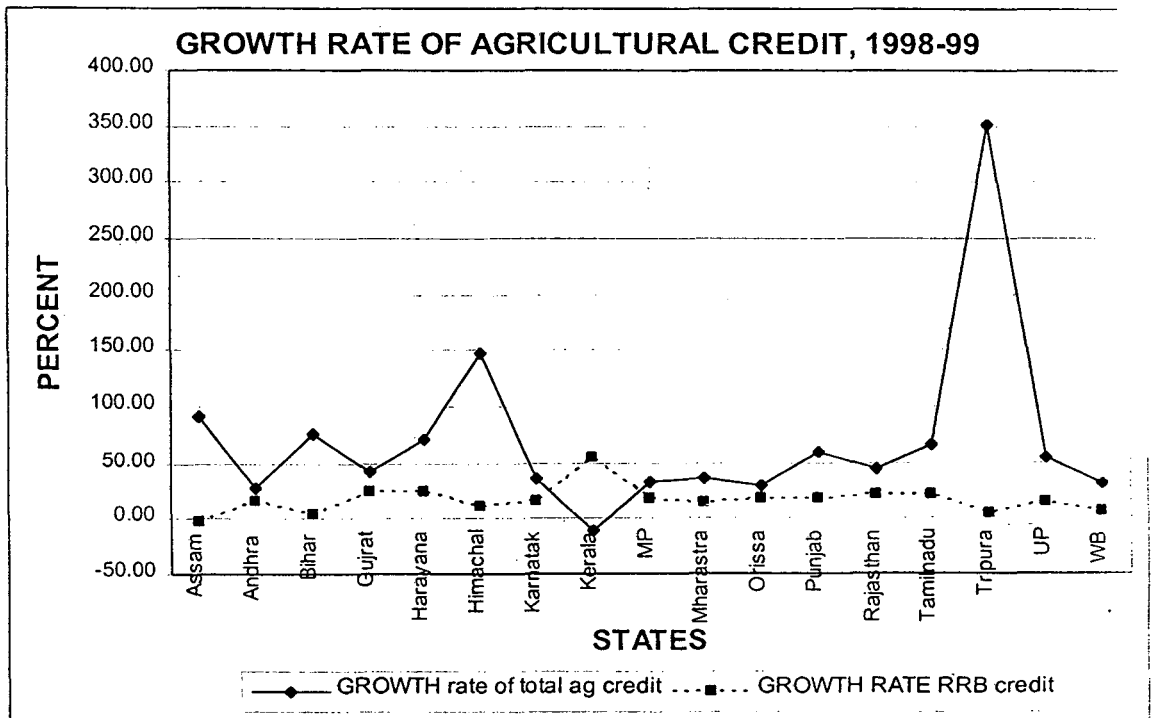
Graph 2.6



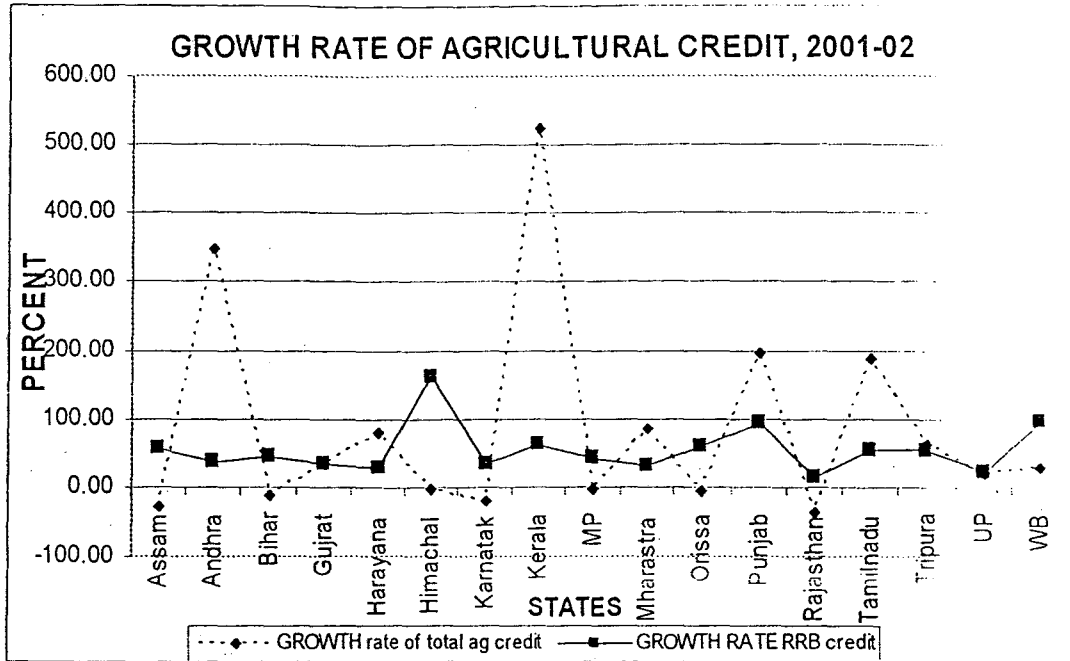
Graph 2.7



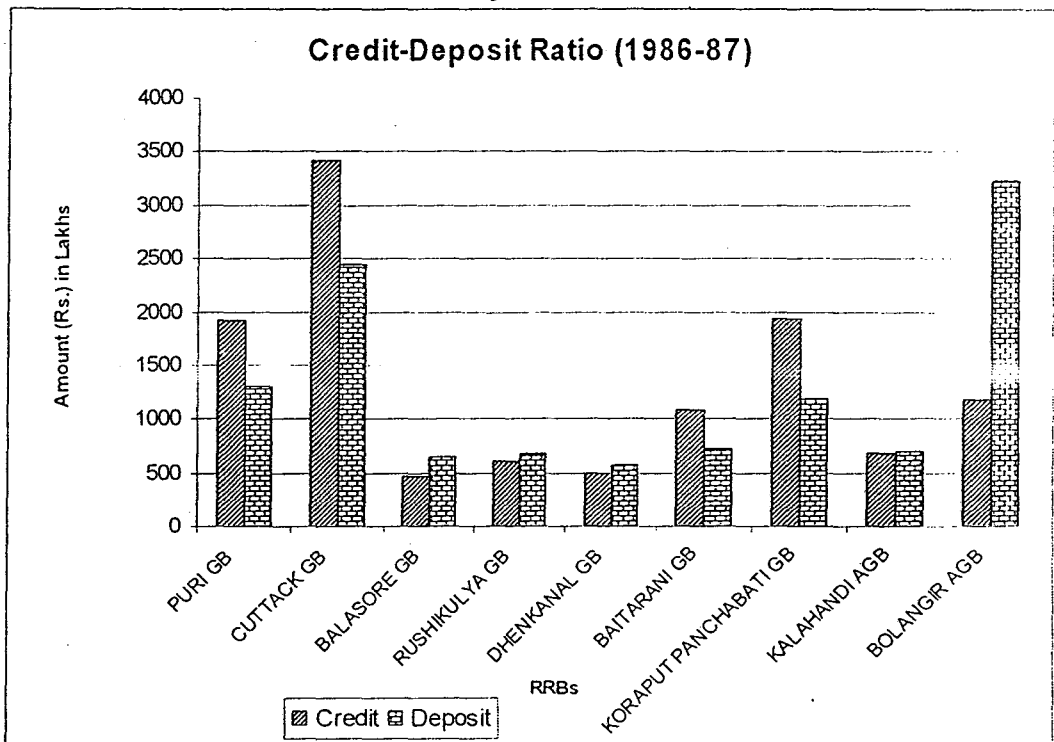
Graph 2.8



Graph 2.9

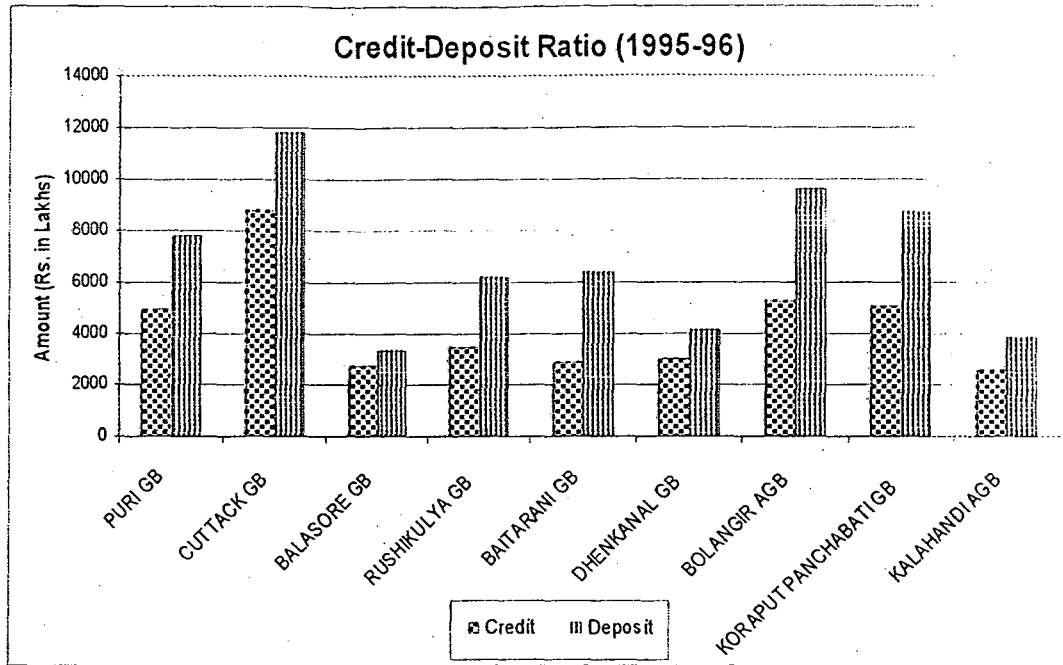


Graph 3.1

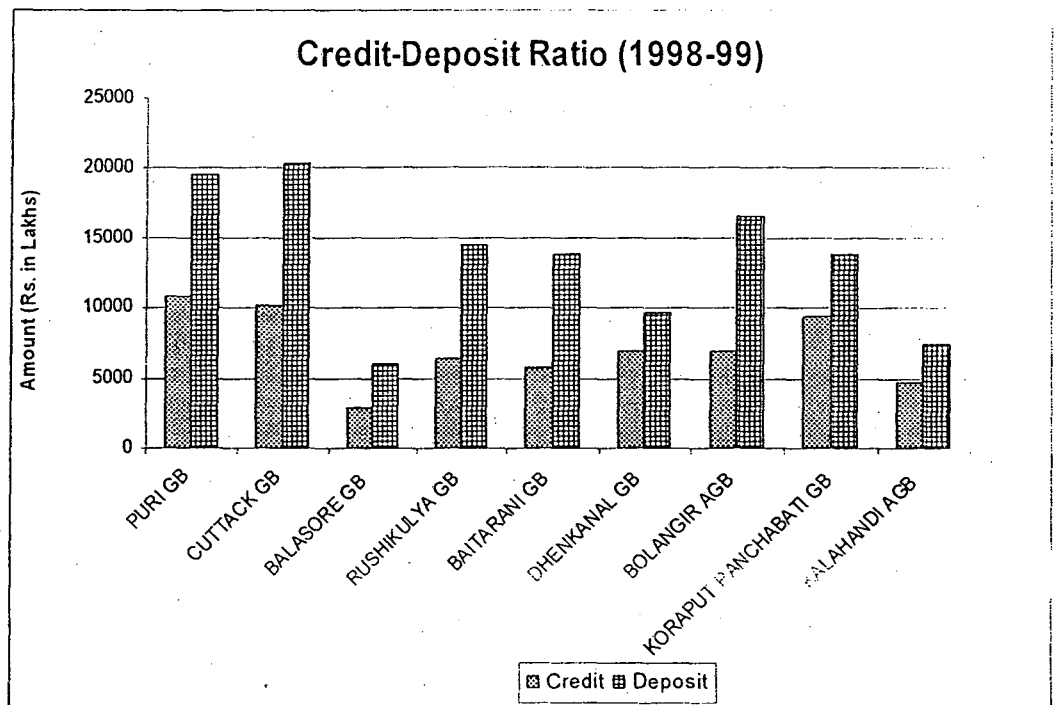




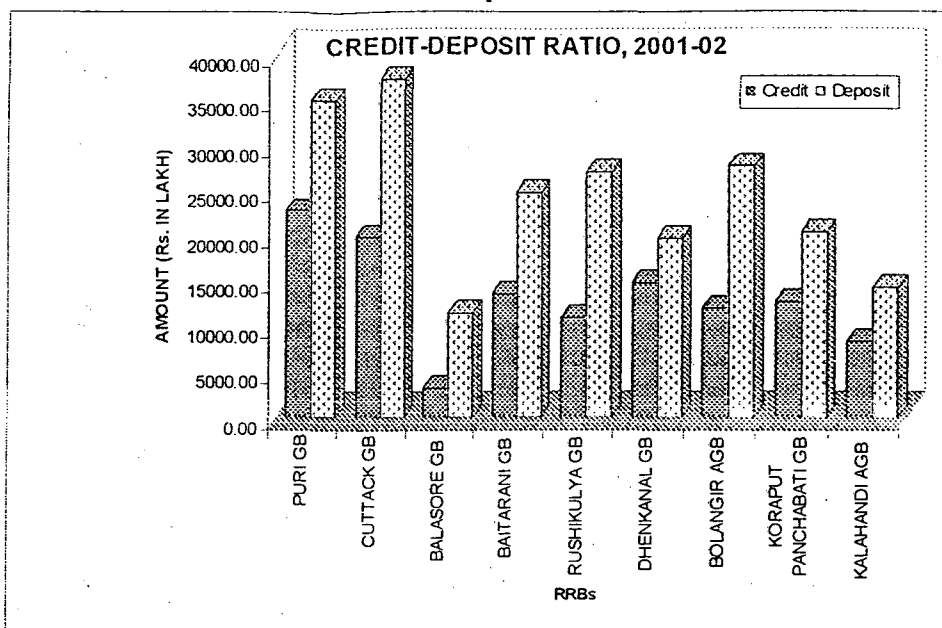
Graph3.2



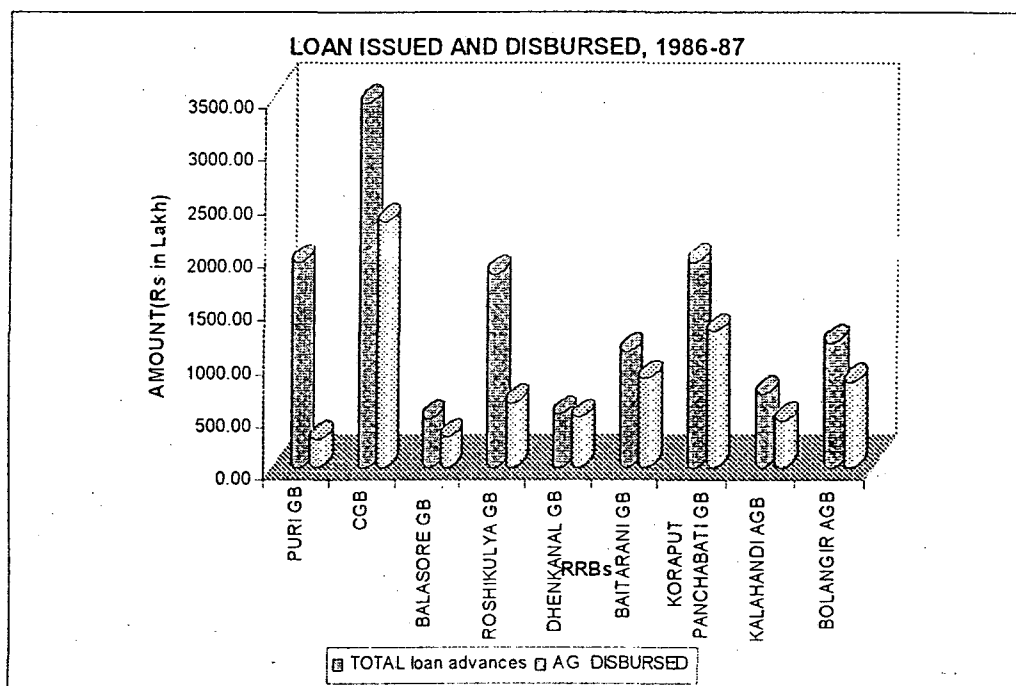
Graph3.3



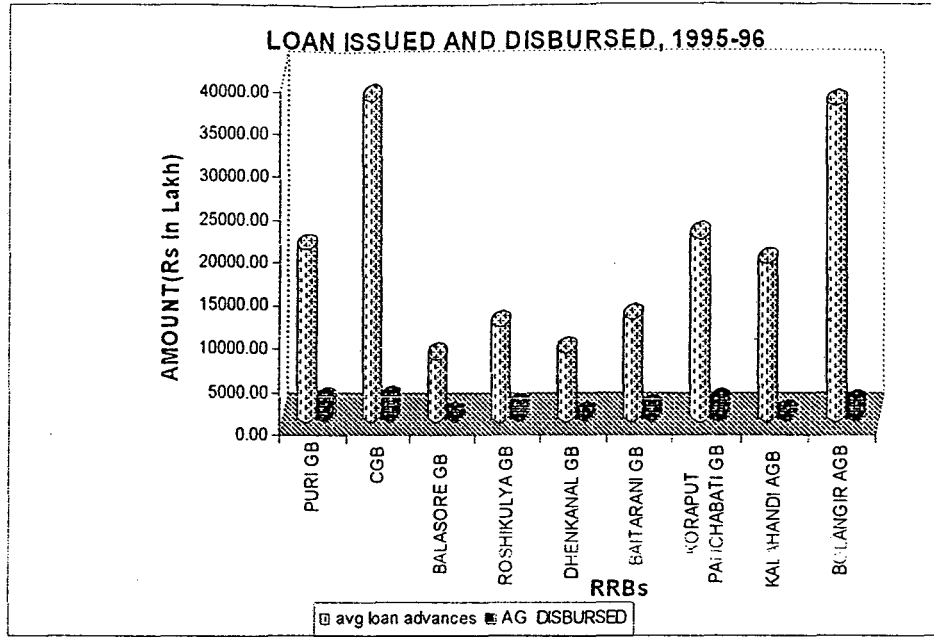
Graph 3.4



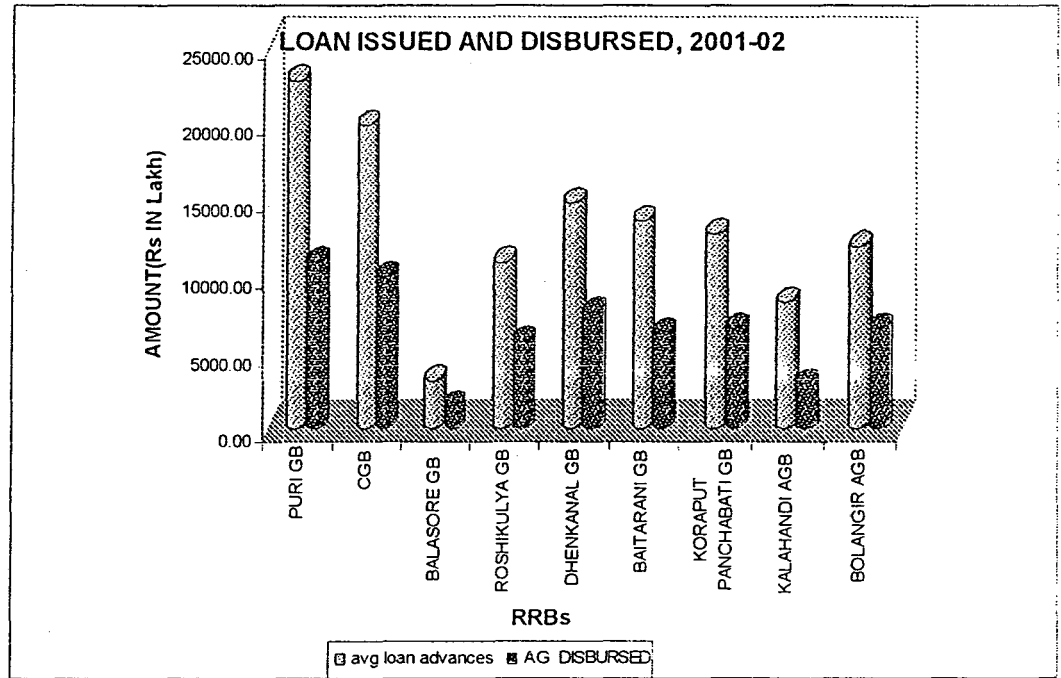
Graph 3.5



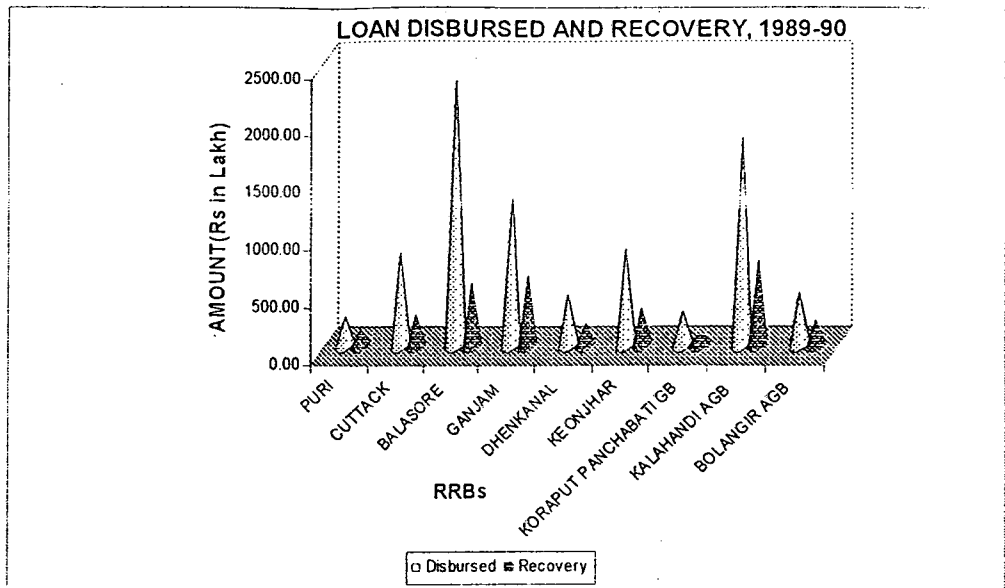
Graph3.6



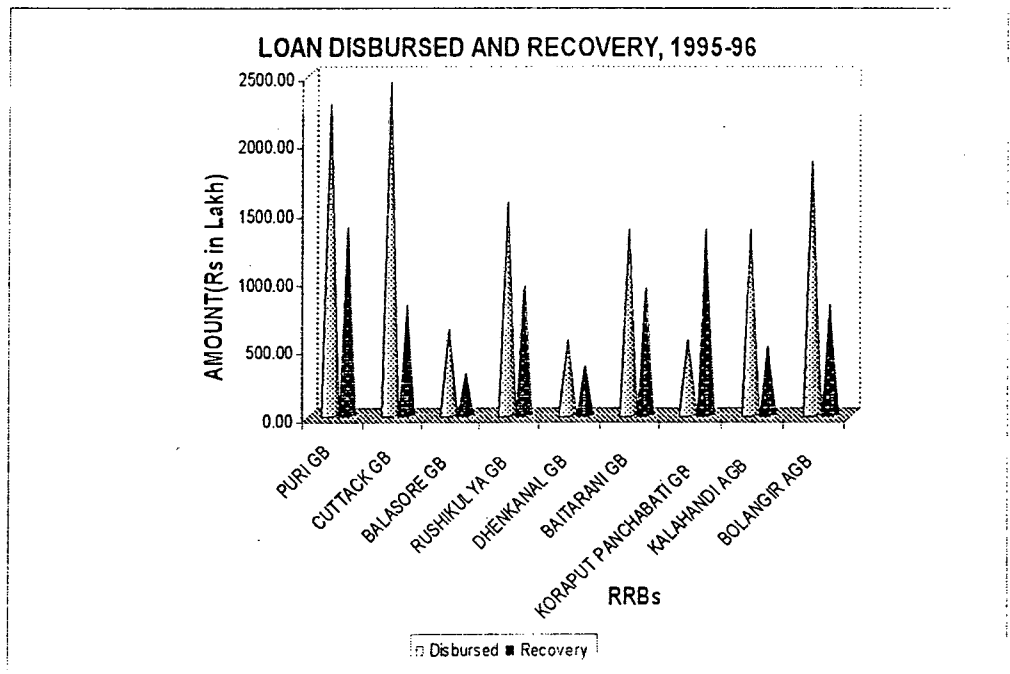
Graph 3.7



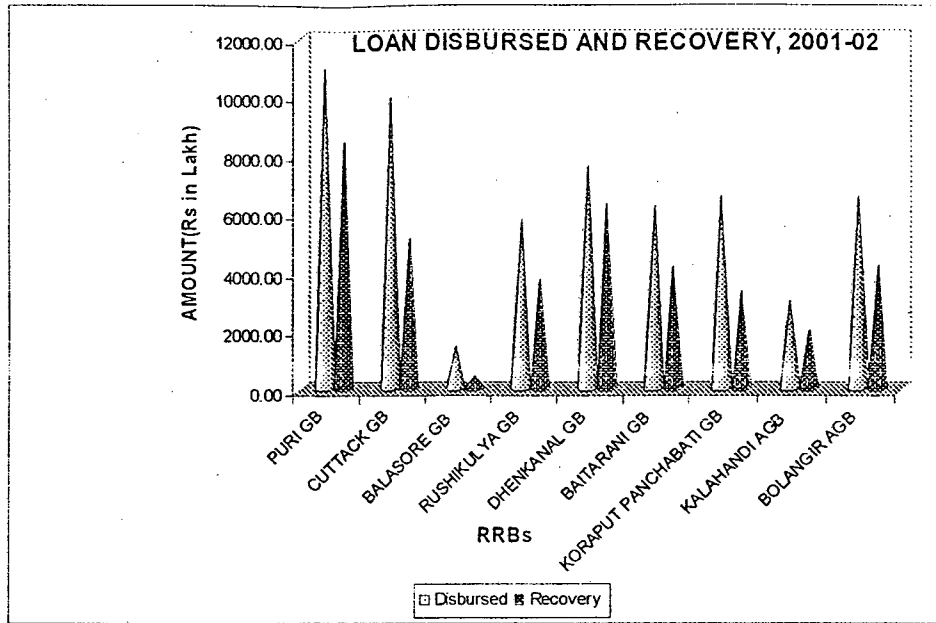
Graph 3.8



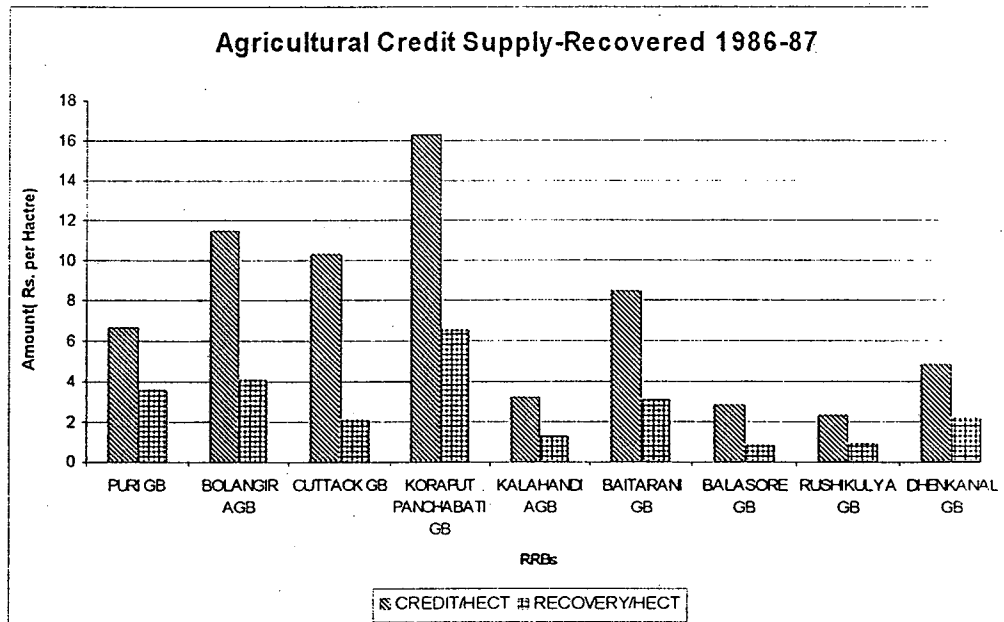
Graph 3.9



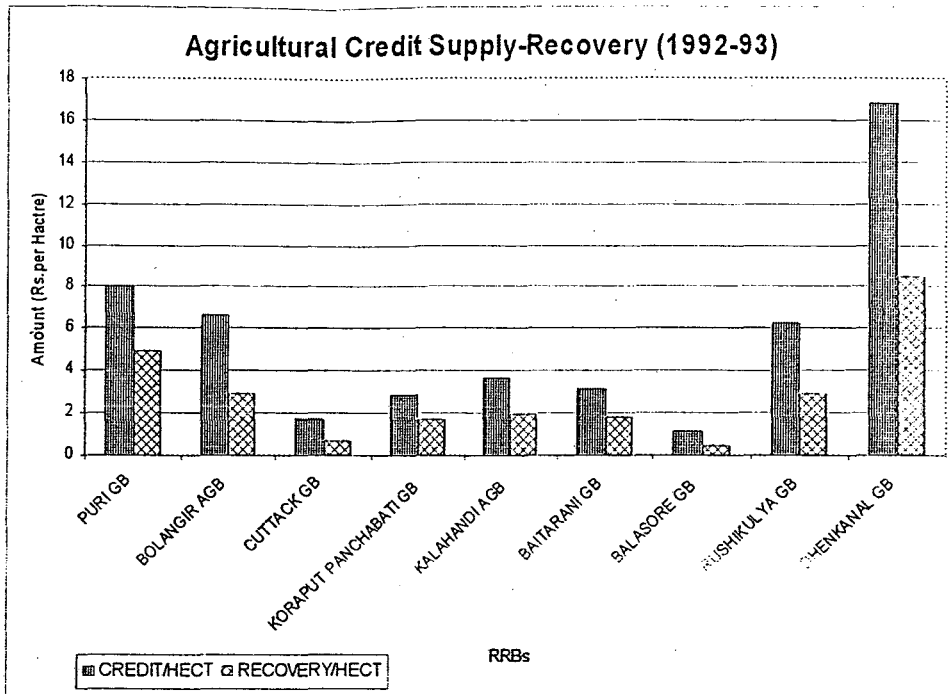
Graph 3.10



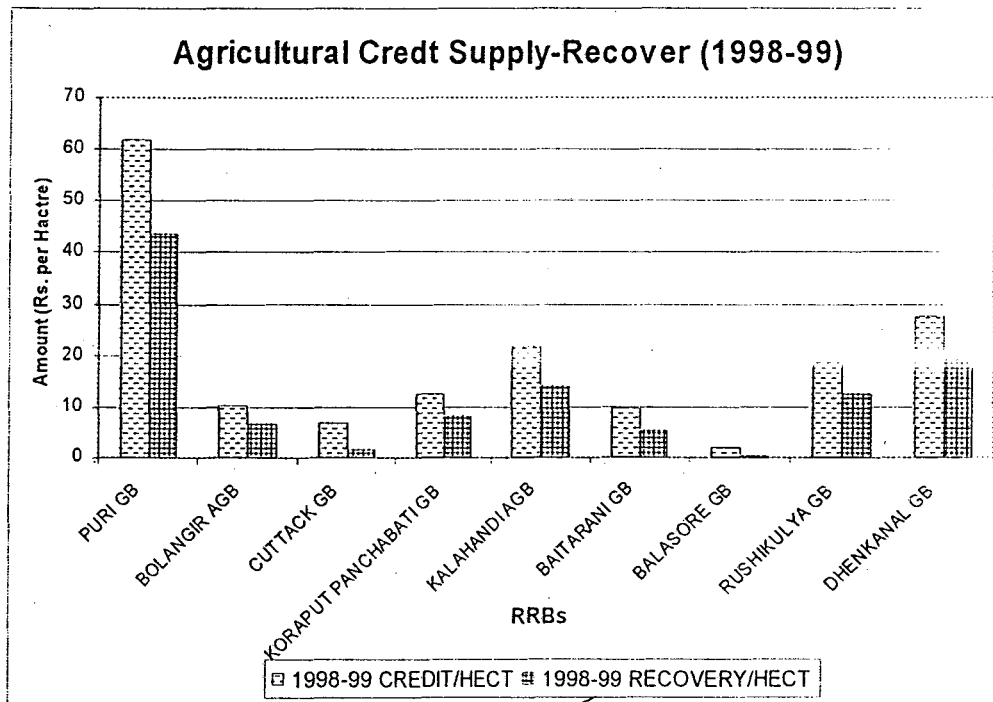
Graph 4.1



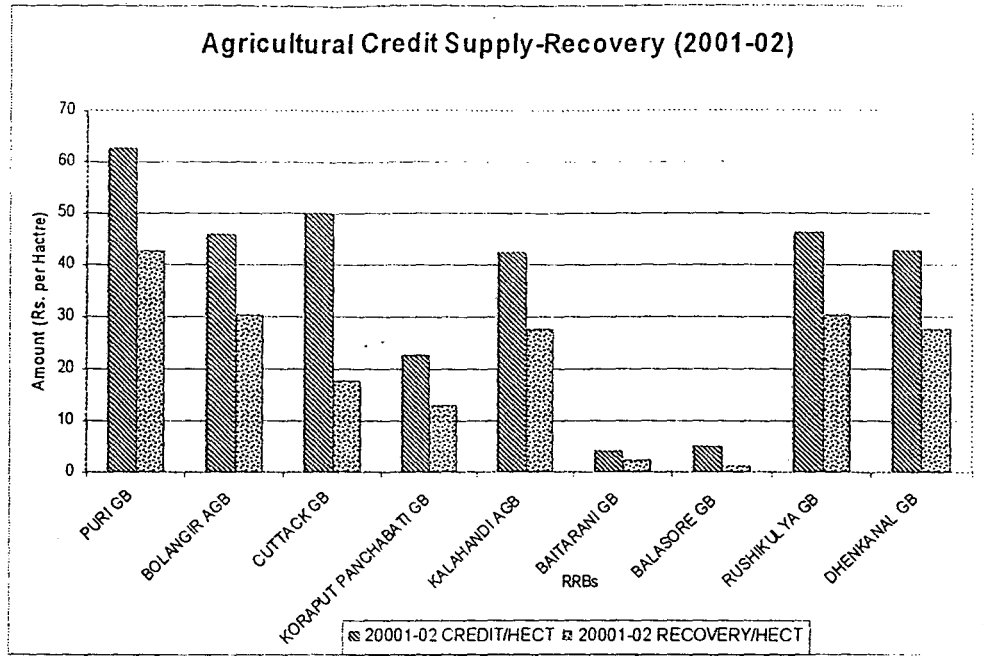
Graph 4.2



Graph 4.3



Graph 4.4



# *Bibliography*



### Books:

- Bhalla, G.S. And Y.K.Alag (1979) : *Performance of Indian Agriculture: A District wise Analysis*, Sterling Publishers, New Delhi.
- Bhalla, G.S.and Gurmul Singh (2001): *"Indian Agriculture :Four Decades of Development"*,Sage ,New Delhi
- Gupta, S.C. (1993) : *Fundamental of Statistics*, Himalayan Publishing House, Delhi.
- Hanumantha Rao(1994) : *Agricultural Growth ,Rural Poverty and Envionment Degradationin India*.Oxford University Press,Newdelhi.
- Yujrohayami and Vernonw Ruttan (1968), : *Agricultural Development and International Perspective*,  
Roads ,Priorities and agenda"

### Articles:

- 47,November Numbr
- A. Saith (1976) : "Indebtedness, Tenancy and the adoption of new Technology in Semi- Feudal Agriculture", *World Development*, Vol. 4, pp. 305-319.
- Acharya, S. (2002) : "Macro-Economic Management in the Nineties", *Economic and Political Weekly*, April 20, pp. 1515-1538.
- Ahuja,K. (1997) : "Banking Sector after the Reform" *Indian Economic Journal*, (44), April-June, pp. 1-19.
- Banks,Yojana,vol 40 :no.5

- Basu, S. (1997) : “Why Institutional Credit Agencies are Reluctant to lend to the rural Poor: A Theoretical Analysis of the Indian Rural Credit Market”, *World Development*, Vol. 25, No 2, pp. 267-280.
- Braverman, A. and  
Chaube, B.N. (1968) : “Institutional Finance for Agricultural Development”, *Indian Journal of Agricultural Economics*, Vol. XXIII, No. 4, October-December, p. 20.
- Chaudhury, S. (2002) : “Some Issues of Growth and Profitability on Indian Public Sector Banks”, *Economic and Political Weekly*, Vol. XXXVII, No. 22, June 1-7, pp. 2155-2162.
- Choudhury, Dr. R.K. (1995) : “Indian Banking through Quarter Century period of Nationalisation”, *Kurukshetra*, Vol. XLIII, No. 10, pp. 3-8.
- Dantawala, M.L. (1978) : “Regional Rural Banks”, *Economic and Political Weekly*, Vol. 13, No. 42, October, pp. 1776-1778.
- Dasgupta, R. (2001) : “Rural Banking and Credit”, *Economic and Political Weekly*, March 3.
- Desai, Bhupat M. (1992) : “Banking for Development”, *Economic and Political Weekly*, July 2, pp. 1655-1657.
- Desai, V.N. (1997) : “Personal Management for Rural Banking”, *Economic and Political Weekly*, March 13.
- Dutta, B. (1978) : “Regional rural Banks: A Clarification”, *Economic and Political Weekly*, Vol. 13, No. 36, September, pp. 1553-1556.
- Ghose, A.K. and  
Ghose, Arabindo (2001) : “Diversifying Agriculture: The new Mantra”, *Yojana*, January, pp. 53-56.

- Gupta, S.K. and Gurumurthy, T.R. (1995) : "New Life to Rural Credit Agencies- an Urgent Need", *Kurukshetra*, Vol. XLIII, No. 10, July, pp. 31-34.
- Jadhav, N. and D. Ajit (1997) : "The Role of Banks in Economic Development of India", *Pranjan*, Vol. XXV, No 3-4, October-March, pp. 309-321.
- Kochar, Anjini (1997) : "An Empirical Investigation of Rationing Constraints in Rural Credit Markets in India", *Journal of Development Economics*, Vol. 53, pp. 339-371.
- L.M. Bhole (2002) : "Determinants of Banks Deposits in India: A State wise Analysis", *Indian Journal of Regional Science*, Vol. XXXIV, No. I, pp. 37-52.
- Mahapatra, P.K. and Mahendradev, S. (1991) : "Constraints on Agricultural Productivity: A District Level Analysis", *Economic and Political Weekly* September 28 , pp. A126-A134.
- Majumdar, N.A. (1992) : "Financial Reforms and Rural Development", *Economic and Political Weekly*, April 4, pp. 664-686.
- Misra, Dr. Baidyanath(1995) : "Banking and Rural Development (with special reference to Orissa)", *Kurukshetra*, Vol. XLIII, No. 10, pp. 9-14.
- Nampoothiry.M.M(2003) : "Trends in Cropping Pattern vis-à-vis Price Trends". *Agricultural Situation in India*, No.5, August, pp.297-306
- Narasimham, M. (1992) : "National Agricultural Credit Policy", *Economic and Political Weekly*, pp. 97-102.

- Narayanan, D. (1992) : "Directed Credit Programmes: A Critique of Narasimham Committee Report", *Economic and Political Weekly*, February 8, pp. 255-258.
- Nayak, G. (1990) : "Quantum Leap in Consumption of Fertilizer", *The Economic Times*, March 22.
- Padhy, B. (1990) : "Flora Orissa State Gazetteers," Vol. I, p. 79.
- Patel, Dr. A.R.(1995) : "Bank's Approach to Rural Development", *Kurukshetra*, Vol. XLIII, No. 10, July, pp. 15-20.
- Pati, S.P. (1990) : "Spatio Temporal Analysis of Area: A Geographical Study", *U Geographica*, pp. 40-44.
- Patil, R.H. (2002) : "Reforming Indian Debt Markets", *Economic and Political Weekly*, February 2, pp. 419-420.
- Premkumar, Banu. (1995) : "Regional Rural Banks: An Analysis (with reference to Andhra Pradesh Vis-à-vis India)", *Kurukshetra*, Vol. XLIII, No. 10, July, pp. 45-50.
- Prof. A.N.Sadhu (1995) : "Economic Liberalisation and Rural Credit", *Kurukshetra*, Vol. XLIII, No. 10, July, pp. 28-30.
- Rajgopalan (1968) : "Farm Liquidity and Institutional Finance for Agricultural Development", *Indian Journal of Agricultural Economics*, Vol. XXIII, No. 4, October-December, p. 26.
- Rajgopalan and  
Rajshekhar, D and  
Rao, K.G.K.S. (2002) : "Cost of Credit of Commercial Banks in Deregulated Environment", *Economic and Political Weekly*, Vol. XXXVII, February, pp. 660-664.
- Rao, Rajeswar J. (2003) : "Crop Diversification in India: Policies, Programmes and Prospective", *Agricultural Situation in India*, Vol. LX, August, pp. 307-319.
- Roy, Ajay (1971) : "The role of Institutional Finance in Agricultural Investment of District Burdwan in West Bengal: A

- Case study”, *Indian Journal of Agricultural Economics*, Vol. XXVI, No. 4, October-December, p. 567-568.
- Rudra, A. (1968) : “Farm Size and yield for Acre”, *Economic and Political Weekly*, Vol. 3, July, pp. 216-230.
- S.N. Tripathy (1987) : “Economic Base of Small Towns in Orissa Coastal Plane” *Eastern Geography Society*, No. 8.
- Sahajan, K.M. (1998) : “Priority Sector, Bank Lending: Some Important Issues”, *Economic and Political Weekly*, 33, October, pp. 2749-2756.
- Sahu, N.K. (1990) : “Origin of the name of the State”, *Orissa State Gazetteers*, Vol. I, p. 1.
- Sen, Aditya (1995) : “The role of Banks: Post- Nationalisation Scenario”, *Kurukshetra*, Vol. XLIII, No. 10, July, pp. 21-24.
- Sengupta, A. (1995) : “Financial Sector and Economic Reforms in India” , *Economic and Political Weekly*, Vol. 30, No. I, January 7.
- Sengupta, A. (1995) : “Financial Sector and Economic Reforms in India”, *Economic and Political Weekly*, January 7, pp. 39-44.
- Shaban, A. and Shivmaggi (1993) : “Problem of Rural Credit in India”, *Economic and Political Weekly*, June 26, pp. 1361-1366.
- Siddappa, B. (1995) : “Impact of RRB Credit on Employment of Weaker Sections in Karnataka: A Comparative Analysis”, *Kurukshetra*, Vol. XLIII, No. 10, July, pp. 42-44.
- Sing, L.R. (1971) : “The Supply, Utilisation and Economic rational of Credit use on progressive and less progressive Farms”, *Indian Journal of Agricultural Economics*, Vol. XXVI, No. 4, October-December, p. 524-532.

- Singh, D.K. and S.D. Pati (1991) : "Diagnosis of Spatio Temporal Variation in Agricultural Efficiency in Orissa", *The Eastern Geographer*, Vol. I, pp. 1-16.
- Singh, Dr. P.K. (1996) : "Agricultural and Rural Development"
- Singh, Dr. P.K. (2003) : "Reforms in The Agricultural Sector", *Yojana*, vol
- Sinha, B.N. (1958) : "Problems of Rural Indebtedness in Orissa", *The all India Co-operative Review*, Vol. XXIV, No. 9.
- Sinha, B.N., (1991) : "Agriculture Efficiency in India", *Agriculture Situation in India*, Directorate of Economic and Statistics, Ministry of Food and Agriculture, GOI, Vol. XXV.
- Srinivasan, T.N. (1979) : "Agricultural Backwardness under Semi-feudalism-Comments", *Economic Journal*, Vol. 89, pp. 416-419.
- T.N. Srinivasan (1981) : "Credit and Sharecropping on Agrarian Societies", *Journal of Development Economics*, Vol. 9, pp. 289-312.
- V Sankaranarayanan (1990) : "Regional Rural Banks and Rural Credit, Some Issues", *Economic and Political Weekly*, September, pp. 2157-2164.
- Varadarjan (1978) : "Impact of Risk and uncertainty on Farm Production and Income in Tamil Nadu", *Indian Journal of Agricultural Economics*, Vol. XXIII, No. 4, October-December, p. 35.
- Velayudham, T.K. and Venkata Rao, K.K.B.P. (1995) : "Nationalised Bank and Priority Sector Lending", *Kurukshetra*, Vol. XLIII, No. 10, July, pp. 25-27.
- Vinod Vyasula (1991) : "Half life of Credit: Simulating Fund flows in Priority Sector", *Economic and Political Weekly*, September 28, pp. A-135-A-143.

### **Government Publications and Reports:**

*Agricultural Census*, Board of Revenue, Orissa (Various Issues), Cuttack.

*Agricultural Situation in India*, Ministry of Agriculture, Government of India (Various Issues), New Delhi.

*Agricultural Statistics at a Glance*, Agricultural Statistics Division, Ministry of Agriculture, GOI, New Delhi (Various Issues).

*Agricultural Statistics*, Directorate of Agriculture and Food Production, Orissa, Bhubaneswar.

*Agriculture at a Glance*, Ministry of Agriculture and co-operation, GOI, (Various Issues), New Delhi.

*Agriculture Review Committee*, Dr. A.M. Khusro, 1986.

*Co-operative Movement in India*, NABARD, Mumbai.

*Datewala Review Committee on Agricultural Finance*, 1979, RBI.

*District Statistical Handbooks*, Directorate of Economic and Statistic, Orissa, (Various) Bhubaneswar.

*Economic Survey*, Directorate of Economic and Static, Government of Orissa, (Various Issues).

*Economic Survey*, Ministry of Finance and Company Affairs, GOI, (Various Issues), New Delhi.

*Fertilisers Statistic*, Fertilisers Associations of India, (Various Issues), New Delhi.

*Financial Statements of RRBs*, NABARD, Mumbai.

*High Level Committee on Agricultural Credit*, Mr. R.B. Gupta, 1998, RBI.

*Narasimham Committee on Banking Sector Reforms*.

*Narasimham Committee on Financial Sector Reforms*, 1991, GOI.

*Narasimham Committee on Regional Rural Banks on 1975*.

*Regional Rural Banks, Key Statistics*, NABARD.

*Report of the Export Committee on Rural Credit* (July 2001), NABARD, Mumbai.

*Reports of the Commission for Agricultural Coasts and prices*, Ministry of Agriculture and co-operation, GOI, (Various Issues), New Delhi.

*Review of the Performance of RRBs*, NABARD.

*Statistical Abstract of India*, GOI, (Various Issues), New Delhi.

*Statistical Returns of Commercial Banks*, Reserve Bank of India, Mumbai.

*Statistics of Commercial Banks*, Reserve Bank of India, Mumbai.

*Statistics on Regional Rural Banks*, National Bank for Agriculture and Rural Development (NABARD), Mumbai.