

shares of agriculture in aggregate public capital formation in Orissa on the one hand and the value of coefficient of variation on the other. Though the share has increased from 37.69 per cent in 1990-91 to 47.81 per cent in 2002-03, the coefficient of variation in the said series is around 98.89 per cent. The trend does not follow any systematic pattern. It is highly erratic. Hence public investment on agriculture in Orissa does not follow any definite and regular time path.

## REFERENCES

- Chand R. and P. Kumar (2004): Determinants of Capital Formation and Agricultural Growth: Some New Explorations, *Economic and Political Weekly*, Vol. 39, December.
- Dhawan B.D. and S.S. Yadav (1997): Public Investment in Indian Agriculture: Trends and Determinants, *Economic and Political Weekly*, April.
- Government of Orissa (2003-04): Economic Survey, Directorate of Economic and Statistics, Planning and Coordination Department.
- Hirway I. (2000): Dynamics of Development in Gujarat *Economic and Political Weekly*, Vol. 35, Nos. 35 and 36.
- Mishra S.N. and R. Chand (1995): Public and Private Capital Formation in Indian Agriculture: Comments on the Complementarity Hypothesis and Others. *Economic and Political Weekly*, Vol. 30, June.
- Shetty S.L. (1990): Investment in Agriculture: Brief Review of Recent Trends, *Economic and Political Weekly*, Vol. 25, February.

## Flow of Institutional Credit to Agriculture in Orissa

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There is apparently an intimate relationship between agricultural credit and the general process of agricultural development. As soon as agriculture in an area starts getting modernized there is a growing demand for investment in development of irrigation, land resources and expenditure on modern inputs for production. There is also at the same time, a demand generated for financing, marketing and processing organisations in the area. Thus availability of agricultural credit in time and in adequate quantity tends to become a prerequisite for a sustained agricultural growth.

Credit has been considered not only as one of the critical inputs in agriculture, but also an effective means of economic transformation. A large number of agencies, including cooperatives, regional rural banks, commercial banks, non-banking financial institutions, self-help groups and a well spread informal credit outlets together represent Indian rural credit delivery system. These networks apart from working as financial intermediaries also play a key developmental role in the economy.

As per the Tenth Plan projection, the flow of credit to agriculture and allied activities is expected to be of the order of Rs. 7,36,570 crore. However, despite the extensive outreach of rural and semi-urban branch network of commercial banks (about

33,000), cooperative banks (about 1 lakh) and RRBs (about 14,000), the estimated actual flow of credit to agriculture from formal rural financial institutions (RFI) during the first year of the Tenth Five Year Plan, i.e. 2002-03, stood at Rs. 69,560 crore against the projected amount of Rs. 82,073 crore, i.e. 84.8 per cent.

Therefore, there is an urgent need to double the flow of credit to agriculture. This is a formidable challenge.

The process of globalisation and deregulation of financial institutions have thrown open new challenges and opportunities. The financial institutions need to meet the expanding credit needs of the agriculture sector. In an emerging situation agriculture sector requires higher credit to strengthen primary production base like land and water, support investment in farm machinery and current inputs, in order to enable it to high value addition and export orientation.

Orissa stands among the poorest states of the country. As per the latest estimate of planning commission available, the percentage of population below the poverty line was 48.01 in rural areas and 42.83 in urban areas in 1999-2000 as against the all India averages 27.09 and 23.62 respectively. As such there is need for accelerating the pace of poverty amelioration and employment generation programmes. The agricultural sector of the state was very badly affected by subsequent vagaries of nature. The low growth rate of the state may continue indefinitely without adequate and timely investment in public and private fixed capital formation. In the recent period the growth of public investment became negative in resource poor states, notably Bihar, Assam, Madhya Pradesh and Orissa. This declining in these low productivity states is a matter of concern (B.C. Ray and Suresh Pal, 2002). In private investment sector the investment was extremely low in the eastern states, particularly in Orissa (Rs. 49) per hectare highest being (Rs. 1034) in U.T. (B.C. Ray and Suresh Pal). The credit deposit ratio in the state was 47.80 in 2002-03 as against the all India average of 59.38. Hence, there is a scope for improving the banking facilities in the state for stimulating the agriculture credit for

increasing and mopping up the employment and productivity and improving standard of living of the people in the state. In this backdrop an attempt has been made in this paper i) to study the institutional credit flow to agriculture in Orissa. ii) to compare the state credit scenario in context of all India situation. iii) to suggest suitable policy measures.

### **Data Base**

The study is based on secondary data collected from state level bankers' committee Orissa proceedings, various issues of Economic Survey of Orissa and Reserve Bank of India Report on currency and finance.

### **CREDIT SCENARIO**

#### **Flow of credit to agriculture: Orissa and All-India 1992-93 to 2002-03**

With the technological break through in the agriculture sector, the demand for farm credit has increased many fold and it was realised that the institutional sources have to play a significant role to meet the growing needs of agriculture credit. In the state like Orissa which is predominantly an agricultural state with 84 per cent of its total population, 37 millions residing in rural areas and 81.98 per cent of operational holding is held by small and marginal farmers. Most of these small marginal farmers do not have the means to make adequate investment due to poverty. These resource poor farmers have to depend on formal and informal credit sources for investment and working capital financing.

A perusal of the data presented in Table 9.1 revealed that the flow of credit to agriculture sector in Orissa declined from 823.88 crores in 1993-94 to 377.35 crores in the year 1995-96 thereafter it rose steadily about three fold to the tune of 1046.55 crores in the year 2002-03. In percentage term it was 5.65 per cent of the total agricultural credit of the country during 1993-94. But it declined steadily and came down to 1.50 per cent during 2002-03.

The credit disbursal with reference to the country as a whole increased from 14569 crores in the year 1993-94 to 69560 crores



**Table 9.1: Agricultural credit advances in Orissa**  
(Rs. in crores)

Sl. No.	Year	Orissa	India	% of
1.	1993-94	823.88	14569	5.65
2.	1994-95	862.76	17901	4.82
3.	1995-96	377.35	21632	1.77
4.	1996-97	440.56	27511	1.60
5.	1997-98	467.96	30976	1.51
6.	1998-99	624.04	38054	1.64
7.	1999-2000	759.92	46268	1.64
8.	2000-01	783.21	52827	1.48
9.	2001-02	928.99	62045	1.50
10.	2002-03	1046.55	69560	1.50

Source :- 1. RBI, Report on currency and finance, various issues.  
2. SLBC, Orissa, Proceedings of various meetings.  
3. NABARD Annual Report, 2002-03.  
4. Economic Survey, Govt. of Orissa.

in the year 2002-03. The financial sector reforms which squeezed commercial bank finance in the state during time period 1995-96 was not marked at the All-India level.

#### Percentage changes in annual average credit disbursement.

The percentage change in disbursal of credit is given in Table 9.2 in respect of Orissa and all-India.

It is observed that in Orissa the average credit disbursed by commercial banks registered (-13.71) per cent decline in credit disbursal over 1991-93 and it continued with (-47.78) per cent in 1997-99 over the sub-period 1994-96. However in the year 2000-02 it has registered 40.61 per cent increase over 1997-99. The credit disbursal in case of cooperative sector registered 43.36

**Table 9.2: Percentage change in credit disbursement to agriculture in Orissa vis-a-vis all India**

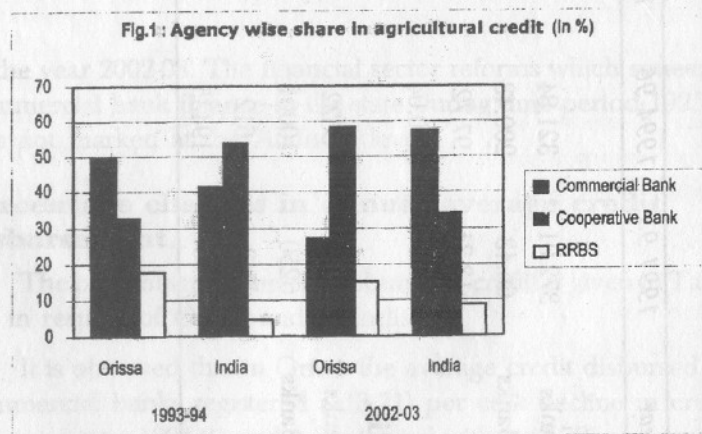
Agency/year	1991-93	1994-96	1997-99	2000-02	1994-96	1997-99	2000-02
<b>Orissa</b>							
Com. Banks	372.01	321.84	168.06	236.32	-13.71	-47.78	40.61
Co-op. Banks	66.43	200.43	287.41	487.67	301.79	43.36	69.68
RRBs	113.31	97.72	90.54	132.11	-13.76	-7.75	45.91
Total	551.75	620.04	546.01	856.10	12.38	-11.94	56.73
<b>All-India</b>							
Com. Banks	4814	8822	17189	340697	83.26	94.84	78.48
Co-op. Banks	6250	10001	14423	22121	60.02	44.22	53.37
RRBs	543	612	680	4537	12.71	11.11	567.20
Total	11607	19435	32292	57355	67.44	66.15	77.61

increase in 1997-99 and 69.68 per cent in 2002-03 over the previous sub-periods respectively. The RRBs also registered negative percentage growth for the period of 1994-96 and 1997-99 over the previous sub-periods. However in 2000-02 it registered an increase by 45.91 per cent.

At all-India level, the trend of credit disbursed during the reform period was also more or less maintained a steady progress from 1991-93 to 2000-02. This indicates that the financial sector reforms have affected credit flow by the commercial and RRBs adversely in the sub-periods 1994-96 to 1997-99 in Orissa state but did not have any impact at the national level.

**Table 9.3: Agency wise share in agricultural credit**

Agency	1993-94		2002-03	
	Orissa	India	Orissa	India
Commercial Bank	49.58	41.47	26.88	57.24
Cooperative Bank	32.71	53.85	58.22	34.02
RRBS	17.71	4.68	14.90	8.74



**Fig.8.1: Agency wise share in agricultural credit (In %)**

Agency wise share of Agricultural credit has been shown in Table 9.3. In the state, the share of agricultural credit finance by commercial banks which was 49.58 per cent of the total agricultural finance during 1993-94, decreased to 26.88 per cent of total agricultural credit in 2002-03. But the cooperative banks registered an increase in its share from 32.71 per cent to 58.22 per cent during the period. No significant change was observed in case of RRBs for agricultural finance during the said period in the state.

At the all India level a reverse trend was observed, the share of agricultural lending by commercial banks increased from 49.58 per cent in the year 1993-94 to 57.24 per cent in 2002-03 and the agricultural finance by cooperative sector has been declined from 53.85 per cent to 34.02 per cent during the said period. However, finance by RRBs increased from 4.68 to 8.74 per cent in the same period.

### Credit disbursed per hectare of gross cropped area: Orissa and All India

**Table 9.4 : Total agricultural credit disbursed per hectare of gross cropped area Orissa and All-India 1992-93 to 2002-03**

Year	Orissa	All-India	% of col. 2 to col. 3
1992-93	499.63	979.02	51.03
1993-94	821.25	1184.72	69.32
1994-95	890.27	1022.02	87.10
1995-96	389.38	1201.30	32.41
1996-97	536.22	1378.19	38.91
1997-98	523.27	1699.18	30.80
1998-99	740.71	2074.92	35.70
1999-00	891.51	2397.30	37.19
2000-01	994.17	2784.76	35.70
2001-02	1055.91	3265.52	32.34
2002-03	1325.58	3622.91	36.59



It is observed in Table 9.4 that credit disbursed per hectare of gross cropped area was Rs. 499.63 in Orissa, which constituted 51.03 per cent of per hectare credit disbursement in the all India level during 1992-93. Since then credit disbursed has registered steady increase to Rs. 1325.58 per hectare of gross cropped area in 2002-03. But in percentage terms it accounted for 36.59 per cent of the per hectare credit available in all India level.

The lower level of credit disbursal per hectare of gross cropped area in Orissa as compared to all India level indicates the neglect of institutional agencies specifically credit disbursal by the commercial banks towards agriculture.

### Regional disparity in credit disbursement

A region wise comparison of agriculture and allied sector credit is given in the Table 9.5.

**Table 9.5: Disbursement of loans for agriculture and allied activities share in total disbursement (%)**

Region/State	1990-91	1995-96	2001-02
North Region	12.9	11.6	19.9
North Eastern Region	0.4	0.4	0.5
Central Region	16.9	16.4	14.1
Western Region	13.6	17.1	14.4
Southern Region	47.9	48.0	43.8
Eastern Region	8.3	6.4	7.4
Bihar	2.4	2.0	2.2
Jharkhand	0.0	0.0	0.4
Orissa	3.0	1.5	1.5
West Bengal	2.9	2.9	3.3
Andaman & Nicobar Island	0.0	0.0	0.0

Source :- RPCD, RBI

It indicates that there is significant disparity in credit disbursal by the commercial banks in different regions across the country. The south region continues to account for 43.8 per cent of the total agricultural credit followed by north region with 19.9, western region 14.4 and central zone 14.1 per cent respectively. The share of eastern and north eastern region continues to remain at abysmally low level i.e. 7.4 and 0.5 per cent of the total credit disbursal in the 2001-02. In the eastern region out of the 7.4 per cent of the country's agricultural and allied sector credit disbursal West Bengal accounted for 3.8 per cent followed Bihar, Orissa and Jharkhand with 2.2, 1.5 and 0.4 per cent respectively. A comparison across time of agriculture lending in the states indicates a discouraging trend i.e. in 1990-91 the state accounted for 3.0 per cent of the total which declined to 1.5 per cent during the year 2001-02.

### Credit Deposit Ratio

Considering the agricultural credit is mostly provided by the rural and semi-urban branches in Orissa, a perusal of the data presented in Table 9.6 revealed the reluctance of commercial banks to finance the agricultural sector in the state. The credit deposit ratio of the commercial banks is only 35.80 taking rural and semi-urban branches together. The regional rural banks have a better credit deposit ratio of 54.62. However the cash starved cooperatives maintain an overwhelming 131 per cent credit deposit ratio for agricultural finance in the state.

The results are more disquieting when viewed against a RBI prescription of a minimum of 60 per cent credit-deposit ratios that rural and semi urban bank branches are required to achieve.

A perusal of the data presented in Table 8.7 indicates the ratio of agricultural credit to agricultural GDP. Despite the claim of a well developed credit delivery structure, the out reach of institutional sources has remained restricted. Though the ratio of agriculture credit to agriculture GDP increased from 7.4 to 8.7 per cent in the country in 2001-02, yet agriculture credit as a proportion of to total credit has decelerated from 14.4 per cent to 10.5 per cent. In Orissa the ratio of agricultural credit to agricultural GDP

Table 9.6 : Area wise deposits, advances &amp; CD ratio for agriculture as on 30.09.2002 in Orissa

Sl. No. of the Banks	(Amount Rs. in crores)							
	Rural		Semi-urban		Total		C.D. ratio	
	Deposit	Advance	Deposit	Advance	Deposit	Advance		
1. Public sector commercial banks	4055.41	1565.20	4890.67	1637.12	8946.08	3202.32	35.80	35.80
2. RRBS	1633.21	958.26	490.55	201.82	2123.76	1160.08	54.62	54.62
3. Co-operatives	431.12	719.85	485.08	482.31	916.20	1202.16	131.21	131.21
Total	6119.74	3243.31	5866.30	2321.25	11986.04	5564.56	46.43	46.43

Table 9.7 : Ratio of Agricultural credit to Agricultural GDP and to Total Credit

Period	Agricultural credit as a ratio of agricultural GDP	Agricultural credit as a ratio of total credit <sub>05.05</sub>
<b>India</b>		
1992-93	7.4	14.4
2001-02	8.7	10.5
<b>Orissa</b>		
1992-93	9.80	4.63
2001-02	11.31	7.29
	12.31	12.31

was 9.80 per cent which registered a mild increase to 11.31 per cent in 2001-02. Agricultural credit as a proportion of total credit has also increased from 4.63 per cent to 7.29 per cent during the same period. This clearly indicates lower deployment of credit for agricultural sector in the country as well as in the state.

### Conclusions and policy implications

In the country conscious efforts have been made to expand credit to agriculture and allied sectors. But, studies in different time periods indicate that despite such conscious efforts, there exist a substantial gap between the requirement and supply of agricultural credit. The dependence of small farmers and less developed regions on informal sources for credit is still high (Dandekar, 1993). The less developed states like Orissa, Bihar, North Eastern States have been deprived from the national credit policies designed for development of agricultural sector due to lack of ground level credit planning. To address the above issue, there is a need to identify two types of clientele in agricultural credit market: (i) capital intensive production oriented farmers for commercial agriculture (ii) farmers for traditional farming. For these two types of clientele, the approach and system for credit delivery should be different. In the case of first type of farmers, viability of the project, infrastructure required, marketing arrangements and risk analysis has to be made to finance the



project. In the case of second type of clientele, the credit delivery system should be more informal without insisting on collateral requirement. The proper structure for such informal credit delivery system suitable for resource poor farmers are the SHG/MFI (Self Help Groups and Micro Financing Institutions). The formal groups (SHGs) and the non-government organisations can be linked with the formal institutions. So, that the access of the resource poor farmers can be increased to avail institutional credit from SHGs/MFIs. Thus the formal groups can empower the small and marginal farmers to have higher access to production credit, investment loans for minor irrigation, farm mechanization, marketing and other farming improvements. These are generally beyond the capacity of individual farmer.

In Orissa, the small and marginal farmers constitute 82% of total farming community. These resource poor farmers are generally considered as having low credit worthiness. Their holdings are too small to adopt viable investment activities. In view of high default risk, mounting over dues, high transaction cost in agricultural loans, commercial banks are hesitant to take lending decision for these category of farmers. In this situation commercial banks can not be shy away from their responsibilities but have to devise the means by which the designed policy measures of the state as well as the central Government are met by adequately increasing credit for agricultural sector. The situation in the state is more suited to informal credit delivery through SHG route. This requires the formation of special type of Kissan SHGs which would help to mobilize rural savings, empower the small and marginal farmers to negotiate production and investment loans, reduce transaction cost and improve loan recoveries. Agricultural credit must be linked with marketing of agricultural products. The lending agencies should make necessary arrangements so that the forced sell of marketable surplus is checked and farmers get due share of their produce and able to repay their debt in time.

There is also a need for the development of grass root level bankable proposals with its economic feasibility by the participation of NGOs and reputed agencies having knowledge of real ground level situation of the farmers. Arrangements also are to be made

for security of the farmers by providing insurance facilities with a suitable premium so that the uncertainties of crop failure due to natural calamities and insecurity due to price fluctuation in the market can be taken care off. All though a micro level study is essential to suggest for higher credit deposit ratio but at present, steps can be taken in an integrated manner to increase credit deposit ratio for Orissa in general and agriculture in particular.

## REFERENCES

- Dandekar, V.M. (1993), "Limits of Credits, Not Credit Limits", *Economic and Political Weekly*, Vol. 28, No. 39, September 25.
- Desai, Bhupat M. (1994), "Contribution of Institutional Credit, Self Finance and Technology Changes in Agricultural Growth in India", *Indian Journal of Agricultural Economics*, Vol. 49, No. 3, July-September.
- Mujumdar, N.A. (1999), "New Architecture of the Rural Credit System", *Financing Agriculture*, Vol. 31, No. 3 and 4, July-September and October-December.
- Puhazhendi, V. and B. Jayaraman (1998), "Rural Credit Delivery: Performance and Challenges before Banks", *National Bank News Review*, Vol. 14, No. 4, October-December.
- Ray, B.C. & Suresh Pal (2002), "Investment, Agricultural Productivity and Rural Poverty in India: A State Level Analysis", *Indian Journal of Agricultural Economics*, Vol. 57, No. 4, October-December 2002, pp. 653-678.
- Reserve Bank of India (1989), *Report of Agricultural Credit Review Committee*, Bombay, August.