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Agriculture Credit Market in Odisha: A Source of Sustainable Livelihood for the Farmer

Jeeban Jyoti Mohanty

Consultant at Small Industries Development Bank of India (SIDBI) and Ph.D Research Scholar, Department of Economics, Ravenshaw University, Cuttack, Odisha

Abstract- Agriculture continues to be the backbone of the state's economy in Odisha. Nearly 58 percent of the rural households depend on agriculture for their primary means of livelihood, but this sector continues to be subsistence oriented and susceptible to natural shocks such as droughts and floods. As agriculture depends on monsoon, a major segment of this population does not have sufficient income even to meet their daily expenses and for them the possibilities of savings and investment are almost stagnant. They require credit in their day to day life, to purchase agricultural inputs and adopt modern technology. Thus, timely and adequate quantum of agricultural credit is critical for the socio-economic development of the agricultural farmer.

The present paper is an attempt to explore the agricultural credit market in Odisha, which is a powerful tool for enhancing production and productivity and ensuring sustainable livelihood for the countryman. Further, the paper highlights the strategies adopted by the Reserve Bank of India (RBI), National Bank for Agriculture and Rural Development (NABARD) to increase the agricultural credit facilities in the state. The various tools of rural credit are analyses in details. This study utilised secondary sources of information such as RBI and NABARD report on Financial Inclusion, agenda of various issues of State Level Bankers Committee (SLBC), Odisha meeting and State Economic Survey Report etc. Moreover the study has also explored various other sources, for instance MFIN Micrometer Report and Odisha inclusive finance report, etc.. The analysed data are presented based on objective of the research in the form of tables, which are described, interpreted and conclusion drawn. The study gives an ample opportunity to understand the need and sources of agricultural credit market in Odisha. It further unbolts exploration in terms of issues and challenges of the rural credit market in the state. The study has revealed that agricultural credits can serve as a tool for providing a sustainable livelihood for millions poor farmers in the state. Several organisations like NABARD, RRBs, cooperative bank and Microfinance Institutions, etc. are playing a major role in providing agricultural credit facilities to the needy. The study suggests that the cooperative credit system need to be reinvigorated and the priority sector lending norms should be strengthened. Furthermore the study has also recommended that every district should have a vision plan encompassing all aspects of financial services to farmers and pursuing certain minima of financial services and livelihood support services. But in spite of several efforts put up by various organisations to increase the agriculture credit facilities, several challenges will prevail in years to come.

Index Terms- Rural credit, Institutional Credit Agency, Crop loan, MFIs, SHG-Bank Linkage Programme and Cooperative credit System

I. Introduction

India is an agrarian economy; where above 58 percentages of rural households depend upon agriculture for their primary means of livelihood. Agriculture contributes 17.4 percentages towards Gross Domestic Product (GDP) and employs 2/3 of labour to the total work force[1]. Though it contributes for majority of the people as a primary source of livelihood and added great extent in GDP, but fails to provide optimum production of the farm land. Basically landholding pattern, irrigation facilities, marketing system, agricultural inputs, lack of finance has kept them in back foot point. Landholding pattern is very much pathetic because 25 percentages of the total cultivable land under the clutches of majority (75%) of the people and 75 percentages of cultivable land are in the name of 25 percentages of the landlord[2]. Poor irrigation facilities also added fuel in low production. Because of small pieces of land and lack of finance, farmers are unable to invest in agricultural inputs. Agricultural inputs include modern technologies, fertilizers, manures, and quality seeds. These agricultural inputs are very much required for increasing the productivity of the land which is the need of an hour. Increasing the productivity of the land depends on the investment on agricultural inputs packages. It requires huge investment which is not possible on the part of poor farmers. After 70 years of independence still nearly 27.5 percentages of people are living in BPL category[3].

The term "Credit" refers to a particular sub-set of financial services which provides small loans to very poor and tribal families, most often without any collateral. The provision of credit and generation of savings has long been recognized as an essential element in any rural development strategy. Credit plays a crucial role in the modernization of agriculture, but its role in the fight against rural poverty has seldom been recognized (Islam, Siddiqui and Karim, 2014) . In one hand the majority of the people depend on agricultural activities and on the other hand, they are lacking in capital for investment which compels them to knock the door of any financial institutions either formal or informal.

[1] Economic Survey, 2015-16
2 www.nic.in
[3] Ministry of Social Justice and Empowerment, GoI

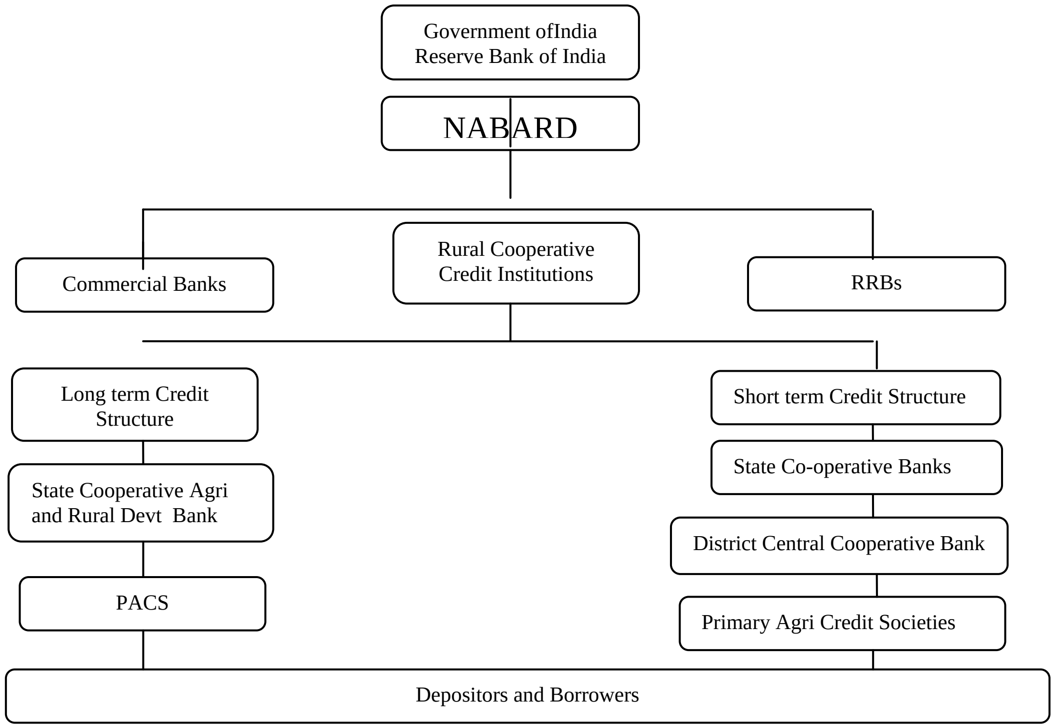
Formal institution means registered under the banking regulation act 1949[4] and following the norms, principles of Reserve Bank of India. These institutions are cooperative banks, commercial banks, regional, rural banks, NBFCs etc. as per the circular and guideline of the RBI, these institutions will act upon it. The formal institutions are very much strict on their lending principles. The documentation process and without mortgages the formal institutions will not sanction a single pie to the farmers. The quantum of loan depends upon the value of assets that a farmer wants to keep with the bank. It is noteworthy to mention that interest is charged as the purpose of the loan. For documentation farmers take lots of pain for collecting required documents from various departments. As it is mentioned that the majority of the people are small farmers and poor they cannot keep any mortgages, but as per the banking principles without fulfilling these required criteria's they cannot avail loan. However, in few cases where farmers meet the requirements of the institutions, but failed to access it in time because of the lengthy loan sanctioning process. When they get it the purpose of that loan might have met out in some other sources. Three things are very important in delivering credit to the farmers for agricultural purposes such as the documentation process, quantum of loan and timely disbursement, falling of these compels the farmers to knock the door of informal sources for availing it.

Informal financial institution means without any documentation, record and not adhering norms, principles, guideline set by RBI. The farmers avail loans from the informal sources like moneylender, merchants, bittle shopkeeper, relatives and friends, etc. in fact, in availing loan from these sources, farmers get a certain benefit like required less document, face value, no mortgage, quantum of loan is high, door step services and timely credit. Face value plays a very important role in sanctioning loan. It means if you are known to the respective persons all facilities will be given to him. The interest rate is also depends upon the person who is taking a loan and it varies from sources to sources. But definitely, it is a bit higher than the formal institutions.

Thus, the concern with the inadequacy of agriculture credit has had more than a century of tortuous history. The agricultural credit system (Chart-1) as it has emerged has been a product of both evolution and intervention and symbolises the system's response to the stimuli from continuing dissatisfaction with credit delivery. The concern for food security and the need for building up buffer stocks, which guided the Green Revolution, created both enhanced and diversified one of credit requirements for agricultural productions in India, a "supply-leading approach" to the institutional development for agricultural credit has been followed (Mohan, 2004).

4 Monetary Economics: institutions, theory, and policy by S. B. Gupta

Chart 1: Structure of Agricultural Credit Systems in India



Source: Reserve Bank of India Bulletin, 2004

II. REVIEW OF LITERATURE

Agricultural credit, being a vital sector of national importance, has claimed governmental and academic attention quite often. It has been analysed under different disciplines for a long time.

The All India Rural Credit Survey Committee headed by Gorwala (1954) made a study on rural credit. This nation-wide survey was carried on at the institutional level as well as at the cultivator level. It was observed that about 70 per cent of the total credit requirements of the agriculturists were supplied by the professional moneylenders. The government and the co-operatives have supplied just 3.3 and 3.7 percent respectively. The committee identified that a bulk of institutional credit was used by the big farmers. The co-operative credit societies lent loans against the land alone and the co-operative credit institutions were weak both at the grass root and central levels. The committee recommended "Integrated Scheme of Rural Credit" to set right the bottlenecks in co-operative institutional credit.

Mishra and Mishra (2007) in their study on "Institutional finance and farmer indebtedness in Orissa: evidence from village study" have identified that the large farmers by their political influence get access to a considerable amount of credit, but the small and marginal farmers are found to divert the productive credit for other purposes and very often they are alleged not to have repaid the amount intentionally.

Kailash (2005) attempted to study on agricultural credit in India doings and undoing's noted that both formal and informal sources of credit are important in the Indian context. However, the significances of formal credit institutions in terms of credit deliveries for the agricultural sector have increased over the years and it also noted that the share of cooperative credit institutions in total agricultural credit has declined in the last decades whereas the share of commercial banks and RRB have increased. The study revealed that the large farmers had taken more than 75 per cent of total credit from institutional sources, ie., co-operatives 62 per cent and commercial banks 13 per cent, when compared with the other two size groups of farmers, nearly 82 per cent and 71 per cent of the total credit taken by small and medium sample farmers respectively, are from non institutional sources, i.e., relatives and money lenders respectively, while the same was found by large group of farmers accounting less than 25 per cent.

Mishra, R.K. and S. Pattanaik (2005) attempted to study the impact of institutional finance of farm income and productivity, a case study of Orissa. The results revealed that among the institutional sources role of co-operatives was quiet commendable having the share of 39.53 per cent followed by commercial banks 19.83 per cent and RRB with 6.91 per cent, the small and large farmers were borrowed about 75 and 81 per cent of the total finance. Further it is evident that out of total borrowings, crop loan constituted about 68 per cent, as against term loan 32 per cent.

Singh, S and M.S. Toor (2005) made a study on cash in benefits of the Kisan Credit Card scheme. The results revealed that major sources of the farm credit in the case of all the farm classes, was co-operative credit almost all these respondents were in the practice of availing of credit in kind in the form of fertilizer and also in pesticides. The average amount availed by per borrower showed an increasing trend with increase in the farm size.But the number of medium farm KCC beneficiaries was comparatively lower at 65.75 per cent. Besides accessing co-operative credit 30.77 percent of the small and 28.95 percent of the medium KCC beneficiaries were observed to be still in the grip of money lenders.

III. METHODOLOGY OF THE STUDY

Looking the various aspects of the agricultural credit market in Odisha and the existing financial market scenario in the state, a study was required to understand the need and source of agricultural credit market in the state and its impact on agricultural productivity. More than this the study had also focused on the status, opportunity and challenges of the various credit market in Odisha. There are various explicit and implicit factors related to this issue. With this backdrop, the objective of our study had been stated more precisely as follows

i. To examine the nature, need and source of Agricultural credit market in Odisha.
ii. To explore the status, opportunity and challenges of the various credit market in Odisha.
iii. To suggest certain viable measures to be adopted for timely availability of credit to the agricultural farmers and its proper utilization.

Sources of Data: The study has utilised secondary sources of information such as Reserve Bank of India report on Financial Inclusion, Reports of variousfinancial institutions like NABARD, Agenda of SLBC, Odisha meeting. Moreover the study has also explored the various other sources like MFIN Micrometer, Cooperative Credit Systems, etc. The analysed data is presented based on the objectives of the study in the form of tables, which are described, interpreted and conclusions drawn.

IV. KEY CHALLENGES IN AGRICULTURAL CREDIT

Generally there are three key challenges in agricultural markets in India, i.e (i) Highlight the structures of existing agriculture credit markets and its role in order to bring out the insufficiency in terms of performance, (ii) Whether the existing credit markets full fill the needs of the rural population. Furthermore, whether the formal source of credit has helped in bridging the credit gaps of the small farmers, (iii) Problems related to adverse selection and lack of incentives to guard against the risk in an agricultural credit,creates problems for formal institutions in lending money to farmers.

NEED FOR AGRICULTURE CREDIT

The need of credit for agriculture can hardly be over emphasis where its productivity is still low due to financial constraints. In this context, All Rural Credit Survey has observed: “Agricultural credit is a problem when it cannot be obtained; it is also a problem when it can be had but in such a form that on the whole it does more harm than good. In India it is this twofold problem of inadequacy and unsuitability that is perennially presented by agricultural credit”. Undoubtedly, an Indian farmer is not able to make the maximum use of his time, labour and productive capacity of his land because of the lack of adequate financial facilities. Farmers need credit for two purposes such as

i. Productive: Productive purpose means investment of that amount and expecting return out of it. Investment of productive loan on agriculture refers agricultural land development work, purchasing modern technologies, seeds, fertilizers, etc. these agricultural packages will help in enhancing the productivity of the land. Formal financial institutions are interested in financing for this purpose because itis expected better repayment performance from the farmers[5].

ii. Unproductive: Unproductive purposes mean return is not expected from that investment. Investment on marriage, social gathering, festivals, constructing houses, purchasing gold, etc. are treated as an unproductive purposes. In economic point of view, it may be unproductive, but development point of view, it is very much essential on the part of human life. Being a social animal you need to go along with the society at any point of time you cannot detach yourself from it. But formal financial institutions do not extend its support for encouraging investment on unproductive purposes, because it looks it as a business point of view, not social phenomena. But in case of money lender they lent money for any purposes without any hesitation.

Agricultural activities is the major sources of the farmer income in the state, but the land holding pattern and the methods they opt for cultivation, does not provide substantial output to manage their family round the year resulted in knocking at the door of landlords or merchants, etc. They use traditional way of cultivation using traditional equipments, methods, etc. In one hand they are unskilled and on the other side they lack in capital for investment on agrarian packages. These are responsible for low production of the land. In addition to that there are lots of financial institutions break out in the remote places, but still then it fails to provide any substantial result in delivering credit to the agricultural farmer. They are unable to access the formal financial institutions because of unable to produce the required documents and the assets that they demand. However, for availing agriculture loan they need to produce patta and tax receipt on that land which is in their name only, but in fact that land might have belongs to their eternal father. These are few concerns bend the farmer backbone for accessing institutionalized credit for which they knock at the door of informal sources.

SOURCES OF AGRICULTURAL FINANCE

Saving generation and availability of credit plays a crucial role in rural development. It is well accepted that credit always plays animportant role in modernization the agriculture, but its role of fight against rural poverty has seldom been recognized. In developing countries like India formal financial institutions, whether public and private have avoided rural credit for various reasons such as low financial credibility and the opportunity costs. Further rural financial services have mostly been controlled by moneylenders, who are able to use their large endowment base and influence within the local power structure to secure loans at high advantaged, terms. Credit policies are also generally concentrated on land based agricultural production programmes, neglecting off-far in activities in which the poor are mainly engaged (Rao and Priyadarshini, 2013**)**. The informal

[5] Agriculture and Rural development in India since 1947, Dr. Chandra Sekhar Prasad

sector workers have mostly been excluded from the financial services either because they were not available or simply because they were not conceded creditworthy. There is a myth that poor are not credit worthiness and they are ignorant of the basic principles of sound money management.

FORMAL AND INFORMAL AGRICULTURAL CREDIT SOURCES

Conventionally, the institutional finance in India has been serving only the needs of the commercial sector and meeting the loan requirements of middle and upper income people. As far as the formal financial institutions are concerned, there are Development financial institutions like NABARD, SIDBI, Commercial Banks, Regional Rural Bank (RRB) and Co-operative Banks (CBs), etc.. The Government has taken several initiatives to strengthen the institutional rural credit system. The rural branch network of commercial banks has been expanded and certain policy prescriptions imposed in order to ensure greater flow of credit to agriculture and other preferred sectors (Rao and Priyadarshini, 2013)..

In the beginning plan period the moneylenders are continuing to dominate and nearly 92.8 percent of the rural households depend on informal source of credit. After 1981, the presence and role of commercial banks and cooperative were highly commendable. It appears that the large number of branches that was set up by various commercial banks in the 1970s and the subsequent introduction of rural banking schemes have driven the commercial banks to assume the role of principal credit agency in rural areas (Pradhan, 2013). At the all India level, among the formal credit institutions, commercial banks and cooperative societies were playing a key role in meeting the rural credit.These two institutions together, have 91 percent shared of the entire amount in the rural sector. In 2002, share of co-opeative societies stood at 27.3 percent, whereas share of commercial banks is 28.9 percent (Table-1).

Table 1: Break up of institutional and Non-Institutional Rural Credit (in %)

	1951	1961	1971	1981	1991	2002	2010	2013
Institutional Agencies	**7.2**	**14.8**	**29.2**	**61.2**	**64**	**57.1**	**62.3**	**64**
Government	3.3	5.3	6.7	4	5.7	2.3	7.8	1.3
Co-Op. Society	3.1	9.1	20.1	28.6	18.6	27.3	21.3	28.9
Commercial Bank incl. RRBs	0.8	0.4	2.2	28	29	24.5	30.2	30.7
Insurance	-	-	0.1	0.3	0.5	0.3	0.8	0.1
Provident Fund	-	-	0.1	0.3	0.9	0.3	0.5	0
Others Institutional agencies	-	-	-	-	9.3	2.4	1.7	3
Non-Institutional Agencies	**92.8**	**85.2**	**70.8**	**38.8**	**36**	**42.9**	**37.7**	**36**
Landlord	1.5	0.9	8.6	4	4	1	5.7	0.4
Agriculture Moneylender	24.9	45.9	23.1	8.6	6.3	10	8.1	
Professional Moneylender	44.8	14.9	13.8	8.3	9.4	19.6	10.1	29.6
Traders and Commission Agents	5.5	7.7	8.7	3.4	7.1	2.6	4.8	-
Relatives and Friends	14.2	6.8	13.8	9	6.7	7.1	4.4	4.3
Others	1.9	8.9	2.8	4.9	2.5	2.6	4.6	1.7
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Sources: All India Debt and Investment Survey various series and NSSO

On the otherhand the share of all non-institutional credit agencies in the loan outstanding of the agriculture, farmers declined from 70.8 percent in 1971 to 38.8 percent in 1981, but from 1991 to 2002, there are only 3 percentage points (Table-1). It is found that dependency on agriculture money lenders was sharply declined from 45.9 percent in 1961 to 8.1 percent in 2010 but in case of professional moneylenders it raised from 14.9 percent in 1961 to 29.6 percent in 2013. It was observed that importance of relatives and friends gradually declined as a source of credit. The share fell from 14.2 percent in 1951 to 4.3 percent in 2013. From non-institutional credit agencies, money lenders – both professional and agriculture were found to be an important source of finance in rural areas.

PROFILE OF THE STATE OF ODISHA

Odisha is the eleventh largest State with 3.4% of the country's population. As per the provisional Census figure of 2011, the State has a population of 41.95 million (male-21.20 million, female -20.75 million) (Table-2). The sex ratio of the State is an important indicator for the analysis of the Human Development Index in these areas. A comparison with national average also puts the performance of the State in perspective with the country as a whole.

Table 2: Comparative State Demographic Features

Sl.No	Parameter	Odisha [2011]	India [2011]
1	Population in Million	41.95	1210
	(a) Male	21.2	624
	(b) Female	20.75	568
2	Decadal Growth Rate	13.97	17.6
3	Population Density (Per sq km)	269	382
4	Literacy Rate (%)	73.05	74.04
5	Sex Ratio	978	943
6	Rural Population (%)	83	68.84
7	SC Population (%)	17.13	16.6
8	ST Population (%)	22.85	8.6
9	Female Work Participation	32.15	25.6
10	HDI	0.362	0.467
11	Poverty Ratio (2009-10)	37	29.8

Source: Census of India, 2011

Odisha has been ranked as the most backward states by the panel headed by Dr. Raghuram Rajan. The panel has proposed a new index of backwardness to identify States that require special assistance. The new index is composed of 10 equally weighted indicators for monthly per capita consumption expenditure, education, health, household amenities, poverty rate, and female literacy, the percentage of the Scheduled Caste/Scheduled Tribe population, urbanization rate, financial inclusion and physical connectivity.

CONCERN AND CHALLENGES OF THE STATE

Agriculture and allied sectors continue to be subsistence oriented and susceptible to natural shocks such as droughts and floods. Agriculture is mostly traditional, rain fed and use of technology and modern agricultural practices is minimal. The growth of the sector has been around 3%. The Schedule Castes (17.13%) and Schedule Tribes (22.85%] constitute 39.98% of the population as per 2011 census. The adverse socio-economic condition, as it is, of such a large chunk of population presents a major challenge in development of the state. There is a considerable gap between the State's real per capita income and the national per capita (8% approx.). Left Wing Extremism (LWE) has affected nineteen districts; this has an impact on both security and development, and thus has to be tackled with specific strategies. Faster and balanced economic development with focus on critical infrastructure is warranted. The State needs to improve governance, delivery of public services, investment, recovery and regulatory environment.

STATUS OF AGRICULATURE IN ODISHA

As per the Economic survey of Odisha, Agriculture formed 15.4 percent of the GSDP of the state in 2014-15 and it was 16.3 percent in 2013-14[6]. The GDP of Odisha is growing at a pace slower than the national average. Slower growth can be partly attributed to lower or negative growth in agriculture in the state. Also the per capita income of Odisha is INR61,678 while all India average is INR 81,805[7]. It is also important to note that Odisha has one of the highest levels of poverty in the country. As there is not enough scope for non-farm income, agriculture stagnation has serious livelihood implications for the small and marginal farmers and the agricultural labourers. The potential for agricultural development of Odisha is, however immense. It has good water potential for growing groundnut and jute. There is also a lot of scope for agro industries for value addition in the agriculture sector which has largely remained underdeveloped (Khan, 2008).

AGRICULTURE IN ODISHA: ISSUES AND CHALLENGES

The agriculture in Odisha is facing several challenges which includes (a) Low productivity due to fragmentation of land holding pattern, (b) Mostly focused on cereal production, (c) lack of research and development support, (d) One third of agriculture land is alkaline or saline,(e) Insufficeint and improper use of inputs, (f) Credit flow is skewdly distributed across the districts, (f) Highly fragmented markets, (g) Microfinance/SHGs initiatives not focusing on agriculture, and (h) Low use of Information and digital technology in agriculture.

Scope of Agriculture in Odisha: (i) There are ample scope for crop diversification considering the variety of agro climatic zones in the state, (ii) The low use of fertilizer can be strengthen as large areas can be brought under organic agriculture which is characterized by growing demand and commands a premium price in the global and domestic markets, (iii) Agro processing and agribusiness have good value addition and employment generation potential. In the long term, agriculture would not be able to sustain the nearly 60 percent of the population involved in agriculture and hence, there is need to create more opportunities in the agro industries sector (Khan, 2008).

[6] NITI Aayog, 2014-15

[7] Odisha Economic Survey, 2016-17

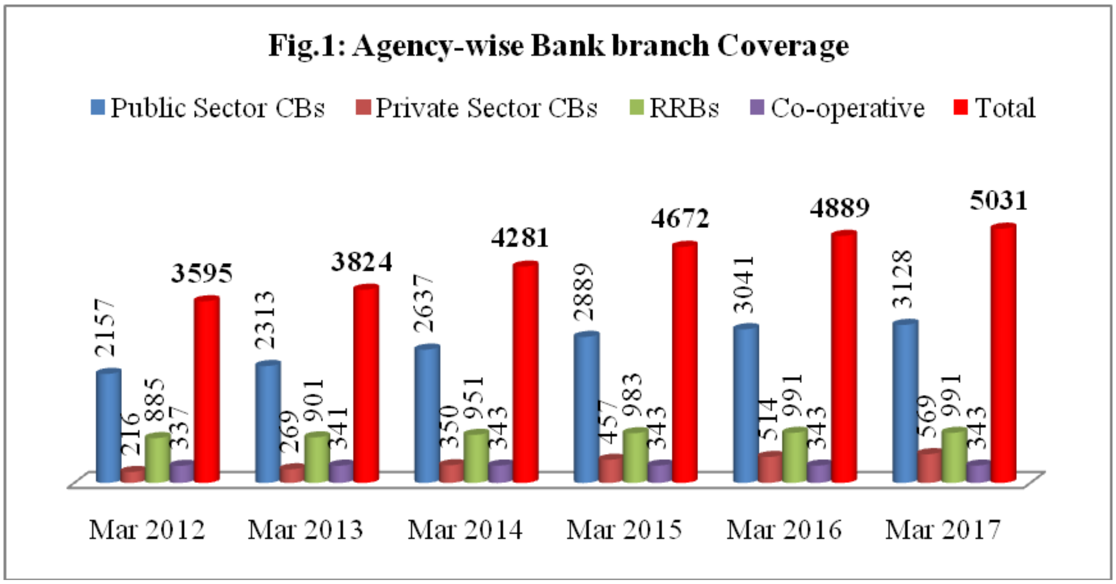
CURRENT TREND OF RURAL CREDIT IN ODISHA

The (Table-3) below shows that a total of 1436 new bank branches have been opened between March 2012 and March 2017. The majority of the branches were opened by public sector banks. The contribution of private sector banks has been reasonable. Although, there has been a gap between the total figures of public and private banks in the last six years. Area wise these banks have opened more branches in rural areas than urban pockets during the last quarter. This is a very good sign and shows the intent of the banks in reaching the underserved section of the population (Fig-1).

Table 3: Agency wise bank branch coverage in Odisha

Agency	Mar 2012	Mar 2013	Mar 2014	Mar 2015	Mar 2016	Mar 2017
Public Sector CBs	2157	2313	2637	2889	3041	3128
Private Sector CBs	216	269	350	457	514	569
RRBs	885	901	951	983	991	991
Co-operative	337	341	343	343	343	343
Total	**3595**	**3824**	**4281**	**4672**	**4889**	**5031**

Source: Odisha Inclusive Finance Bulliten various edition



Performance of banks operating in key areas from March 2012 to March, 2017 is furnished below.

Table 4: Important Features of Banking performance in Odisha (Amount in Crores)

Particulars of Item	**As on Mar 2012**	**As on Mar 2014**	**As on Mar 2015**	**As on Mar 2016**	**As on Mar 2017**
Total Deposits	1295104	169642	196232	218748	253115
Total advance utilised by the state	9,30,948	144726	143614	163733	174539
CD Ratio (%)	71.88	85.31	73.19	74.85	68.96
Total Priority Sector Advances (TPSA)	4,13,290	52554	57876	73386	84202
% to Total Credit	59.57	55.72	56.76	63.94	65.26
To Agriculture (% of TSAP)	28.68	29.01	29.38	33.51	31.69
To SC/ST (% of TSAP)	10.11	32.74	33.24	33.16	27.61

Source: Agenda 147th , 143rd, 139th, 135th and 131stSLBC, Odisha meeting

The ratio of the total loan advances to total deposits of banks serves as an important indicator of banking activity, reflecting their development approach to lending. There has been a steady increase in the CD ratio of all banks over the years (Figure-2). The area wise position of a CD ratio of banks for three years is given below:

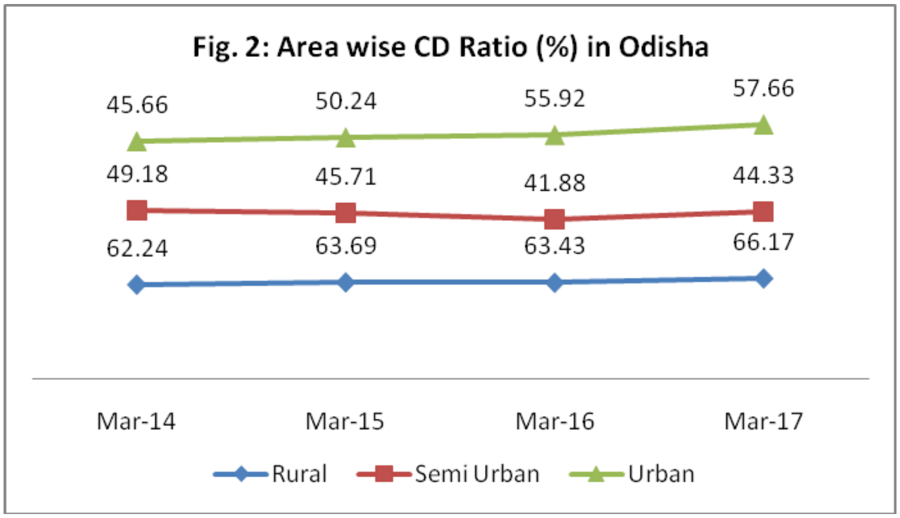


Table 5: Area wise CD Ratio (%) in Odisha

Area	As on Mar 2014	As on Mar 2015	As on Mar 2016	As on Mar 2017
Rural	62.24	63.69	63.43	66.17
Semi Urban	49.18	45.71	41.88	44.33
Urban	45.66	50.24	55.92	57.66

Source: Agenda 147th , 143rd, 139th, 135th and 131stSLBC Odisha

Thus, CD ratio has been steadily increasing from 62.24 in March 2014 to 66.17 as on March 2017 in rural aras whereas in urban areas, it raised from 45.66 percent to 57.66 percent(Table 5).Further credit deployment by banks in the rural areas is more in comparison to the deposits mobilized from rural areas. Funds mobilized from the semi- urban areas and urban areas are also being deployed in rural areas. As per the Agenda note of 147thSLBC, Odisha meeting,6 districts CD ratio is more than 60 percent and 12 districts CD ratio is less than 40 percent.

In the State of Odisha, as on 31st March 2017, 431487 SHGs had saving balance of Rs.62745.1 million with banks. Nearly 72,420 SHGs has been linked with banks and loan disbursed to the group stood at INR 96099.42 million till March 2017 and loan outstanding of 220662 is at the tune of INR 220662 million (Table-6). It is also pertinent tomentioned here that NPA have also reached at 14.08%. The SHG model considers as an avenue of economic empowerment of rural women extending the banking outreach in an affordable way.

SHG – BANK LINKAGE PROGRAMME

Table 6: Progress under SHG-BLP as on 31 March 2017 (Amt. in Million)

No. of SHGs	Savings Amount	Loan disbursed Amt		Loan Outstanding		NPA	
		No. of SHGs	Amt.	No. of SHGs	Amt.	Amt.	% of O/S
431487	62745.1	72420	96099.49	220662	212682	29955.49	14.08

Source: NABARD Regional Office, Bhubaneswar

JOINT LIABILITY GROUPS (JLGS)

In order to develop effective credit products for small/ marginal/tenant/ farmers, oral lessees, and sharecroppers, as also entrepreneurs, engaged in various non-farm activities, National Bank for Agriculture and Rural Development (NABARD) has first introduced the concept called Joint Liability Group (JLG). Similar to the pattern of Self Help Groups (SHG), NABARD will provide refinance facility to banks for providing loans and financial assistance to small and marginal farmers who are normally deprived of finance.The status of JLGs as in Odisha compare to eastern region and India as on march 2017 is stated below (Table-7).

Table 7: Status of JLG in Odisha compare to Eastern region and India as on March 2017 (Amount in Lakh)

Region	Cumulative No of JLGs promoted as on Mar 2016	Cumulative loan disbursed as on Mar 2016	No of JLGs promoted during 2016-17	Loan disbursed during 2016-17	Cumulative No of JLGs promoted as on Mar 2017	Cumulative loan disbursed as on Mar 2017
Odisha	177207	130405.52	83225	83217.89	260432	213533.41
Eastern	466408	385688.29	234019	251924	700427	637612.53
India	1751722	1733695.46	701623	951117.33	2453345	2684812.79

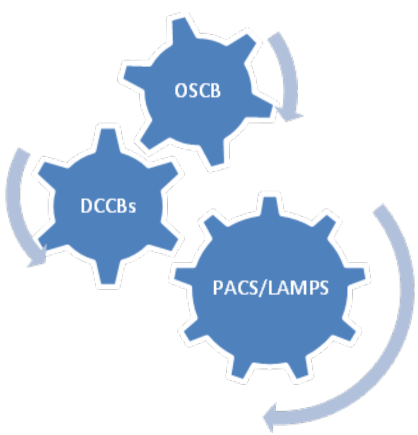
Source: Status of Microfinance in India 2016-17

PRIMARY AGRICULTURAL COOPERATIVE SOCIETIES (PACS)

Following the 'Raiffeisen Model', PACS came to existence after the enactment of Cooperative Credit Societies Act 1904. PACS functions on the basis of cooperative principles of voluntary participation, democratic control, limited area of operation and limited liability. These societies work at the village level and are meant for the farmers regarding provision of requisite short term and medium term loans. In addition to these PACS also helps in the formulation and implementation of agricultural development plans for the welfare of its members. The PACS are associated with following functions:

(i) they borrow adequate and timely funds from DCCBs and help the members in financial matters; (ii) they attract local savings in the form of share capital and deposits from the villagers, thereby inculcating the habit of thrift; (iii) they supervise the end use of credit; (iv) they make available fertilizers and insecticides etc. to the needy farmers; (v) they provide machinery on hire basis to the farmers; (vi) they associate with the programmes and plans meant for the socio-economic development of the village; (vii) they are also involved in the marketing of farm produce on behalf of the farmer-borrowers; (viii) they provide storage facilities and marketing finance; and (ix) they supply certain consumer goods like rice, wheat, sugar, kerosene, cloth etc. at fair prices.

In Odisha there are three tier structure of Credit Cooperative Structure (CCS) which is similar to other states as shown below (Figure 3).



- 14 Branches
- Operates an Agricultural Cooperative staff training Institute (ACSTI) in Bhubaneswar

- 17 DCCB with 318 branches
- All the DCCBs and branches operate under CBS

- 2708 PACS including 214 LAMPS and 6 FSS with a total membership of 54 lakhs agricultural families out of them 49.19 lakhs families have been enrolld as members of the PAC.

Figure 3

MFI COVERAGE IN ODISHA

The (Table 8) below gives a list of MFIs operating in the state. It captures growth rates of active borrowers, loan outstanding and outreach in terms of no of districts covered by MFIs. There is an increase in the overall portfolio outstanding of the MFIs (37.1%) in comparison to the last financial year. It is also encouraging to see that some of the MFIs including local ones are expanding their outreach in the state.

Table 8: Microfinance coverage in Odisha

FY 15-16					FY 16-17				
MFI Count	No. of Branches	Clients (lakh)	GLP (Cr)	Loan amt. disbursed (Rs Cr)	MFI Count	No. of Branches	Clients (lakh)	GLP (Cr)	Loan amt. disbursed (Rs Cr)
10	407	16	2,460	3,227	13	546	20	3,256	4,427

Source: MFIN Micrometer

KISAN CREDIT CARD (KCC)

Kisan Credit Card scheme was introduced in August, 1998 to facilitate farmers easy and timely access to short term credit for purchasing farm inputs while conducting seasonal agricultural operations for raising crops. Now the scheme has been extended to cover tenant farmers, oral lessees, farmers to redeem debt from informal sources, besides providing long term as well as consumption credit. The progress of KCC as on 31st March 2017 is as under:

Table 9: Financing under KCC Scheme upto March 2017 **(Amount in Crore)**

Sl.No	Bank	No of KCC Issued till March 2017		Total amount disbursed till March 2017		Balance outstanding as on March 2017	
		A/C	Amount	A/C	Amount	A/C	Amount
1	Public Sector Bank	261813	1306	379745	2365.83	961281	5177.13
2	Private Sector Bank	79000	360	97072	583.06	51353	255.6
3	Regional Rural Bank	187449	881.65	303779	1177.64	595549	2310.37
4	Orissa State Co-operative Bank	86728	181.28	3151424	10203.79	5085823	10512.23
	Total	**614990**	**2728.93**	**3932020**	**14330.32**	**6694006**	**18255.33**

Source: 147th SLBC, Odisha Agenda

There has been considerable progress in the number of cards and the amount disbursed under the KCC scheme over the years. The performance of KCC scheme varies widely across regions and financial institutions. The Eastern & NER lag behind other regions. The performances of Regional Rural Banks (12.65 percent) are comparatively lower than Co-operative banks and commercial banks in the state (Table 9).OSCB had introduced Kalinga Gold Kisan Card with considerable ads on facilities. Odisha has assumed the fourth position in the country in issue of KCC (in terms of number) only next to UP, AP and Rajasthan.

SUGGESTIONS AND RECOMMENDATION

On the basic of the study the following suggestion are made. They are as follows

i. Agriculture in Odisha has still suffers from: i) poor productivity, ii) falling water levels, iii) expensive credit, iv) a distorted market, v) many intermediaries who increase cost, but do not add much value, vi) poor infrastructure, and vii) inappropriate research. Thus the supply leading approach with more emphasis on credit in isolation from the above factors will not help agriculture to attain the desired growth levels. Furthermore, agriculture being a core subject, State and districts are required to play a more pro-active role in agriculture development by putting in place adequate infrastructure through different means (Golait, 2007).

ii. Department of agriculture needs to be strengthened to help farmers in improving the productivity and creating awareness in solving their problems rather than mere spectators/attending to paperwork, meeting. Reorganise for favourable working conditions may be required.

iii. There is also a need for exploring new innovations in product design and methods of delivery, through better use of technology and related processes. It needs to be seen whether credit going to farmers, especially small and marginal is in sufficient quantity and if so, whether it will have any meaningful effect in the absence of other supportive measures for ensuring their economic viability. In this context, creation of production and employment opportunities in the rural sector through public investment assumes critical importance (Arabi, 2011).

iv. The SHG-Bank Linkage model is an outstanding example of an innovation, leveraging on community-based structures and existing banking institutions (Arabi, 2011). In future, concerted efforts have to be made for enhancing the flow of credit in critical infrastructure areas such as irrigation, marketing and storage, *etc.*, and also for areas such as watershed/wasteland development, wind energy, allied activities such as poultry, horticulture, dairying, *etc.*

v. There is an urgent need to upscale the KCC outreach to cover all the eligible farmers by creating greater education through financial literacy camp and giving greater publicity to the scheme. Updation of land records and sensitization of bank staff through training programmes will further add to the spread of the scheme. Furthermore, there is also a need for developing special agricultural credit plans for small and marginal farmers with higher component of direct finance.

vi. Grassroots NGOs should play a critical role at this juncture. They are vertically integrated with the farmers for providing them critical inputs or processing their produce, could increase the credit flow to agriculture significantly.

At last but not the least the bankers will have to play an active role in supporting farmers in several ways, just like they did during the heydays of the green revolution through Farmer approach (Khan, 2008). FARMER Approach, signifies as follows, **Finance:** Adequate and timely need for agriculture credit is the need of the hour. As credit is consider as important input, which can command all other rewsouces. **Allied Activities:** It is through increased income of the farm families through diversification. Allied activities act as a hedge the downsides in agriculture. Today, crops constitute less than 30 percent of farm income with the rest coming from dairy, poultry, beekeeping and horticulture. **Risk Management:** Risk mitigation measures like crop and weather insurance, health and crop insurance are very critical for maintaining the health of the rural financial system and ensuring the viability of the agricultural sector. Some of these can be bundled and provided as a package to the small farmers as Micro Insurance.**Market Access:** Efficient marketing which would include innovative approaches, such as the producer companies, contract farming, value chain Agro processing and Agri business are particular important for the small and marginal farmers. It should also include availability of quality inputs to the farmers, such as seeds, fertilizer and pesticides.**Extension and Research:** Research and extension linkages should comprise the all four critical pairs of the L's Lab to Land, Land to Lab, Land to Land and Lab to Lab. It needs to be appreciated that the quality extension and research services in a cost effective manner is a sine qua non for productivity enhancement and risk mitigation. **Resources (Other than Finance):** Inputs like water, seed, fertilizer, pesticides and healthy and skilled human resources. Potable water supply and toilets are, for instance very important. Some of the banks have found that there are significant benefits for construction of toilets in the rural areas and financing them is a bankable proposition.

V. CONCLUSION

Agricultural credit has played a vital role in supporting agricultural production in the state. Green Revolution characterised by a greater use of inputs like fertilizers, seeds and other inputs, increased credit requirements which were provided by the agricultural financial institutions. Though the outreach and the amount of agricultural credit have increased over the years, several weaknesses have crept the viability and sustainability of these institutions. Furthermore, antiquated legal framework and the outdated tenancy laws have hampered the flow of credit and development of strong and efficient agricultural credit institutions.

From the present study reveals that though the overall flow of institutional credit has increased over the years, there are several gaps in the system like inadequate provision of credit to small and marginal farmers, paucity of medium and long-term lending and limited deposit mobilisation and heavy dependence on borrowed funds by major agricultural credit purveyors. These have major implications for agricultural development as also the well being of the farming community. Efforts are therefore required to address and rectify these issues.

The changes in the consumption and the dietary patterns from cereals to non-cereal products, a silent transformation is taking place in the rural areas calling for diversification in agricultural production and value addition processes in order to protect employment and incomes of the rural population. In the changed scenario, strong and viable agricultural financial institutions are needed to cater to the requirements of finance for building the necessary institutional and marketing infrastructure. Agriculture credit structure needs revamping to improve the efficiency of the credit delivery system in Odisha. Since, the access of small and marginal farmers to credit has been constrained by their inability to offer the collaterals, micro finance, which works on social collaterals, can go a long way in catering to their requirements. Hence, there is a need to promote micro finance more vigorously on a widespread basis.

To conclude, an assessment of agriculture credit situation brings out the fact that the credit delivery to the agriculture sector continues to be inadequate. It appears that the banking system is still hesitant on various grounds to purvey credit to small and marginal farmers. The situation calls for concerted efforts to augment the flow of credit to agriculture, alongside exploring new innovations in product design and methods of delivery, through better use of technology and related processes.

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AUTHORS

First Author – Jeeban Jyoti Mohanty, Consultant at Small Industries Development Bank of India (SIDBI) and Ph.D Research Scholar, Department of Economics, Ravenshaw University, Cuttack, Odisha, Mob: 9438691657, □: jeebanjyoti.mohanty@gmail.com