The Role of Credit Co-operative Institutions in Agriculture: A Review

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[Abstract: *Agriculture will continue to play an important role in the economic development and poverty alleviation in India . Credit is not only one of the critical inputs in agriculture, but is also an effective means of rural development. Credit helps farmers invest in creating assets to generate output and income through deploying science, technology and modern methods of business management. With this background, this paper attempts to analyse the role of Agricultural credit cooperative institutions and the nature of their involvement in rural development more specifically in agricultural development. The main purpose of this paper is to understand the types of research going on in relation to Credit co-operative Institutions in Agriculture.*

Keywords: Agriculture; Agricultural Credit; Co-operative Institutions; Rural development;

1. Introduction

Agriculture sector plays a vital role in the development of the Indian economy. It contributes one third of the national income and 60.0 percent of the export directly or indirectly originates from the agriculture sector. According to the Central Intelligence Agency Fact book Indian agriculture Gross Domestic Product was 17.9 percent in 2014-15 and recently also it is around 17-18 percent. Contribution of agriculture sector in Indian economy is much higher than world's average that is 6.1 percent. Agriculture is the principal source of livelihood for more than 58.0 percent of population of this country as per the Economic Survey.

Agriculture growth depends upon various factors and input use, among them; credit is more crucial one. Several research studies were undertaken to analyse the utility and general aspects in institutional credit facilities for agriculture. Investments in farm can generate farm income sustainably when credit is simultaneously and adequately supported by backward and forward linkages, viz, inputs of production (seeds, fertilizers, pesticides, water, labour), technology (technical know-how) and services (storage, processing and marketing) etc.., So most of the research works were to analyse the input aspects in institutional credit.

Credit in agriculture is as important as other inputs being used in agricultural production. Credit institutions were advised to give preferential treatment to backward regions and weaker sections. Whereas, there are no credit institutions to fall back upon and the poor are forced to rely on credit supplied by bigger landlords, traders and moneylenders at high rates of interest. Several research studies were undertaken to analyses the institutional credit and non- institutional credit aspects in agriculture.

In view of the above, an attempt made to review the working of agricultural co-operative sector. There are several sources, out of which the role of Co-operative institutions in Agricultural credit is analysed here.

2. Objectives

The main aim of this paper is to review the discussions on the performance of Agricultural credit co-operative institutions. The specific objectives are;

1. To review the outcome of the earlier research work on Co-operative credit institutions
2. To understand the kind of research work going on, emphasizing on co-operative institutions in the development of Agriculture.

3. Methodology

Paper is descriptive, reviewing the research publications on agricultural credit co-operative institutions and the sources of information used in this paper are from books, research papers and Government reports published with due acknowledgement.

4. Review of Literature

Agricultural finance would comprise the borrowing of funds by farmers; the organizational and operation of farm lending agencies; and societies interest in credit for agriculture. The two major financial activities of farmers namely borrowing and investing, which is more important because of critical nature of the decision a farmer makes in the process of borrowing and of using borrowed funds.

Literature on institutional credit to agriculture can be viewed in terms of supply and demand aspects, input aspects, co-operative versus commercial banks and credit recovery aspects.

There are studies in relation to supply aspects of agricultural lending, further can be seen in terms of analysing regional variation in lending agricultural credit based on the farm size. Also, studies in relation to demand aspect can be seen in terms of analysing the needs and requirement of agricultural credit. The beginning of what had come to be known as the "Multi-agency Approach", involving commercial banks of the country to play a dynamic role in the development process of rural and backward areas of the country by providing additional institutional credit (apart from the cooperative which were already serving agriculture). there are studies which attempted to analyse the credit recovery aspects, comparison between Cooperatives and Commercial Banks, general and utility of the credit borrowed.

Studies on the performance of credit cooperatives

The performance of co-operative institutions in providing agriculture credit was observed and analysed by many researchers.

Devadas (1987) examines in his book titled, "Co-operative Banking and Economic Development" the role of Assam Co-operative Apex Bank Ltd in financing primary credit societies. He found that apart from working as a commercial bank it had to discharge three other functions, namely

1. to finance primary credit societies,
2. to act as banking centre for primary societies and
3. to undertake supervision of primary societies.

He opines that bank had not been able to achieve much in these three fields due to lack of adequate support from government of the state.

Patel (1995), in a paper titled 'Viability of Rural Banking', observes that low volume of business per branch and per employee and high level of credit deposit ratio were the major factors causing losses in rural banking system. He further makes a note that relative share of non-farm sector loans in rural banks was increasing.

Pathania and Singh (1998), in their paper titled, "A study of performance of HP State Co-operative Bank" examines the the performance of the Himachal Pradesh State Cooperative Bank Ltd. Analysing the variables such as membership drive, share capital, deposit mobilization, working capital and advances has improved over the period of five years (1991-92 to 1995- 96). They found that the recovery performance was unsatisfactory and over dues had increased sharply.

Singh and Singh (2010), in their study titled, "Technical and Scale Efficiency in District Central Co-operative Banks of Punjab- a non-parametric analysis" had attempted to examine the extent of technical efficiency across 20 District Credit Operative Banks (DCCBs) of Punjab, and finds that they suffer from problems of managerial irregularities and improper production scale. They suggested for the appropriate policy interventions by state government, RBI and NABARD to bring their functioning for achieving their goals.

Shastry (2017), in a paper titled, "Role of cooperative banks in rural development through agricultural credit" observes that to promote agriculture credit by assisting customers to complete banking formalities and reduce lengthy procedures in availing credit.

Jugale (1992) in his book 'Co- Operative Credit in Indian Agriculture' discussed the socio-economic impact of co-operative credit on agriculture sector. In his study, he found that the real success of cooperative credit depends on achievements of the Primary agriculture society (PACS) and Land Development banks (LDBs) at micro level. The PACS are entitled to disburse the short term and medium term loans while long term loans are being disbursed by LDBs. But most of the benefits of these credit facilities are being harnessed by rich class of agriculture sector. Not only this, but they have also have a major role to play in the governance of PACS. The study further concluded that these credit facilities are mainly responsible for transforming the cropping and land use patterns.

Studies on Demand – Supply Aspect of Credit

Credit no doubt, plays an important role in increasing agriculture production. Availability and access to adequate, timely and low cost credit from institutional sources is of great importance especially to small and marginal farmers. Along with other inputs, credit is essential and establishing sustainable and profitable farming system. Most of the farmers are small producer engaged in agricultural activities in areas of widely varying potential. Having appreciated the importance of credit for a farmer to expand his ownership of resources and exploit the opportunities, it is equally crucial to access the demand-supply situation of agricultural credit in India, and reckon the presence of a gap. Factoring in the future demands of agricultural sector, the Kotaiah Group (Planning Commission, 1996) estimated the demand of agricultural credit of the Ninth Five Year Plan (1997-2002) at rupees 22,97,500.00 million an estimate that would have required a 16.0 percent growth in the rate of credit flow during the plan. It was also mentioned that approximately 47.0 percent of this credit demand was from small and marginal farmers. On another side supply of credit for agriculture is determined by the policy of monetary system. As far as supply of agricultural credit is concerned, only data regarding disbursements from institutional sources (such as commercial banks, cooperative banks and regional rural banks) are available. Several research studies were undertaken to analyse the Demand Supply situation of institutional credit for agriculture.

Number of scholars and official bodies have also examined demand- supply gaps in agricultural credit based on some objective assessment credit needs and they have generally conclude that the gaps have been very large. The situation has not under gone much of a change since the National Commission of Agriculture reported in 1976 a gap of over two third. The Agricultural Review Credit Committee (Reserve Bank of India 1989), and the successive working group for Five Year Plans- the Kotaiah Group for the Ninth Plan (1997-1998 to 2001-2002) and the Y.C.Nanda Group for the Tenth Plan (2002-2003 to 2006-2007) all anticipated similar gap in the supply of farms credit. For the Eleventh Plan (2007-2008 to 2011-12), the projection of the ground level credit (GLC) purveyed by commercial banks, regional rural banks, cooperatives and other rural financial institutions, have been placed at Rs. 16,40,000.00 crore implying an annual compounded growth of 17.00 percent over rupees 6,39,330.00 crore of expected ground level credit during the Tenth Plan period. In fact, the projections made do not take into account excluded farmer categories cited above [Reserve Bank of India Bulletin, May 2007].

The long term and short term credit have both been increasing rapidly, while long term credit grew from rupees 500.00 to rupees 107162.00 crore, short term expanded from rupees 1096.00 to rupees 346737.00 crore during the period from 1975-1976 to 2011-2012. The rate of growth of short term credit was a tad higher, and the share of short term credit increased from 68.7 percent in 1975-1976 to 76.4 percent in 2011-2012 (Statistics on the Indian Economy, Reserve Bank of India & National Accounts Statistics, Central Statistics Office).

Agricultural credit discernible trend one of the major achievements post-independence is widening this spread of institutional machinery for credit and decline in the role of non-institutional sources. The share of institutional credit, which was little over 66.3 percent in 1991, increased manifold to over 68.8 percent in 2010. The effort of increasing the flow of credit to agriculture seems to have yielded better research in the recent years as the total institutional credit to agriculture recorded a growth of around 14.0 percent during 1991-1992 to 2008-2009. Equity in institutional credit to agriculture across regions has been formed to persist. It is argued that the benefits of institutional credit have largely accrued to the relatively prosperous regions and richer sections within each region. The extending of variations in the distribution institutional credit can be gauged from the fact that the institutional credit per hectare. The coefficient of variation in the distribution of institutional credit across the state was 122.0 percent in 1990-1991 which declined to 94.0 percent in 2000-2001 and further to 81.0 percent in 2007-08. But 81.0 percent is quite a significant level which reveals that the regional disparities in institutional credit flow do exist and are still a part of rural credit system (Advisory Committee on flow of credit to agriculture and related activities from banking system).

The distribution of institutional credit across farm size categories is also skewed. Through, the majority of farmers 82.0 percent in Indian possess less than two hectares of land, they together account for only 50.0 percent of institutional credit; while 18.0 percent of the farmers having more than two hectares of land, accounted for 49.0 percent of institutional credit. It may be measured that 18.0 percent of those farmers operate about 53.0 percent of total cultivable land in the country.

From the demand side, the increasing short term credit points to the fact that farmers have been borrowing more to meet their input needs such as seeds, fertilizers pesticides, power, irrigation and hired labour. The total value of inputs also represents in total short term credit need of farmers. The green revolution has called for high credit requirement for the purchase of high yielding seeds, irrigation systems, fertilizers and chemical pesticides. Along with crop yields the cost of production has raised drastically calling huge credit requirements. This huge credit requirement was not met by the cooperatives or commercial banks for their own limitation. The green revolutions has commercialized the Indian agriculture were the farmers started to depend on the inputs purchased calling for huge credit requirement but the cooperative lacked resources to meet expected demand and commercial bank were not ready to lend small and marginal farmers. The Narasimham working group (1975) as recommended for the Regional Rural Banks.

Rosegrant and Evenson (1995) studied the total factor productivity and sources of long-term growth in Indian agriculture using data envelopment analysis (DEA) a non-parametric technique. In this study Tornqvist- Theil Total Factor Productivity indices were computed for 271 districts which were covering around 13 states in India for the period 1956 to 1987. The study examines the sources of productivity growth, including public and private investment, and estimates the rates of return to public investments in agriculture. The results showed that significant TFP growth in the Indian crops sector was produced by investments -- primarily in research – but also in extension, markets, and irrigation. It seems from study that the Government of India is not over investing in agricultural research and extension which is important pillar for agriculture growth in India.

Sarbajit Chaudhuri (2001) studied the interaction of formal and informal credit markets in backward agriculture using mathematical tools by establishing Nash equilibrium. The paper considers two alternative ways of formulating a credit subsidy policy

1) Through an increase in the aggregate volume of formal credit supplied to the borrowers, keeping the formal sector interest rate at a reasonable level; and
2) Through a decrease in the rate of interest charged on this type credit. The paper shows that if a credit subsidy policy is undertaken via the first path, it is actually able to lower the informal sector interest rate and improve both the agriculture productivity and welfare of farmers.

Abhiman Das, Manjusha Senapati, Joice John (2009) studied the impact of agricultural credit on agricultural production using econometric tools by estimating Arellano-Bond Regression. They use Dynamic Panel Data Analysis with instrumental variables for the period 2001 to 2007. The analysis suggests that the direct agriculture credit amount has a positive and statistically significant impact on agriculture output and its effect is immediate. In particular, change in per capita agriculture direct credit (amount outstanding) by one per cent will lead to increase in per capita agriculture output by 0.11 per cent. This shows a strong effect of direct credit on agriculture output.

Studies also observed that big farmers received a larger share of loan advanced by different financial agencies and the share of co-operatives was the maximum. It was also observed that private money lenders were, still playing an important role in supplying rural credit and the proportion of borrowings from this source was higher in case of small farmers.

Studies on Loan Defaults

Kalyankar (1983) in the study titled, "Wilful Default in Loans of Co-operatives" examined the trends in deposits, working capital, share capital, outstanding loans and advances, overdue and recoveries. The socioeconomic factors responsible in projecting and promoting future development in the operations and approaches of the co-operative credit institutions were also considered in the analysis. The study revealed that the cropping intensity, irrigation facility and working capital of the societies were the major factors for explaining overdue at primary agricultural credit societies‟ level. The socioeconomic backgrounds were not responsible for increasing overdue at the borrowers level, but overdue were mainly escalated due to the non-economic factors in case of wilful defaulters.

Kalyankar (1983) in his study titled, "Wilful Default in Loans of Cooperatives", examined the trends in deposits, share capital, working capital, loans outstanding, advances, over dues and recoveries at the district level financing institutes. Socio-economic factors responsible in projecting and promoting future development in the operations and approaches of the co-operative credit organizations were also considered to examine the specific progress made by Central Co-operative Bank of Parbhani District. The study revealed that the cropping intensity, irrigation facility and working capital of the societies were the major factors for explaining over dues at primary agricultural credit societies' level. The socio-economic factors were not responsible for increasing over dues at the borrowers' level, but over dues were mainly mounted due to the non-economic factors in case of wilful defaulters.

Reddy and Reddy (1996), in their paper titled, "Nature and Dimensions of Wilful and Non-Wilful Default and impact of Co-operative Credit Policy with reference to Nellore District of Andhra Pradesh" applied a multi-stage sampling technique and relevant statistical tools to examine the reasons for overdue. They noticed that landholding, cropping pattern, income from agriculture, number of dependent family members and political interference had direct influence on recovery position of cooperative banks.

Verma and Reddy (2000), in their study analyses the causes of over dues in co-operatives under SWOOD, to assess recovery and NPAs position in these banks. Policy distortions in liberalized economy and inefficient management were identified as main reasons for poor recovery. Misutilization of credit, political interference at every level, successive crop failures, non-remunerative prices of agriculture produce, inadequate income and natural calamities, were some other factors, which affect the working culture of cooperative banks considerably. To improve the working of these banks, they suggests that available credit size should be need based and production-oriented. Effective supervision of loans to minimize misutilization and close social relations with borrowers are needed to improve the profitability and productivity of these banks.

Das (2001), in a paper titled, "A study on the Repayment Behaviour of Sample Borrowers of Arunachal Pradesh State Co-operative Apex Bank Limited", analyses the repayment behaviour of borrowers. They observe that incidence of default was highest among borrowers for agriculture and allied activities loans. The study further noted that the number of defaulters was highest in government sponsored loan schemes.

Viswanath (2001), in the paper titled, "An analysis of performance of agricultural credit Co-operatives and their overdue problems in India" finds that the total loans advanced by Primary Agricultural Credit Cooperatives increased from Rs.24 crore to Rs.14201 crore, during 1950-51 to 1995-96 almost 590 times. Moreover, unfortunately this increase was followed by a corresponding increase in overdue. Further they observed that there was a direct and positive link between overdue and membership on one hand, and overdue and working capital, amount of loans advanced on the other.

The World Bank (1975) in its sector policy paper has aptly reiterated that credit is often a key element in the modernization of agriculture. Not only can credit remove financial constraint but it also accelerates the adoption of new technology. Credit facilities are also an integral part of the process of commercialization of the rural economy. However, no amount of credit even at the most reasonable rates can guarantee higher productivity or income among the rural poor, as the success depends upon many factors including the availability of inputs and services, sound credit policies, well-managed institutions and appropriate delivery channels.

The green revolution could succeed because farmers used credit to purchase high yielding seeds, fertilizers, farm equipments/machinery, create irrigation facilities and access to yield-enhancing technology, which were prerequisites. These, therefore, necessitates creating enabling environment that can enhance credit effectiveness to improve productivity of farm resources viz. Land, water and labour and post – harvest services to fetch better prices of the farm produce, which in turn increases the return on investment, net farm income and improves farmer's capacity to repay borrowed credit with interest.

Institutional finance was instrumental in acquiring productive form assets and development of irrigation facilities this result in changes in the cropping pattern increase in the cropping intensity and adoption of High Yielding Verities **(Veerashekarappa 1997)**.

Particularly, for small farmers, the credit has a significant role to facilitate them to purchase inputs of production, create irrigation facilities and avail storage, transport and marketing services which can ultimately enhance productivity, production and profitability of farming enterprise. The factors, which constrain the small farmers to avail bank credit are lack of knowledge about credit management including their ability to comply with lending procedure how much capable they are to manage farm, inadequate access to extension services, unawareness of economic opportunities and markets.

All the earlier studies emphasizes on the importance of co-operative financial institutions in providing agriculture credit even though the recovery of credit is a difficult task.

5. Conclusion

The development of institutional credit is a basic requirement for agricultural progress. The review of literature clearly shows that there are not many studies conducted empirical study to analyse the procedural aspects of credit, time taken for sanction of credit and credit by different banking institutions for different type of farmers, credit utilization and credit diversion, need for additional credit for the purpose of farm needs, raising the credit limit and reactions from the banking institutions, what are the frequency of withdrawal and repayment of credit, weather the dependence of the farmers on non- institutional credit lending agencies has declined or not due to the introduction of the bank schemes and what are the important suggestions that can be incorporated in the scheme so that sound credit delivery system can be established in the rural areas. On these issues many studies have not adequately focused upon to make the current credit delivery system more people oriented and farm oriented and thus setting up the sound credit delivery system.

Therefore, an effort to addressing the above issues may certainly help the policy makers and the banking institutions to bring about the necessary modifications in the current credit delivery system and provide adequate and timely credit to the farming sector and endure faster and inclusive growth in the market driven economy.

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