CHAPTER II

AN OVERVIEW OF THEORETICAL BACKGROUND, REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK

2.1. INTRODUCTION

This chapter deals with the theoretical background of the agricultural credit, reviews of existing literatures related to agricultural credit and reforms and development of framework of the study. This will enable to get a clear view about the research gap and how the topic was finalised to fill these gaps.

2.2. SIGNIFICANCE OF AGRICULTURAL CREDIT:

In developing countries like India, the agriculture sector assumes significance for a variety of reasons. It is still a source of livelihood for a majority of people in rural areas and there is a need for ensuring sustainability in these livelihoods. Recent Population Census (2013) reveals that there are 21.20 crore cultivators and agricultural workers. It is noteworthy that the agriculture/ rural sector provide demand for industrial goods and in India whenever agriculture sector has grown at the annual rate of 3-4 percent; other sectors have shown healthy growth. In fact, the required growth of productivity in agriculture means that more capital must be invested in it. Farmers’ need much more capital than they can afford to save and small and marginal farmers with meagre savings require a higher input of capital.

Credit is a condition that enables a person to extend his control over his ownership of resources. Indian agriculturist is not only capital starved, but faces vagaries of nature too; irrigated agriculture is roughly 33 percent of total cropped area. Agriculture, thus is, a high-risk area. It is also observed that Indian agricultures’ investments requirements fluctuate as
incremental output ratios have varied significantly. In fact, it is not only the availability of credit but also the access to adequate institutional credit that matters, since most of those who are engaged in agriculture belong to the marginal and small farmer categories.

Agriculture sector credit flow has been influenced by fallout of implementation of various accounting and statutory norms without taking into account the ground level realities, which led to irreparable damage to the rural financial architecture in the post liberalization era. The agriculture finance is being viewed as a risky proposition now. This has led to piquant situation where the share of small and marginal farmers in total credit flow has declined when share of this group of farmers in operational holdings over the period has increased. Besides, there is an observing about the declining share in credit flow. Ther is a situation when the farms have increased their contribution in agricultural production thereby immensely contributing to food security and attaining food self-sufficiency, the share in total credit has declined.

The main challenge faced by agricultural credit involves not only ensuring flow of credit to small and marginal farmers, but designing policies and credit delivery systems that have relevance in the present context in terms of production and demand for agricultural products. Such policies have to consider the need for agricultural credit due to crop diversification. The present multi-agency approach is inadequate to tackle the pressing need for finance of agricultural extension services too. The issue to be addressed is how to tackle channel the resources of commercial banks in sustainable and viable manner in order to fund the development of a wide range of allied activities. It is also felt that tenancy laws also hinder flow of credit to tenant and sharecroppers despite guidelines issued by Reserve Bank of India. The specific needs of the agricultural sector to financial services demand a broader
systemic approach. Need is to understand the extent of availability and distribution of productive resources, along with their distribution, legal and social structures governing their use, cropping patterns, current and emerging technologies and dynamics of rural markets and so on to gauge the credit requirements. This would improve the flow of credit to agriculture, especially small farmers.

A critical determinant for agricultural credit is the commercialization of subsistence farmers. Development of efficient marketing system would result in the commercialization of subsistence farmers by providing outlets and incentives for increased production. Critical issues of rural agricultural infrastructure and institutions need to be addressed as credit can only be the facilitator. Investments are required in irrigation, rural roads and other infrastructure. One argument is that farmers’ need to be provided incentives to adopt market based solutions for input procurement and marketing of output through autonomous cooperatives and other forms of organization.

There are some questions to be answered:

Does integration of crop and investment credit and scales of finance used reviewed and readjusted in line with the requirements of modern, market-oriented capital intensive agriculture using newer technologies and superior inputs?

Is rising cost of production is factored in?

The new technologies and production cycles are high cost and risky proposition for such farmers and market volatility harms them the most and policies and state role need to take cognisance of these factors. Such farmers have no protection against natural calamities and are most vulnerable. These farmers have limited ability to manage interest rate risk. Most of these farmers lack the absorptive capacity both in terms of cost and the size of loans
and advances, which are of cost effective size to be handled by the banks. It has to be recognized that business of farming is not just an issue of individual livelihood but is also critically related to national food security. Therefore farmers must have access to credit. In Indian agriculture, even small and marginal farmers and dalit and tribal farmers whether owning land or not, are risk taking entrepreneurs contributing to economic growth.

Farmer is an important player in the financial, labour, inputs and commodity markets, who because of the size of transactions in the market place does get marginalized. Livelihood diversification can help in greater credit absorption at lower end of farming community. Besides, increased public investment in agricultural infrastructure, research and extension services is required. Need is also felt for developing post-harvest technologies.

**2.3 IMPACT OF AGRICULTURAL CREDIT ON THE PRODUCTIVITY**

Since the mid-1990s, the growth of the agricultural sector has been low as well as volatile; the growth decelerated from an annual average of 4.7 per cent per annum during 1980s to 3.1 per cent during the 1990s and further to 2.2 per cent during the Tenth Plan period. Growth in agricultural production has decelerated during 2006-07 with the agriculture sector characterised by stagnation in output of major food grains. Per capita annual production of cereals declined from 192 kilogram (kg) during 1991-95 to 174 kg during 2004-07 and that of pulses from 15 kg to 12 kg over the same period. Per capita availability of food grains has, thus, fallen close to the levels prevailing during the 1970s.

Volatility in agricultural production has not only affected overall growth but also exerted persistence pressure on maintaining low and stable inflation. Demand-supply gaps were reflected in higher domestic food prices in recent years. All these evidences apparently
point to the fact that higher credit to agriculture is not translated into commensurate increase in agricultural output.

India has systematically pursued a supply leading approach to increase agricultural credit. The objectives have been to replace moneylenders, relieve farmers of indebtedness and to achieve higher levels of agricultural credit, investment and agricultural output. Among earlier studies, found that the output and employment effect of expanded rural finance has been much smaller than in the nonfarm sector. The effect on crop output is not large, despite the fact that credit to agriculture has strongly increased fertilizer use and private investment in machines and livestock. High impact on inputs and modest impact on output clearly mean that the additional capital investment has been more important in substituting for agricultural labor than in increasing crop output.

Between bank nationalization in 1969 and the onset of financial liberalization in 1990 bank branches were opened in over 30,000 rural locations which had no prior presence of commercial banks (called un-banked locations). Alongside, the share of bank credit and savings which was accounted for by rural branches raised from 1.5 and 3 percent respectively to 15 percent each (Burgess and Pande, 2005). This branch expansion was an integral part of India’s social banking experiment which sought to improve the access of the rural poor to cheap formal credit. The estimates suggested that a one percent increase in the number of rural banked locations reduced rural poverty by roughly 0.4 percent and increased total output by 0.30 percent. The output effects are solely accounted for by increases in non-agricultural output – a finding which suggests that increased financial intermediation in rural India aided output and employment diversification out of agriculture.
Credit delivery to the agriculture sector continues to be inadequate. It appeared that the banking system is still hesitant on various grounds to purvey credit to small and marginal farmers. It was suggested that concerted efforts were required 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. Facilitating credit through processors, input dealers, NGOs, etc., that were vertically integrated with the farmers, including through contract farming, for providing them critical inputs or processing their produce, could increase the credit flow to agriculture significantly.

In general, it is difficult to establish a causal relationship between agriculture credit and production due to the existence of critical endogeneity problem. However, increased supply and administered pricing of credit help in the increase in agricultural productivity and the well being of agriculturists as credit is a sub-component of the total investments made in agriculture. Borrowings could in fact be from multiple sources in the formal and informal space. Borrowing from formal sources is a part of this sub-component. With data being available largely from the formal sources of credit disbursal and indications that the formal credit as a proportion of total indebtedness is going down, it becomes much more difficult to establish the causality. He also stated that the diversity in cropping patterns, holding sizes, productivity, regional variations make it difficult to establish such a causality for agriculture or rural sector as a whole, even if one had data. Finally, that mere increase in supply of credit is not going to address the problem of productivity, unless it is accompanied by investments in other support services. In the present study, we take a re-look at the problem by quantitatively assessing the impact of institutional credit expansion on agriculture.
One of the principal objects of nationalization of commercial banks was to bring about certain structural changes in the credit deployment. To begin with we look at the trends in the credit disbursement across sectors. The total credit extended by scheduled commercial banks grew by 17.2 percent during the eighties while during the nineties it fell to 16 percent (table 2.8). This decline was due to both demand and supply factors. The tight monetary policy during the first half of the nineties had led to decline in demand for credit. On the supply side, introduction of prudential norms relating to income recognition, asset classification and provisioning in early 1990s made banks cautious. It recovered to touch 22.9 percent during 2000-01 and 2006-07. In the case of agriculture sector, the credit grew at the rate of 18.1 percent during the eighties while during the nineties, it fell drastically to 10.6 percent. However, during 2000-01 and 2006-07, the growth has been healthy at 26.0 percent. This period also saw effort to boost agriculture credit deployment though doubling of credit to agriculture as per the budget announcement of 2003-046. The downward trend in interest rates also contributed to this growth. The table also shows a significant shift towards personal loans and finance sectors, which observed healthy growth during the three phases under study. Overall, financial deepening from low base, structural shifts in supply elasticity, rise in efficiency of credit markets and policy initiatives to improve credit flow to sectors like agriculture and SMEs. The policy directions over the period have thus favoured few sectors like agriculture, small industries, weaker sections of the society etc. Thus structural change has occurred in credit deployment due to policy directions. 5 Sector-wise deployment of gross bank credit reveals that the share of agriculture since the second half of the 1990s has ranged between 11-12%. As on March end 2009, the share stood at around 12.79%. On the other hand, the share of industry in total credit deployed
stood at 39.81% as on March end 2009. Since the mid-1990s, the share of industry has been in the range of 32.11% and 40.45%. 6 See, Surjit Singh (2008), op cit. 7 Across the globe, retail lending has been the most spectacular innovation in the commercial banking sector in recent years. The surge in retail lending has certain limitations. Retail lending may accentuate indebtedness of households, with implications for sustainability of private consumption and saving in the medium to longer horizon. Rapid increase in retail loans may impinge on bank credit for investment activities with implications for economic growth. 8

There are many competitors for credit and when resources are mobilized at a cost then many considerations arise. In India, agriculture and industry have been the two major clients, but now other sectors like housing, trade, etc. are seeking their pound of flesh. In fact, housing finance in developing countries is a social good in view of its backward and forward linkages with other sectors of the economy.

It is argued that it is essential to allow for difference between the credit requirements of agriculture and commodity industry because the latter has relatively smooth flow of purchases of inputs and sales of outputs over the year. Agriculturists, on the other hand, systematically require to buy inputs and to commit themselves to payments several months before their products are harvested. This latter feature renders it inappropriate to view the ratio of inputs to outputs in commodity industry than in agriculture as justifying a larger ratio of credit to net product. It also suggests that even the criterion of same ratio of credit to net national product (NNP) in each sector is too kind to commodity industry. Commodity industry, besides this, needs less credit per unit of output than agriculture because both input and output flows are smoother over the year9. It is also organized in larger units with more access to internal savings and to the private capital market. It is also less liable to the
draining of production credit towards the funding of slack season family consumption. Unlike agriculture, it seldom turns credit-financed inputs into subsistence products which are consumed by the family that owns the firm and which thus- however efficiently produced- do little to help repay trade credit.

Institutions and Agriculture Credit Despite wide network, the cooperative banks have lost their position to commercial banks, particularly since the mid-1990s (table 2.12). The share of former in 2006-07 was almost one-third of commercial banks when in 1992-93 share of commercial banks was almost half that of cooperative banks13. During this period, the share of RRBs has almost doubled. Growth in flow of agriculture credit in the recent times has been significant. This is largely due to doubling of credit effort by government in 2004-05.
Table 2.1: Institutional Credit to Agriculture (Rs. crore)

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NABARD, Mumbai and also as NABARD (2009), Doubling of Agricultural Credit Programme (2004-05 to 2006-07): A Study Report, DEAR, Mumbai.

2.4 REVIEW OF LITERATURE:

Agricultural finance has always played a pivotal role in the development of the agriculture sector. Earlier it has been the non-institutional sources of agricultural finance that has dominated the scene but with independence, the government took a special attention for the provision of institutional credit to the agriculture sector. There appeared numerous schemes for the provision of speedier and adequate credit to the farming community. Similarly, the banks were directed to provide easy loan to the farmers by initiating various innovative schemes. The progress has been remarkable and the farmers are provided finance through various institutional sources. In light of the fact that the demand for credit by the farming community is so enormous that the institutional system remains insufficient to provide adequate credit, there emerged parallel non-institutional systems of agricultural finance. Given such structure of the agricultural finance markets in India, there emerged a plethora of literature that have discussed various tenets of agricultural finance in their entirety. A brief review of available literature is discussed below.

Recent growth of Indian economy has been primarily service-led. The service sector has completely replaced agriculture, which has been traditionally the largest contributor to India’s GDP. However, the fact that agriculture has a small share of 14 percent in GDP today comparing to a share of more than 50 percent in total GDP, does not belittle its importance for the Indian economy. This is because first, agriculture remains the largest employer having a share of around 60 percent; second, it holds the key to creation of
demand in other sectors and remains by far an important indirect contributor to India’s GDP growth.

There have prevailed various inter-state differences in the access to institutional credit as well as the loan amount obtained by farm households even for the same size class of landholding. Owing to which, an analysis of status and performance of agricultural credit has been the major concern of the available literature on agricultural finance. Such literature facilitated policy makers in taking review of progress already made and thereby it helped them in taking the appropriate corrective action. There appeared a large number of studies that have examined this aspect.

Indebtedness among Indian farmers has long been recognised by the observers of rural scene in India. The Deccan Riots Commission (1875) reported that one-third of occupants of the government land were under debt. The Famine Commission of 1880 reported that one-third of the land holders in the country were in deep debt and another one-third were also in debt but in a position to redeem it. The Famine commission of 1901 estimated that more than 80 percent of the cultivators were under debt. The great depression (1929-33) considerably increased the burden of debt of the farmers. The problem of indebtedness of the farmers continues in the post-independence period. The proportion of indebted cultivators came down to 46.1 percent in 1971 and further declined to 22.3 percent in 1981. In the subsequent period, the proportion of indebted cultivators increased to 25.9 percent in 1991 and has increased sharply to 57.2 percent in 2003. If farmers engaged in allied agricultural activities are added to the cultivators then the proportion of indebted farmers at all-India level is estimated at 48.6 percent (NSSO, 59th round). Thus the proportion of indebted farmers has been higher than that was estimated in 1971. Deceleration
in agricultural growth in the 1990s is regarded as one of the most important factors responsible for increasing indebtedness.

Singh (1975) in a detailed comprehensive study, concluded that the new agricultural technology required substantial amount of capital-inputs. The landlords and rich peasants’ one the only ones who have the capital or can get it from the Co-operatives and banks.'

Chauhan (1987) in his paper discussed the role of commercial banks in agricultural finance and studied advances to priority sectors and suggested ways of improving recovery performance.

Haque and Verma (1988) finds that there has been a remarkable increase in the percentage share of institutional credit to total rural credit over time in almost all the regions of the country, except Assam. It finds that the agricultural moneylenders has made a significant contribution to the supply of total credit in many regions including Meghalaya (21.2 percent), Bihar(18.8 percent), Andhra Pradesh (14.4 percent) and Rajasthan (9.6 percent). It finds that the co-operative credit (year 1984-85) had a per hectare availability ranging from Rs. 24 in Bihar to Rs 1490 in Kerala.

The states of Bihar, Jammu & Kashmir, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh, West Bengal and Karnataka had relatively lower amount of cooperative credit per hectare available than national average (Rs. 165). The amount of loan issued per borrower

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3 Singh, The Green Revolution in India — How Green it is! Vishal, Publications, University Campus, Kurukshetra (Haryana, 1975).

4 Chauhan D.J. Commercial bankers and agricultural finance: Arthavikas 1987 23(2) p.72-86.

was the highest in Gujarat (Rs. 2,551) and the lowest in Bihar (Rs. 231). Same pattern of loans were observed with regards to commercial banks. Considering the country as a whole, however, per hectare cooperative credit was found to be comparatively high in the small size land holdings of below 2 hectares. The medium and large farms had relatively more credit per borrower. The results of the study have far reaching policy implications as the private agencies including the agricultural and professional moneylenders were found to dominate in the agricultural credit market in many regions where the liberation of farmers from the poverty and debt traps has a very remote possibility.

Dadibhavi (1988)\(^6\) observes that over the years, the co-operative credit institutions as well as the commercial banks and Regional Rural Banks (RRBs) have registered a commendable progress. In relation to short term credit, the commercial banks seem to have fared better in providing credit to small borrowers. The share of cooperative short-term credit going to small borrowers having holdings up to 5 acres each was 41 percent as compared to 62 percent of commercial banks. The study observes increasing concentration of institutional credit to agriculture in few regions/states between 1972 and 1985, despite the goals set before the banking system to provide a more even distribution of bank credit. It suggests that the commercial banks can go to the areas where co-operatives are strong, provided they play a complementary role in the distribution of different components of total credit.

Dantwala(1989)\(^7\) in his paper had dealt with projection of the requirements and demand for short term credit for crop production in India to the year 2000. He reviewed the performance of Institutional credit since Nationalization of Commercial banks.

A study in Bangladesh conducted by Ahamed( 1989)\(^8\) for example, has shown that the average effective cost of a loan smaller than 1,000 Takas varied between 146 percent and 169 percent in the formal market, while it varied from 57 percent to 86 percent in the informal market (Ahmed 1989)\(^9\).

Khan( 1990)\(^9\) suggested a charge of approach which the bank should take into consideration to benefit for small farmers since the banking system could not meet fully the credit requirement of small farmers.

Deoghare ( 1991)\(^10\) and others examined the impact of credit and technology on income and employment on small farms in Haryana. They revealed that the capital generated through borrowing and invested in farming transformed the farming sector into a highly profitable one.

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\(^7\) Dantwala M.L. Estimates of demand for credit and its role in poverty alleviation. IJAE. 1989 44(4) p. 416-422.


\(^9\) Khan A.R: some operational problems of small farmers in lending, Journal of Rural Development Administration 1990 22(4) p.9-18. 8

\(^10\) Deoghare P.R. Sharma EM; Goel s.k; Impact of credit and technology on income and employment of small farms under different farming systems in Karnal district Agricultural situation in India 1991 46(2) p. 65-70
Kittur (1992)\textsuperscript{11} found that marginal and small farmers tended to use the funds to meet the basic necessities of life whereas large and well to do farmers use the funds towards wasteful and conspicuous consumption.

Sharma( 1992)\textsuperscript{12} in his paper suggested that banks should be encouraged to budget for recovery and government support be introduced for recovery and introduction of various possible legal measures.

Capital formation in agriculture has been another aspect that has attracted the attention of researchers. A study by Karmakar (1998)\textsuperscript{13} has examined the growth trends in capital formation in agriculture in both public and private sectors. It finds the declining trend in both the public and private sources of capital formation. In fact, as per this study, the share of gross capital formation had declined from 15 percent in 1980-81 to 8 percent in 1990-91. It finds that the real gross capital formation in agriculture sector showed negative growth rates of 2 percent per annum during the sixth plan and 1.4 percent per annum during the seventh Plan. Correspondingly, the share of agriculture sector as percentage of total investment in economy had also declined from 18.2 percent in fifth plan to 15.1 percent in the sixth plan and further to 11.9 percent during the seventh Plan. The impact of agricultural credit policy and credit disbursements on crop productivity is also examined by numerous studies.

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Puhazhendhi and Jayaraman (1999)\textsuperscript{14} reviewed the performance of the rural credit delivery system in three focus areas of rural credit markets viz-agricultural, nonfarm sector activities and poverty alleviation and the challenges that the banks were likely to encounter in the next decade. Development of the rural credit system in the country has metamorphosed from monopoly of co-operatives to the introduction of commercial banks and establishment of RRBs for improving, outreach and ensuring access to credit in rural areas. Innovations in rural credit had an impact on agricultural production and reduction of poverty due to increased flow of credit. The total short term credit flow had increased from about Rs 589 cr. in 1970-71 to Rs 17,691 cr. in 1996-97. The study shows that there was significant and positive impact of credit on the gross value of output in agriculture. They observed are various challenges confronting rural credit institutions. Cost of credit should be lowered down. Small farmers should have an easy access to credit through farm clinics or Krishi Gyan Kendras. Accelerating the pace of capital formulation in agriculture, infrastructural development with focus on transportation and marketing ensuring credit discipline, could enable the rural sector to absorb more credit from institutional resources. The focus should be on strategies that are required for tackling issues such as sustainability and viability, operational efficiency, recovery performance, small farmer coverage and balanced sectoral development. The study concluded that ensuring credit discipline through a ban on loan waivers would help in effective recycling or lending and creating a conducive environment for lending. Financial institutions and various government departments have to work in a coordinated manner to address the above issues for ensuring greater flow of credit to this sector.

To boost agricultural production and productivity farmers have to use improved agricultural technologies. However the adoption of modern technologies is relatively expensive and small farmers can not afford to self finance. As a result, the utilization of agricultural technologies is very low. It is argued that enhanced provision of rural credit would accelerate agricultural production and productivity (Briquette, 1999).\textsuperscript{15}

Satyasai and Badatya (2000)\textsuperscript{16} in their study argued for a total -revamping of the rural credit system and not cosmetic changes. The aim should be the satisfaction of the ultimate borrower at minimum cost. Cost reduction per unit of business can be achieved by integration of short and long term wings, rationalization of co-operative structure by removing one of the tiers, exploiting scope and scale economies available in rural lending. The rural credit co-operative institutions are one of the strong arms of rural financial institutions which have made significant strides in delivering credit for agriculture and rural development. The objective of the co-operatives is to encourage thrift and judicious use of credit. It was observed that the limitations of the co-operative system such as inability to offer all types of financial services that commercial banks/RRBs do such as money transfer, restricted area of operation and activities, inability to cater to credit needs for all purpose from a single outlet, low level of professionalization etc. had to be overcome. Real success comes when co-operatives take full advantage of their ability to have close interface with the clientele. This ability almost matches similar ability of non-institutional rural lenders and can never possibly be acquired by other institutional agencies.

\textsuperscript{15} Briquette, Better practices in Agricultural lending, FAO publication 1999

Dasgupta (2001) critically examined the recommendations of RV Gupta committee (RVGC) and Narasimhan Committee (NCR II) on rural banking and credit. According to RVGC and NCR II the objective of rural credit was to achieve anticipated growth rates in agricultural production and employment. There was substantial unfulfilled demand for crop loan credit which was either met by the money lender or led to a lower use of input. The above committees recommended that lender-borrower relationship should be transparent, Loan documents should be made simple, banks should display their maturity by ensuring that correct type of people but not the unwanted ones are posted in rural and difficult areas and stamp duty for agricultural loans should be abolished.

Agricultural credit and rural finance play important role in the recovery and growth of transitional countries. Rural credit and finance problems are caused by a combination of “normal” imperfection of rural credit markets and specific transition problems such as macroeconomic instability, institutional reforms of the financial system, low profitability in agriculture, high risk and uncertainty, and general contract enforcement problems (OECD, 2001)\(^\text{18}\).

(Barry & Robison, 2001)\(^\text{19}\). Agricultural finance centers on the agricultural sector’s acquisition and use of financial capital, both in developed and less developed countries. Financial capital includes debt, equity and leased capital, and each of these may include


numerous forms Credit provision is one of the principal components of rural development, which helps to attain rapid and sustainable growth of agriculture. Rural credit is a temporary substitute for personal savings, which catalyses the process of agricultural production and productivity.

The credit markets do not operate in isolation; rather they generate various kinds of horizontal and vertical linkages.

Kaur, Toor and Sain (2002)\textsuperscript{20} examined the role of various sources of agricultural credit based on data collected from a random sample of 100 farmers from four villages in two selected blocks in Sangrur district of Punjab. The farmers were stratified into small, medium and large farms by using the cube root method and the information regarding credit acquisition, its use, sources and purpose etc. was collected by using the survey method. The results of the study showed that small farmers were leading in acquiring per hectare credit (Rs. 98409), followed by medium (Rs. 39006) and large (Rs. 23388) farmers. Source wise, the credit advanced by Land Development Banks was the highest being Rs. 6896 per hectare, followed by co-operatives (Rs. 5891), commercial banks (Rs. 3053) and Regional Rural Banks (RRBs) (Rs. 348). However, in case of non-institutional sources, the farmers received the highest per hectare credit from commission agents (Rs. 12228) followed by moneylenders (Rs. 6197) relatives and friends (Rs. 1647). As regards the use of credit 19.86 per cent of institutional loans were diverted from specific purpose to other uses. EPW Research Foundation.

Chaudhari et al. (2002)\textsuperscript{21} work out the dynamics of such linkages by taking the case of backward agriculture with a theoretical analysis. Similarly, the issue of interlocking of land, labour and credit markets has gained the attention of researchers. In fact, the institutional credit has been conceived to play a pivotal role in the agricultural development of India. A large number of institutional agencies are involved in the disbursement of credit to agriculture. However, the persistence of moneylenders in the rural credit market is still a major concern.

Agricultural technologies are ‘scale neutral’ but not ‘resource neutral’ (Singh et al, 2002)\textsuperscript{22}. Small holder-oriented research and extension should give importance to cost reduction without reduction in yields. Therefore, new technological innovations are needed.

Sandeep Kumar (2002) discussed the changes in policy for increasing institutional credit flow to agriculture. After nationalization of banks, systematic growth in institutional finance was visible and the percentage of non-institutional credit had declined. Different institutions were providing credit facilities to this sector under the umbrella of National Bank for Agriculture and Rural Development (NABARD). During the nineties, certain reforms and innovations had taken place which were conducive to agricultural growth, productivity and were in favour of small and marginal farmers. Special Agricultural Credit Scheme (SACPS), changed in priority sector lending, Rural Infrastructure Development Fund, Kisan Credit cards, setting up of local area banks, involvement of NGOs etc. were


some important innovations in this regard. Credit could help rural women also to take up small enterprises thus adding to their household incomes. But due to growing credit demand of agriculture, effective implementation for different schemes and strengthening of some institutions was still needed. Moreover more innovations were desired so that small farmers could get more and more benefit.

Given this structure of the Indian agricultural finance system, a number of studies have focused their attention on the question of access to credit by way of addressing various issues related with credit gap, implicit disparities in access to credit, etc. Focusing on the Bikaner district of Rajasthan, Singh and Kumar (2003)\textsuperscript{23} have examined the aspect of institutional credit gap in agriculture. This study finds the presence of large gap in the provision of institutional credit to the agricultural sector. In fact, this gap has dampened the growth of agriculture.

Zeller (2003)\textsuperscript{24} in his paper given at conference on rural finance in 2003 identified three principal motivations for the renewed interest in agriculture finance;

1. The agriculture sector remains the most important economic sector, especially for the poor in many developing countries;

2. Improved financial markets accelerate agricultural and rural growth, leading to greater economic growth and less poverty and;

3. A growing sense of optimism that donors might learn from the failures of the past.


For small and marginal farmers, marketing of their products is main problem apart from credit and extension. In recent years, there has been some form of contract arrangements in several agricultural crops such as tomatoes, potatoes, chillies, gherkin, baby corn, rose, onions, cotton, wheat, basmati rice, groundnut, flowers, and medicinal plants. There is a silent revolution in institutions regarding non-cereal foods. New production – market linkages in the food supply chain are: spot or open market transactions, agricultural co-operatives and contract farming (Joshi and Gulati, 2003).

Satish (2004 a) had observed that governments had a critical role to play in the development of agricultural and rural financial institutions. But state involvement in the management and implementation of rural financial system had proven expensive and inefficient. Subsidized credit programmes which were part of state intervention in rural financial markets undermined the institutional sustainability of financial institutions, distorted rural finance markets and discouraged saving mobilization and failed to develop market driven sources of funding. The revitalization of the state owned rural financial institutions was possible without a wholesale structural and ownership change. The study concluded that the intervention of the state in (2005) studied the status of institutional credit to agricultural sector in India. The study revealed that there was a direct relationship between the agricultural credit flow and development of agriculture among different regions as well as states. Small proportion of agricultural credit to AGDP as well to GDP indicated low investment in terms of agricultural credit in comparison to its contribution to national 40


economy. Inadequacy of agricultural credit was indicated by lower per unit gross cropped area flow of credit. The study further highlighted the fact that KCC had been great success, but more than 25 per cent farmers still lacked it. The KCCS to all eligible farmers needed to be issued by banks to meet the working capital requirement of the farmers. To break the stagnation in total factor productivity due to technological fatigue to ensure sustainable growth in agriculture, there was a need to pump in more long term institutional credit along with the short term credit. Easy access to institutional credit at lower rate of interest was to be ensured through suitable policy interventions. The targeted 18 per cent share of total institutional credit to agriculture sector was to be ensured to achieve the targeted four per cent growth during the eleventh five year plan.

India currently produces about 50 million tonnes of fruits and 90 million tonnes of vegetables. Only 2% of these fruits and vegetables are processed as against 23% in China, 78% in Phillippines, 83% in Malaysia. Half of those engaged in agriculture are still illiterate and just 5% have completed higher secondary education. Even in 2004-05, around 60% of rural male workers and 85% of rural female workers are either illiterate or have been educated up to primary level. In other words, education and skills are constraints. India can learn from China on rural transformation. China experienced a structural transformation in the last three decades. The state’s role has been decisive in building up the physical and social infrastructure (including land reforms). India should learn from China on reforms in agricultural growth, rural non-farm employment, public investment and human development. The impact of growth on poverty reduction is quite significant (Rao, 2005).

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27 Rao, CH, Hanumatha (2005), Agriculture, Food security, Poverty and Environment” Oxford University Press, New Delhi
China started with agricultural reforms. Agricultural growth was quite high. The economic and institutional reforms in the whole economy created space for rural non-farm sector (TVEs and others). Diversification towards rural non-form sector in China is one of the important factors responsible for rural poverty reduction (poverty is only 3%). This was partly due to agricultural productivity.

Sidhu and Gill (2006) 28 highlighted some issues in agricultural credit and indebtedness in India. The study showed that the growth of agricultural advances were significant over the years. The direct agricultural advances increased from Rs 3436 crores in 1980-81 to Rs 38,128 crores in 2000-01 at an annual growth rate of 13.05 per cent. It further revealed that there were wide variations in the availability of institutional credit per ha of gross cropped area in different states. The flow was as high as Rs 6235 in Kerala, Rs 5502 in Tamil Nadu, Rs 3806 in Punjab while it was as low as Rs 873 in Uttar Pradesh and only Rs 155 in 1999-2000. Agricultural credit was found to be highly related with the level of agricultural development. It was a kind of vicious cycle operating in less developed states. Less availability of credit influenced adversely the adoption of modern technology and private capital investments which in turn lowered the production capacity of the agricultural sector and resulted in lower productivity and production and also pushed the farmer from non-institutional sources.

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Sura (2006) in his study found that the burden of indebtedness in rural India was exceptionally enormous. Despite major structural changes in credit institutions and forms of rural credit in the post independence period, the exploitation of the rural masses in the name of credit facility was one of the most pervasive and persistent features of rural India. The objective of this study was to assess the growth pattern of RRBs; to examine the credit distribution and geographical distribution of RRBs. The analysis period of the study was from inception (1975) to 2005 that the overall position of RRBs in India is not satisfactory. The credit deposit ratio is poor. The government should spread the branches of RRBs at grass root level.

Similarly, Mohan (2006) examining the performance of the flow of institutional credit finds that despite the increase in the overall flow of institutional credit over the years, there has taken place 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. All these have major implications for agricultural development and the well being of the farming community. It urges for taking serious efforts to address and rectify these issues.


Sura (2006) in his study found that the burden of indebtedness in rural India was exceptionally enormous. Despite major structural changes in credit institutions and forms of rural credit in the post independence period, the exploitation of the rural masses in the name of credit facility was one of the most pervasive and persistent features of rural India. The objective of this study was to assess the growth pattern of RRBs; to examine the credit distribution and geographical distribution of RRBs. The analysis period of the study was from inception (1975) to 2005 that the overall position of RRBs in India is not satisfactory. The credit deposit ratio is poor. The government should spread the branches of RRBs at grass root level.

Kumar and Singh (2007), for example, by focusing on the case of Himachal Pradesh have examined the impact of co-operative credit on 1) agricultural inputs; 2) land improvement; 3) agricultural production and 4) marketing practices. This study finds that the access to co-operative credit has generated a positive impact on the usage of agricultural inputs. The farmers have invested in land improvement. All this led to an improvement in agricultural production. Similarly, there has been some improvement in the marketing practices of the sample farmers though the study has noticed variation across farm size class in terms of all the four areas of impact.

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Khan et al. (2007) focuses on examining the nature and extent of inter-state disparities in per hectare flow of short-term institutional credit to agriculture sector. Covering seventeen agriculturally important states (having about 96 percent of agricultural land), it finds the incidence of sharp inter-regional disparities in the per hectare flow of institutional credit. It finds that there prevailed wide disparities across states in this respect during the pre-liberalisation period of 1980-81 to 1990-91 but thereafter, there has taken place a decline in the incidence of disparity during the post-liberalisation period. However, the study points out that the coverage of institutional credit has remained very low. It finds that it has been below 20 percent of the cost of cultivation.

Focusing on the state of Uttar Pradesh, Kareemulla (2008) points out that given the size and economic contribution of Uttar Pradesh, there is relatively little access to institutional credit in this state. There is lower banking network in the state. Similarly, there prevails large indebtedness among the farming community. In fact, crop failure due to vagaries of weather and the diversion of agricultural loan for non-productive uses have been the major factors influencing the indebtedness of farmers in Uttar Pradesh.

Sahu (2008), for example, analyses the trends in the supply of agricultural credit by institutional agencies in fourteen major Indian states. It observes that the growth rate of agricultural credit was higher during per-reform period compared to the reform period in

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most of the states. It also observes that the growth rate of agricultural credit was higher during pre-reform period compared to the reform period in most of the states. It notes the unevenness in the growth rate of agricultural credit during the sub periods as well as across the states.

Birthal et al., (2008) The country’s dairy sector is dominated by smallholders, and contracting with a large number of them involves transaction costs for the processors. The processors do not have much choice but to take milk from smallholder producers. The problem of the higher cost of contracting with small producers is overcome by contracting with a single person in the village—often an agent—who acts as an intermediary between the processor and producers.

According to Shah et al (2009), “the Gujarat government has aggressively pursued an innovative agriculture development programme by liberalising markets, inviting private capital, reinventing agricultural extension, improving roads and other infrastructure”. If it is only canal irrigation, high growth should have been mainly in South and Central Gujarat.

However, the evidence shows that dry Saurashtra and Kachchh, and North Gujarat that have been at the forefront. “These could not have performed so well but for the improved availability of groundwater for irrigation. Arguably, mass-based water harvesting and farm power reforms have helped energise Gujarat’s agriculture”. This is possible due to more than 100,000 check dams and major programme on Khet Talavadi (water ponds in the fields).

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Similarly, Das et al. (2009)\textsuperscript{38} examine the role of direct and indirect agricultural credit on agricultural production by taking care of regional disparities in agriculture, credit disbursement and agricultural production in an economic framework using Dynamic Panel Data Analysis. It finds that the direct agriculture credit has a positive and statistically significant impact on agricultural output and its effect is immediate.

Nitrogen applied in fertilizers, manures, biosolids and other N sources are not used efficiently by crops. Management strategies to improve the nitrogen use efficiency of crops which reduce fertilizer requirements focus on fertilizer best management practices. A note written for IFPRI by Flynn (2009)\textsuperscript{39} says that the best practices should look at application type, application rates, application timing and application placement. For example, balancing application rates of nitrogen with other required nutrients including phosphorus, potassium and sulphur is a major way of improving nitrogen use efficiency. Similarly, appropriate nitrogen application rates are important in order to have effectiveness on yields.

Another way is switching to organic production which can reduce fertilizer use. Better use of existing organic sources of nutrients, including animal manure, crop residues, and nitrogen-fixing crops such as legumes. Such organic nitrogen sources may also contribute to raising sequestration of carbon in soils (Flynn, 2009). However, yields have to be maintained with organic farming as compared to cultivation with chemical fertilizers.


\textsuperscript{39} Flynn- 2009 “Can Small Farmers Survive, Prosper, or be the Key Channel to cut Mass Poverty”, Journal of Agricultural and Development Economics, Vol 3, No.1, 2009 pp58-85
Kaur et al. (2009) 40 studied growth of institutional credit and indebtedness in Punjab agriculture. The study was based on secondary data of the institutional sources and a large scale field survey of 600 farmers from 11 districts, 20 blocks and 28 villages. The study showed that agricultural loans advanced by institutional lending agencies in Punjab increased from Rs. 1638 crores in 1990-91 to Rs 16374 crores in 2004-05 at current prices with the compound growth rate of 14.1 per cent per annum. Per hectare institutional agricultural loans advanced increased continuously from Rs 3883 to Rs 38986 during 1990-91 to 2004-05 at current prices and from Rs 3883 to Rs 13476 at constant input prices. The total agricultural advances increased from Rs 1638 crores in 1990-91 to Rs 3139 crores in 1995-96 and to Rs 6430 crores in 2000-01 and to Rs 16374 crores in 2004-05. The growth in the availability of credit was also reflective of growth in the incidence of debt in the agricultural sector. Institutional indebtedness gauged as outstanding at March end increased from Rs 1863 crores in 1990-91 to Rs 2988 crores in 1995-96. But the increase was not as higher as the increase in the NSDP from agriculture and livestock, as the percentage of amount outstanding to NSDP and agricultural and 38 livestock declined during the same period from 25.2 to 17.4 per cent. Considering the credit requirement as proportion of the output (NSDP) remaining the same, albeit at least, if not increasing, it indicated increases in the farmers dependence on the non-institutional sources thereby forcing them into debt trap.

Sarangi (2010) 41 made an attempt to study credit related issues of farmers. The study revealed that several state governments attempted to reduce the debt and interest burden on farmers by offering rebates on interest, for timely repayments. This was perceived as a

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measure to encourage farmers to come into and stay in the banking system. The low rates of interest appeared also to have had same influence on borrower behaviour with for example farmers drawing out their entire credit limit on KCC at once. The farmers who least benefited from these schemes and dependent on moneylenders were those who did not have land title deeds in their names. These included tenant farmers, oral lessees, sharecroppers and those who had inherited land with the records yet to take note of the changed circumstances. The study also showed that the KCC scheme was not being operated in accordance with the purpose for which it was first conceived. The farmers did not know that they were covered by KCC and this may have been due to the fact that the KCC was in fact not a card, but a pass book and farmers had such pass books prior to KCC issuance. Khatkar and Gaur (2011) studied the status of institutional credit to agricultural credit.

Small farmers can benefit from the emerging super markets and value chains. The presence of super markets as retail trade is rapidly expanding in the emerging economies. According to Gulati (2009)\(^\text{42}\), this process has developed in an astonishing speed: Supermarkets now enjoy a retail share of 50-60% in South America, East Asia (China excluded) and South Africa; and a 30-50% in Mexico, Central America and much of South East Asia. While in China, India and Vietnam their market is still low and variable (2-20%), it is experiencing an annual growth between 30% and 50%.

The need for adopting the methods of an evergreen revolution has become very urgent now. As Swaminathan (2010) mentions, among other things, there are two major pathways to fostering an evergreen revolution. The first is organic farming. Productive

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\(^{42}\) Gulati, Ashok (2009), “Emerging Trends in Indian Agriculture: What can we learn from these?” 2nd Prof. Dayanath Jha Memorial Lecture, National Centre for Agricultural Economics and Policy Research, New Delhi
organic farming needs considerable research support, particularly in the areas of soil fertility replenishment and plant protection. The other pathway to an evergreen revolution is green agriculture. In this context, ecologically sound practices like conservation farming, integrated pest management, integrated nutrient supply and natural resources conservation are promoted. Green agriculture techniques could also include the cultivation of crop varieties bred through use of recombinant DNA technology if they are good in resisting to biotic and abiotic stresses or have other attributes like improving nutritive quality (Swaminathan, 2010).43

Contract farming has a potential to help the small and marginal farmers overcome constraints in accessing inputs, credit, extension and marketing. In recent years, there has been some form of contract arrangements in several agricultural crops such as tomatoes, potatoes, chilies, gherkin, baby corn, rose, onions, cotton, wheat, basmati rice, groundnut, flowers, and medicinal plants and is spreading throughout India in states like Andhra Pradesh (Dev and Rao, 2010)44, Tamil Nadu, Karnataka, Punjab and Maharashtra.

Kumar et al. (2010)45 on the basis of secondary data compiled from several sources, conclude that the institutional credit to agriculture in real terms has increased tremendously during the past four decades. The structure of sources of credit has witnessed a clear shift and commercial banks have emerged as the major source of such credit to agriculture in recent years. It notes that several initiatives have been taken to strengthen the institutional

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43Swaminathan(2010), Biotechnology in Indian Agriculture: Potential, Performance and Concerns, Academic Foundation, New Delhi
44Rao, NC and Dev, S.Mahendra (2010), Biotechnology in Indian Agriculture: Potential, Performance and Concerns, Academic Foundation, New Delhi
mechanism of rural credit system. The main objective of these initiatives has been to improve farmers’ access to institutional credit.

The research conducted by Thapa and Gaiha, 2011\(^\text{46}\) shows that low external input and sustainable agriculture approaches based on ecological principles but without the use of artificial chemical fertilizers, pesticides or agro-ecological principles but without the use of artificial chemical fertilizers, pesticides, or genetically modified organisms; and biotechnology’

A study by Kumar et al. (2011)\(^\text{47}\), for example, have focused on three aspects related to this scheme; first, it examined the state-wise variation in the disbursement of KCCs; second, it estimated the magnitude of regional disparities in the spread of KCCs and the third, it made an attempt to look into the factors that influence the availing of KCC scheme by the farmers. In addition to the commercial banks, a large number of studies have also focused their attention on the performance of co-operative societies.

Kannan (2011)\(^\text{48}\), for example, by focusing on the state of Karnataka finds that the disbursement of credit through institutional sources had a large impact on improving agricultural productivity. However, it points at its inadequacy and thereby urges for

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widening its coverage both in terms of the amount of credit and the coverage of more number of marginal and small farmers.

Reardon and Minten (2011)\textsuperscript{49} examine the patterns and dynamics of diffusion of modern food retail in India. They emphasized three surprises in the rise of modern food retail in India. They are: “(1) that has occurred since the 1960s with waves of government, coop, and then private retail; (2) that the private retail wave has been extremely fast in particular in its second phase, in the past 6 years, when it grew at 49% per year on average, some 5 times faster than the fast growth being experienced in the GDP; (3) that the rise of private retail chains has been unique or rare in its drivers (in its great majority by domestic capital, not foreign investment), and “early” (compared with the prior experience in other developing countries) in its penetration of the food markets of the poor, of small cities and even rural areas, of fresh product markets, and its use of diverse formats to help toward the above ends” (p.20, Reardon and Minten, 2011a).

In a study on food supply chains in India, Reardon and Minten (2011) indicate the following changes in the past two decades.

(1) A modern sector is emerging in the whole sale sector with the growth of modern logistics firms and specialized modern wholesalers. --

(2) Tradition segment of the whole sale sector is also transforming. Based on earlier studies, this study presents the findings on transformation of traditional whole sale sector as follows.

\textsuperscript{49} Reardon , T and B. Minten (2011 a), “Surprised by Supermarkets: Diffusion of Modern Food Retail in India”, Journal of Agribusiness in Developing and Emerging Economies 1 (2).
(a) Rural traditional market transformation is much more advanced in certain regions. For example, West and Central regions of Madhya Pradesh and West and Central Uttar Pradesh are different from Eastern regions of these states.

(b) The marginal farms (0-1 hectare) look more like traditional rural India with low market surplus, chemical use, credit use, lower use of clod stores etc. On the other hand, small and medium farmers are more dynamic.

(c) The conventional view is that food supply chains are dominated by long chain of many hands. The recent findings show that supply chains can be short.

(d) Conventional view is that farmers are at the mercy of money lender of because of tied credit. But, the surveys show that less than 5 per cent take advance or credit in any form from brokers or wholesalers.

(e) The surveys show rapid development of cold stores for potato in Uttar Pradesh and Bihar in 2000s.

According to Subba Rao (2012)50 Commercial banks have played an important role in financing the needs of agricultural sector. With the aim of facilitating timely and adequate credit flow to agriculture, the sector has been targeted as a part of the priority sector lending programme introduced after nationalisation of banks in 1969. Since then, banks have become gradually an important source of agricultural credit, although the growth in their share has not been monotonic during 1980s. In the first half of 2000s, there has been a steep rise in the share of commercial banks in total agricultural credit. Starting 1990s, the share of short-term agricultural credit in total agricultural credit has been going up. Newer credit delivery systems in the form of Kisan Credit Card (KCC) were introduced to provide easy

access to credit. Banks like NABARD has grown and evolved over the last three decades from a uni-dimensional apex financing agency into a multi-dimensional institution for shaping and implementing the country’s overall rural credit policy. In the first two decades after independence, the conduit for institutional credit to agriculture was the cooperative sector. Although sound in concept, the cooperative sector failed to live up to expectations. With the nationalisation of commercial banks, the decade of 1970 marked the entry of commercial banks into agricultural credit. Over the last 40 years, there has been a striking increase in the credit intensity of agriculture as measured by the ratio of agricultural credit to agricultural GDP. The credit intensity increased from 12 percent in the early 1970s to 67 percent by 2010-11.

Another study by Satyasai (2012) has empirically examined the relative access of different categories of farm households to formal credit and its impact on fertilizer use. This study finds that access to credit has had a positive impact on the usage of fertiliser among the farmers though a large impact is experience among medium and large farmers than the marginal and small farmers. It finds the elasticity of fertilizer use with respect to credit between 0.20 and 0.24 for marginal and small farms. The same has been between 0.52 and 0.54 for medium and large farms.

The major milestones in improving the rural credit are, acceptance of Rural Credit Survey Committee Report (1954), nationalisation of major commercial banks (1969 & 1980), establishment of RRBs (1975), establishment of National Bank for Agriculture and Rural Development (NABARD) (1982) and the financial sector reforms (1991 onwards), Special agriculture credit plan (1994-95), launching of Kisan Credit Cards (KCCs) (1998-

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99), doubling Agricultural Credit Plan with three years (2004) and Agriculture debt waiver and Debt Relief Scheme (2008). These initiatives had a positive impact on the flow of agricultural credit. However, the persistence of money lenders in the rural credit market is still a major concern. The government is trying its best to expand the reach of the institutional credit to the farmers. Recently, it has initiated a new scheme, called the Kisan Credit Card (KCC) Scheme. This scheme has been successful to some extent. There appeared various studies that have made an assessment of the performance of this scheme.

A review of the research and development activities of the Indian Council of Agricultural Research (ICAR) system during the first two years of the 10th Plan revealed several weaknesses. Some of these are (a) there is inadequate emphasis on the needs of rainfed areas, which account for over 60% of cultivated area; (b) crop bias with major focus on rice and wheat; (c) proliferation of programmes resulting in resources being spread thinly and lack of focus in areas of relevance and opportunity; (d) inadequate priority to emerging challenges, particularly post-harvest, marketing and environmental conservation; (e) the multiplicity of institutes with overlapping mandates has led to duplication of research work; (f) lack of accountability, less emphasis on multidisciplinary research, weak interaction among researchers, extension workers and farmers and the private sector and, excessive centralization of planning and monitoring. A thorough reform of ICAR system is needed to address these weaknesses.

The studies reviewed and revealed the fact that there was a need for institutional finance to implement new agricultural technology. The studies further revealed the fact that the banking system could not meet fully the credit requirements of small and marginal

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farmers. Probably there may be no research work to examine the response of the farmers under the circumstance, when the banking system could meet fully the credit requirements of small and marginal farmers. Therefore the proposed study may be an attempt to examine the response of the small and marginal farmers towards different kinds of loans offered by different kinds of agencies.

2.5 RESEARCH CONCEPTUAL FRAMEWORK

The main challenge faced by agricultural credit involves not only ensuring flow of credit to small and marginal farmers and small and tribal farmers, but designing policies and credit delivery systems that have relevance in the present context in terms of production and demand for agricultural products. Such policies have to consider the need for agricultural credit due to crop diversification. The present multi-agency approach is inadequate to tackle the pressing need for finance of agricultural extension services too. We need to tackle the issue of how to channel the resources of commercial banks in sustainable and viable manner in order to fund the development of a wide range of allied activities. It is also felt that tenancy laws also hinder flow of credit to tenant and sharecroppers despite guidelines issued by Reserve Bank of India. The specific needs of the agricultural sector to financial services demand a broader systemic approach. Need is to understand the extent of availability and distribution of productive resources, along with their distribution, legal and social structures governing their use, cropping patterns, current and emerging technologies and dynamics of rural markets and so on to gauge the credit requirements. This would improve the flow of credit to agriculture, especially small farmers. A critical determinant for agricultural credit is the commercialization of subsistence farmers. Development of efficient
marketing system would result in the commercialization of subsistence farmers by providing outlets and incentives for increased production.

Farmer is an important player in the financial, labour, inputs and commodity markets, who because of the size of transactions in the market place does get marginalized. Livelihood diversification can help in greater credit absorption at lower end of farming community. Besides, increased public investment in agricultural infrastructure, research and extension services is required. Need is also felt for developing post-harvest technologies and marketing facilities that can reduce frequent risk and losses faced by farmers.

Thus based on the extensive reviews of the various articles and research papers conducted by the researcher, various factors are identified , which are used to analyse the major problems faced by the farmers .They are

8. Processing formalities and requirements
9. Interest rates and charges
10. Repayment ability
11. Sufficiency of the credit amount
12. Lack of information about schemes and reforms.
13. Discrimination and political interference.
14. Timing and delay in the process.

1. Processing formalities and requirements :

The formalities associated while getting a loan from the banks are very tedious and cumbersome. The farmers sometimes do not possess security enough to obtain a loan .This creates a major problem.
2. Interest rates and charges:

The rates of interest and other processing Charges are exorbitant and farmers may not be in a position to pay the same.

3. Repayment ability:

The capacity to repay the loan amount is another factor which creates a problem. The farmers sometime when the crops are lost due to calamity may not be able to repay the loan which will lose their credibility.

4. Sufficiency of credit amount:

The availability of sufficient amount for the requirements of the farmers is also a problem.

5. Lack of information about the schemes:

Most of the farmers and the rural people are not aware of the schemes and options available for them. This often results in the schemes going waste.

6. Discrimination:

There are often discrimination in the political or community basis and this results in the schemes going without reaching their focus.

7. Delay in the process:

The delay in the process sometime demotivates the farmers and they give up. The schemes are not properly utilised because of the delay in the process.

2.5 GAP ANALYSIS AND OPERATIONAL DEFINITIONS:

The reviews conducted by the researcher gives a detailed account of the various aspects of various agricultural credit available and its effectiveness. The studies highlighted the importance of time, schemes, processing issues, technical and marketing aspects and
other problems associated with the availability of the agricultural credit. Most of the
studies conducted in this sector have focused mostly marketing, pricing and consumer
behavior towards agricultural products. Only very few studies concentrate on financial
problems faced by the farmers and its impact on productivity.

Similarly, though much research has been done into the product attributes and
marketing, only few studies deal with the effect of these problems and uncertainties related
with the agricultural credit. In order to bridge this gap the present study titled “A Study on
the financial problems of farmers and its impact on the agricultural production with
reference to Salem district” was undertaken. This study throws light on the various aspects
of effectiveness of the agricultural credit and also provides suggestions about how to
improve the effectiveness of these credit schemes to improve the productivity.

This study examines the question of access to credit among farmers. In fact, the
question of credit delivery to the agriculture sector is largely studied by a number of
scholars. Prime issues addressed by the available literature remain confined to the
significance of credit, sources of credit delivery, access, disparities, government policies and
so on. In this literature, there prevails a large gap as far as the question of credit supply is
concerned and also its impact on the agricultural production.

**Forms of agricultural credit:**

1. Short term :

   Short term loans are required for the purpose of seeds, fertilizers, pesticides,
   feeds and fodder of livestock, marketing of agricultural produce, payment of wages of
   hired labour, litigation and a variety of consumption and unproductive purpose. The
   period of such loans is less than 15 months.
2. Medium term:

Medium-term loans are generally obtained for the purpose of cattle, small agricultural implements, repair and construction of wells, etc. The period of such loans extends from 15 months to 5 years. These loans are generally provided by money lenders, relatives of farmers, co-operative societies and commercial banks.

3. Long term:

Long-term loans are required for effecting permanent improvements on land digging tube wells, purchase of larger agricultural implements and machinery like tractors, harvesters, etc and repayment of old debts. The period of such loans extends beyond 5 years. Such loans are normally taken from land development banks.

For the purchase of seeds, fertilizers, manures, agricultural implements, live-stock, digging and repair of wells, and tube wells, payment of wages, were effecting permanent improvements of land, marketing of agricultural produce, etc. Repayment of these loans is generally not difficult because the very process of production generally creates repayment. Farmers often require loans for consumption as well. Between the moment of marketing of agricultural produce and harvesting of the next crop there is a long interval of time and most of the farmers do not have sufficient income to sustain them through this period. Therefore they have to take loans for meeting their consumption needs. In this time of droughts or floods, the crop is considerably damaged and farmers who otherwise avoid taking loans for consumption, have also to incur such loans. Institutional credit agencies do not provide loans for consumption purpose accordingly; farmers are forced to fall back upon money lenders and mahajans to meet such requirements.
In addition to consumption, farmers also require loans for a multiplicity of other unproductive purpose such as litigation, performance of marriages social ceremonies on the birth or death of a family member, religious functions, festivals, etc.. Since institutional agencies do not grant credit for such as unproductive purposes, farmers have to seek assistance from money lenders and mahajans. It is often very difficult to repay such loans because they do not contribute to the productivity of farmer.

**Co-Operative Credit Institution:**

Co-operative finance is the best and the cheapest source of agricultural credit because loans are advanced for productive activities and also at very low rates of interest as compared to those charged by the money-lenders and various other institutions.

**National Co-Operative Development Corporation:**

This institution was set up in 1963 with the objective of promoting various economic programmes in the co-operative sector. These programmes include poultry farming, fisheries, sericulture, dairy farming etc. it provides financial assistance to the co-operative societies for this purpose.

**Government:**

The Government, both at the Centre and in the States, has been an important source of rural finance for short period as well as for long period. The government provides finance to farmers directly as well as indirectly. The loans which are advanced by government to farmers directly are called "Taccavi" loans and are advanced by Government in times of distress or emergency such as wears, floods, earthquakes or famine. These loans are
advanced through the agency of community development or revenue departments or co-operatives.

**Commercial Banks:**

A review of the working of the commercial banks in the field of rural finance shows that the commercial banks have been helping the farmers in various spheres of agricultural development e.g., promotion of dry land farming. Purchase of agricultural machinery and other inputs, for dairy farming, lift irrigation, electrification of tube well etc. Despite the increasing role of commercial banks in rural finance in recent years, it has been found that the non-institutional credit still accounts for more than 30% (2002) of the total rural credit. The commercial banks have still to cover too much to establish themselves as the major sources of institutional finance in the rural areas.