Chapter 2

Literature Review
Literature Review

Review of literature plays an important role in finding out information on the work done in the past by different researchers and provides valuable guidelines in formulating the theoretical framework of research at the time of investigation. Keeping this aspect in view, an attempt has been made in this chapter to evaluate various concepts and views related to the present research.

2.1 Role of commercial Banks in the Development of the Country through Agriculture Credit

Hrishikesh and Reddy, (2014) examined the prospects of agricultural finance by commercial banks in Kurnool district of Karnataka. They reported that though many commercial banks have been lending both direct and indirect finance to agriculture but this financing has remained inadequate in promoting infrastructure facilities and services in the rural areas for the benefit of poor farmers. Due to loosely integrated agricultural credit delivery system, credit facilities are not reaching the target beneficiaries.

Rao, (2014) conducted the appraisal of priority sector lending by commercial banks in India during the period 1995-2011. His paper analysed the emerging trends in priority sector lending, the burden of NPAs on commercial banks due to such lending, and the extent to which priority sector targets are met by individual banks. The study found that the composition of the priority sector advances in the non-food credit of scheduled commercial banks account for more than 90 per cent of the gross bank credit while food advances account for less than 10 per cent. This composition shows that the importance of agriculture and small scale industries in priority sector lending by commercial banks is coming down over the years. The priority sector advances for SBI and its associates accounted for an average of 32% while that for other nationalized banks accounted for 35%, private sector banks accounted for 28% and foreign banks 21%.

Saini and Sindhu, (2014) studied in the paper title “Role of Commercial Banks in Economic Development of India” importance of agricultural credit and its main
sources i.e. commercial Banks. A commercial Bank provides many services like deposits, giving business loans and offers many investment products. The share of commercial banks in total institutional credit to agriculture is almost 48 per cent followed by co-operative banks with a share of 46 per cent and RRBs about 6 per cent. But most of surveys show that most of the agriculture credit does not reach the true beneficiaries. As a result India has still 22 per cent of the poor population of the world. Through empirical research it is found that RBI and the Government take necessary steps to improve present condition of the agriculture sector. NABARD is playing a vital role in refinancing. Study shows that 66% people are still not getting the banking facilities. Commercial banks are providing credit to the poor farmers but this is not free from the other problems. Commercial Banks are providing 43.1% of total Agriculture credit (Economic Survey 2011). These are the still privileged problems in India faced by the farmer to get agriculture credit: 1. High rate of interest on loan 2. Lack of financial knowledge 3. Cumbersome process of getting loan 4. Bank staff is not cooperative 5. Lack of security of collateral 6. Fear factor about recovery process. By the study it is clear that economic development in India is only possible when agriculture sector grows and this can be possible only when commercial banks play their role by providing low credit to the farmers.

Gowhar et al. (2013) used the secondary data from 2000 to 2012 to assess amount of loan issued and the overdue by commercial banks and determine the progress of scheduled commercial banks in providing credit to agricultural activities. expressed the need of credit to farmers for purchasing agriculture equipment's like tractor, tillers and IP sets for irrigation, analysed the secondary data by calculating compound growth rate of area, production and productivity; Agriculture Finance is very important for the agriculturists to run their business. In case of direct loan compounded growth rate of scheduled commercial banks was fabulous while it was lesser in case of cooperatives while providing short term credit. As far as long term loans are concerned, the results were same. The rate of proving In-Direct loans was higher in case of the cooperatives. The study revealed that the institutional credit in India to agriculture sector has been increased in its quantum. The credit provided by the various institutional sources has increased its advances. But an effort has to be
taken by the banks to reduce its outstanding, so that the recovered institutional credit should be pumped into agricultural sector further for its growth.

**Jasmindeep and Silony, (2011):** studied the contribution of public and private sector banks in financing agriculture sector. Also evaluated the performance of commercial banks in credit delivery. The secondary data from 1991-2008 had been taken into consideration for the study. They found from the study that priority sector advances and agricultural advances of both the types of banks had improved manifold over the study period. But, they were still lacking behind to achieve the targets set for them by RBI in agriculture sector. It was observed that the performance of private sector banks in respect of all the parameters was better than that of public sector banks. It is suggested to increase the attention of both the public and private sector banks on the priority sector of the economy.

It was suggested that public sector should improve its performance in lending loans to priority sector. Public and private sector banks should work with proper coordination to get desired results. Banks should also be appreciated for their work in agriculture credit delivery. RBI should take initiatives to make farmers aware regarding the facilities provided by the Banks.

**Kittur and Aounti, (2012) Analysed the performance and progress of commercial banks in Karnataka and determined the lending pattern and disbursement of agricultural finance by commercial banks in Karnataka. Discussed the problems faced by commercial banks in lending credit. Studied the relative share of borrowing of cultivator household from different sources. Some problems regarding commercial banks were also pointed out like banks are not in position of covering more villages. Farmers are not aware of schemes available for them. As a result less credit is reaching to them. The distribution of loans is not being done significantly. Due to increasing staff of the banks, expenses are also going high. Based on the problems faced by commercial banks in Karnataka They suggested emphasis should be laid on deposit mobilization. Steps should be taken to increase the credit to lessen the gap between domestic credit and GDP. The banks should encourage the villagers to deposit their money to the bank and ask others to avail loan through banks.**

**Rajesh et al. (2011) In their study they had analysed the role of Co-operative Banks in agriculture credit in India from 2002-2007. Discussed the main sources of finance**
of Co-operative banks: Central and state government, The RBI and NABARD. Other Cooperative institutions, Ownership fund and Deposits. Told about primary cooperative agricultural credit societies which can be started with 10 people who belong to the same village or community. It gives loan to the members who are very needy. There are now over 92,000 primary agricultural credit societies, 367 central cooperative banks and 29 state cooperative banks operating in India (RBI, 2009). Total agricultural credit by the cooperative has also been increased during the period studied. They concluded that average compound growth rate of agriculture credit by cooperatives has always been less that of average compound growth rate of all India Institutional finance.

Anjani et al. (2010) studied the status, performance and determinants of institutional credit to educational sector in India. While acknowledging the pivotal role played by institutional credit in the agricultural development in India, they also raised the persistent influence of money lenders in rural credit market. The study revealed that institutional credit to agriculture in real terms has increased in the last four decades. Over these many years commercial banks have emerged as a major source of institutional credit. But the problem lies in the declining share of investment credit in the total credit taken. This new trend is constraining the sustainable growth of agriculture in the country. A number of socio-demographic factors such as education, farm size, family size, caste, gender, occupation of household, etc. are affecting the quantum of institutional credit availed by farmers. The study suggested that training should be imparted to borrowers regarding procedural formalities of financial institutions. Such training would indeed be helpful in increasing their access to institutional credit. Moreover, procedures for loan disbursement be simplified so that it may not be difficult for the less-educated and illiterate people to access institutional financing agencies for credit.

Ahmed, (2010) emphasized the importance of lending to priority sectors by banking industry. He argued that the attainment of socio-economic equality goals of government like the growth in agriculture, promotion of small entrepreneurs and development of backward areas, etc. are the shared responsibilities of commercial banks. Reserve Bank of India at regular intervals has also stipulated policies for commercial banks for priority sector lending. Ahmed (2010) informed that in the
revised policy of 2007, RBI fixed the priority sector lending target at 40 per cent for domestic banks and 32 per cent for foreign banks. He reported that banks are facing problems in meeting these targets as small farmers and entrepreneurs despite facing problems of credit and demand constraints are still preferring local money lenders. There are various lacunas that exist in commercial banking priority sector lending which have not been addressed. The task of policy makers and researchers is to first identify those gaps and then to take measures addressing the same. Ahmed (2010) suggested that increase in credit delivery centres, that is, expansion of bank branches in rural area would act as a credit support activity. Proper mechanism for recovery of loan amount from debtors will ensure sustainable performance of banks in the priority lending sector.

Uppal, (2009) highlighted the need to channelize the flow of credit to priority sectors for the larger interest of the country. Uppal studied the advances of public, private and foreign banks to agriculture and small scale industries on the parameters of lending targets achieved, and NPAs (Non-Performing Assets) while lending to priority sector. The study concluded that the public sector banks could not achieve their targets of 40% lending to priority sectors while private banks did achieved their overall targets. However, no private sector bank could achieve the target of 10% lending to weaker sections of the society. The issue of rising NPAs of public sector banks to high priority sectors is an area of concern and need to be taken care of at the earliest. The major problems of priority sector lending identified in the study include low profitability, high NPAs, and higher transaction costs. The study suggests that proper attention should be paid to these issues for sustaining the operations of commercial banks in the priority sector lending.

Shah et al. (2007) briefly overviewed the 20th century rural credit in India. They reported that rural people were largely dependent on usurious moneylenders for their credit needs. The rural credit system was marked by exploitative grid of interlocked and imperfect markets controlled by money lenders. The researchers traced the impact of nationalization of banks and came to the conclusion that the process of nationalization of commercial banks had a positive impact on the overall rural credit market and development. Shah et al. (2007) made several suggestions for the present requirements of finance in rural India. These suggestions involve changes in:
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- public investments in natural resource regeneration, ecologically sustainable, low-cost, low-risk agriculture;
- market support for crops grown in rain-fed areas such as cotton, pulses and oil-seeds;
- the aims of public sector banking from mere profit making to strengthening their capacity to deliver high quality credit;
- the cooperative credit structure to make it more democratic, member-driven, professional organization based on the concept of mutuality; and
- the Self-Help Groups (SHG) and bank linkage programs where the government should bear the promotional costs in the initial years.

Zaveri, (2003) argued that exponential growth of low cost funds made available by the commercial banks in India where jobs and incomes are uncertain is dangerous. It also points out that the Indian financial intermediaries by following the same path in the past are still nursing sizable amounts of non-performing assets.

Dasgupta, (2002) has argued that priority sector credit lacks a focus and rationality. In the pre-reform period, there was to some extent an emphasis on weaker section and neglected sectors but in the post-reform period priority sector is just a bundle of list, which has been regularly modified. So the paper suggests for re-examination of the rationality of priority sector, prepare an appropriate list and formulate a strategy to ensure adequate flow of credit to the desired sectors.

Nair, (2000) has broadly reviewed the major trends in rural financial intermediation in India by public sector commercial banks in the post liberalization period. It has examined their role vis-à-vis the newly emerging institutional forms with their thrust on what is called micro finance services. The paper shows that although deployment of credit in the rural sector has increased over the year, this increment was mainly tilted in favour of industrial sector. In 1985, nearly 52 per cent of the funds deployed in rural areas went to agriculture, bulk of it as direct finance. Industry accounted for 16 per cent, trade 12 per cent and transport operations and small scale industries (other than artisans and village industries) 7 per cent each. About a decade later, in 1994, the credit outstanding in the rural sector increased by a heavy amount (about Rs. 1,24,000 crore); but then half of this increment was channelised to industry, with just about 11 per cent going to agriculture, just as much to trade or
personal/professional services loans. The paper has argued that in micro finance, in the absence of any direct transaction between the bank and final user of credit, it is unclear whether the emotional and spatial distance between the two has narrowed in the new arrangement.

Satyasai and Badatya, (2000) prescribed for a total revamping of the rural credit system. It showed that the co-operative system in general failed to perform its functions of providing loans to the priority sector. It added that the problem of Rural Co-operative Credit Institutions (RCCI) got accentuated on account of certain weaknesses, some internal and others external to them, such as depletion of resource base, declining business level, rising transaction costs, mounting overdue, erosion in leadership, defective management, excessive bureaucratization and official domination etc.

Laxmi and Venkatesulu, (1999) To show the importance of agriculture and commercial banks, analysed the Indian economy, the share of agriculture in National Income, occupational structure and Indian exports before and after the independence. Also mentioned the commencement and history of commercial banks, their trends and problems of over dues analysed. Important agriculture products like Coffee, Tea, Tobacco are backbone of items of exports. Analysed that decadal decrease in all these products is a matter of concern. The central Government and the States Governments have come together for the development of agriculture sector. In early stage commercial banks were also facing problems of lack of branches and the expert human resource to run the business. Necessary steps taken by the commercial banks resulted in increase in direct finance in district of the study. For smooth credit delivery it was suggested that banks should form certain committee to provide loans and repayment also. The loan should be given within the specific time limit otherwise it may be used in other purposes. The banks should clear the repayment schedule at the time of giving credit so that the farmers may fix their mind to repay in certain instalments. Time to time visiting to the farmers will result in fasten the recovery of loans. (reference: discovery publication house, ansari road daryaganj delhi. Topic financing of agriculture by commercial banks).
2.2 Studies Based On The Nature Of Agriculture Finance

Hrishikesh and Reddy, (2014) made several suggestions in their paper for farmers, bankers, and government and RBI for plugging the anomalies that exists in agricultural credit mechanism in India. They suggested that the government should promote eco-friendly farming systems. Government policies should make it compulsory for farmers to adopt drip irrigation system for availing benefits of commercial bank finances. A risk mitigation mechanism should be established with the creation of a corpus fund by the government that can be monitored by commercial banks. Commercial banks can start some training programs for small and marginal farmers through which they can be taught about the benefits of primary and secondary level value additions in crops they produce. Moreover, these training programs can also be used to educate farmers about the measures of capacity building techniques for storage of food grains.

Maan and Singh, (2013) The National Bank for Agriculture and Rural Development (NABARD) is the crowned organization with respect to all matters relating to policy, planning and operational aspects in the field of credit for the promotion of, agriculture and allied activities in rural areas. NABARD issues credit to various banks for their term lending operations for the purposes of agriculture and rural development. The National Bank of Agriculture and Rural Development (NABARD) has emerged as an refinancing institution for agricultural and rural credit in the country since July, 1982. It has taken over the refinancing functions from the Reserve Bank of India with respect of State Cooperative Banks and Regional Rural Banks. It has also taken over the ARDC (Agricultural Refinance and Development Corporation), Developing a strong and efficient credit delivery system which is capable of taking care of the expanding and diverse credit needs for agriculture and rural development was a task that received the attention of NABARD. NABARD is involved in the implementation of projects assisted by World Bank and its affiliate, the International Development Association (IDA). There are some other International Aid Agencies which provide assistance to NABARD in respect of various projects. NABARD has been associated with the implementation of 42 projects with external credit out of which 38 projects are assisted by World Bank and its affiliate, i.e. IDA and International Bank for
Reconstruction and Development (IBRD).

Jumrani and Agarwal, (2012) Analysed the trends and concerns in the formal credit delivery in India. After the late nineties there has been a significant improvement in the credit delivery. The agriculture sector performance has been tremendous. Both, the number of accounts and amount outstanding under priority sector grew at an annual rate of 3.8 per cent and 15.2 per cent, respectively during the period 1997-98 to 2007-08. They mainly focused on lending to the agricultural credit. The number of accounts grew at an annual rate of 5.2 per cent and the amount outstanding at 16.5 per cent. The amount outstanding per account grew at an annual rate of 10.8 per cent from 25452 in 1997-98 to ` 78646 in 2007-08. The increasing level of formal debt may be perceived as a sign of modernization and growth, but at the same time, the absence of essential conditions to ensure that credit is being used in a judicious manner may also force the farmers to enter into the vicious debt traps. The probability of such a situation increases all the more in the case of technology fatigue, depleting natural resources and rising uncertainty over economic returns — a situation that has been staring India in its face in the recent past. Adequate access and appropriate absorption of credit by the farmers is indispensable for the long-term growth and sustainability of agriculture, and consequently for the overall economic growth. For measuring the inclusiveness of the formal agricultural credit system, the author analyzed the distribution of amount outstanding as per their credit limit size classes. The study showed that the small farmers had very little share in relation to holdings. The gap is very large between large and small farmers in terms of amount holding the account. The analysis reflects imbalance between direct and indirect finance.

Kishor, (2012) He mainly focused on the policy reforms which were helpful in increasing agriculture credit for the sustainability of agriculture and rural development. He emphasised to strengthen the agriculture sector to reduce rural poverty, food security, unemployment and sustainability of natural resources. By increasing productivity with the help of high yielding seeds, application of chemical fertilizers and pesticides, mechanization and making availability of institutionalized credit for various activities, even though it is not profitable to the ultimate producer as it should be. Due to commercialization more numbers of middle men come into play and farmers are very far away to get due credit. And food requirement of the country
gets affected as agriculturists lack resources. This means rural credit system needs more marketing of the products available for the rural people. The time has come to redefine agriculture as the integrated activities has come to redefine agriculture as the integrated activities relating to production, processing, marketing, distribution, utilization and delivered at each level individually. Agricultural credit development strategy worked in the favour of farmers as far as institutional credit delivery is concerned. As a result of efforts in the agriculture credit delivery system, the share of private money lenders (non-institutional credit) has decreased substantially from 93 per cent in early 1950's to 31 per cent by 1991. He quoted The All India Rural Credit Survey(1954) showed that agriculture credit has not reached up to sufficient quantity, and is not of correct type, did not reach to the right people and also fell short of the purpose. He emphasised on more use of information technology for the sustainable food security of Indian Agriculture.

Kumar, (2013) Mainly described finance as the backbone of agriculture and rural people especially persons who are mere working for the existence of their lives. Government officers and bankers should take steps to reduce poverty as in India more than 25% of the population still living below poverty line. Since nationalization commercial banks provide loans to the poor under priority sector lending (PSL). Banks have certain targets to provide fund for the priority sector, small scale industries, small business man, education, housing and micro finance. He also pointed out the problems of agriculture credit in India like Banks should ensure the feasibility of the project for small scale farmer otherwise problem of recovery will arise. One of main problem of utilising agriculture credit is that is not used for in the effective to get the desired results. The banks should have the target that a certain amount of agricultural credit should reach to the priority sector. Farmers also face some problems like high interest rates, lack of awareness, non-cooperative staff, recovery fear etc. He suggested that separate segment of banking operation “Banking for weaker section” be created and result of banks be highlighted with this segment. Interest rate should be reduced & subsidized. Financial education for weaker section be spread with more involvement of educational institutions.

De, (2010) presented an overview of the agrarian credit scenario in India. The various issues took up in the paper the differences between demand and supply of agrarian
credit, the emergence of sectors within the Indian economy which compete with agriculture for institutional credit and the aversion of institutional lenders towards agrarian borrowers. De (2010) also analysed the deficiencies plaguing the three distinct phases of a credit cycle - resource mobilisation, lending and recovery. It is argued in the paper that financial liberalization and deregulation of the economy along with financial discipline measures reduced the attention towards agriculture in general, and agricultural credit, in particular. The institutional credit organizations have failed in meeting the demand for agricultural credit. The emerging sectors of IT and real estate are increasingly competing for credit with agricultural sector. The problems highlighted in the paper are not exhaustive but are indicative in the sense that they be sorted out through agriculture focused credit policies.

Seibel, (2007) Discussed about the scenario of India Agriculture during sixties and seventies when agricultural production was the main issue of the rural development. And for this Agricultural credit was being given to specially farmers to get improved seeds and seedlings, fertiliser, pesticides, tools and machines. The issue was how to disburse agricultural credit to farmers. The funds were provided by governments and donors. Disbursement mattered, not repayment because agricultural credit was a service not the business. After that population grew rapidly and villagers were trying hard for their living and it was not easy to earn living only by doing farming so the rural people had choose some other option whether it was off-farm and non-farm. For this change they needed fund and concept of microfinance came into existence. Suggested that domestic resources can be effectively mobilised through equity instead of deposits by shareholder-driven RMFIs. Equity provided by external investors may bridge liquidity shortages and leverage own resources. Equity-driven RMFIs resources mobilisation through equity mobilised by local shareholders motivated by profit sharing and access to credit. Drew the attention that the growth of sustainable RMFIs and sustainable financial services is contingent upon effective supervision.

Burgess and Pande, (2003) Discusses how poor people remain poor due to scarcity of finance. In their paper they used the data on the Indian rural branch expansion program to provide empirical evidence on poor people's condition between 1977 and 1990, the Indian Central Bank mandated that a commercial bank can open a branch in a location with one or more bank branches only if it opens four in locations with no
bank branches. In the study they provided that between 1977 and 1990 the rule implemented by Indian Central Bank caused banks to open relatively more rural branches in Indian states with lower initial financial development. But after 1990 it was not possible for the banks to expand their branches whatever the reason may be. They showed by the analysis that the Indian rural branch expansion program significantly lowered rural poverty, and increased non-agricultural output.

The exposure of an Indian state to the rural branch expansion program was jointly determined by its initial financial development and the license regime shifts in 1977 and 1990. Between 1977 and 1990 initial financial development and rural branch. They examined the relationship between initial financial development and poverty outcomes. By regression analysis they showed that how poverty rose or fell in respect of financial development. Initially financial development was not helpful in poverty reduction.

Mohan, (2004) discussed the risky nature of Indian farming as there are a numbers of rivers for water supply to the agricultural fields even though Indian agriculture heavily depends on monsoons. Due to failure of monsoons the farmers used to face several difficulties like earning of their livings. So they had to move to the money lenders. The need of agriculture credit felt .In 1935 Reserve Bank of India was founded. In the survey of 1936 and 1937 RBI found that the source of credit was mainly moneylenders and cooperatives and other agencies had very little part to play. RBI realized its role and build a cooperative credit structure. It was the period of between 1960 to late 80s when things started to change as NABARD came into existence in 1982 and took over the entire undertaking of Agricultural Refinance and Development Corporation(ARDC). Narasimham committee provided blueprint for carrying out overall financial sector reforms during the 1990s. The financial sector reforms initiated in 1991 and included various measures in the area of agricultural credit such as deregulation of interest rates of co-operatives, and RRBs; deregulation of lending rates of commercial banks for loans above Rs. 2 lakh; recapitalisation of select RRBs; introduction of prudential accounting norms and provisioning requirements for all rural credit agencies; increased refinance support from RBI and capital contribution to NABARD; constitution of the Rural Infrastructure
Development Fund (RIDF) in NABARD for infrastructure projects; introduction of Kissan Credit Card (KCC) and stipulation of interest rate not exceeding 9 per cent for crop loans up to Rs.50,000 extended by the public sector banks.

Based on the above assessment he concluded overall institutional credit over the years has been increased. Still efforts are to be made to decrease the gap in the system like inadequate provision of credit to small farmers.

2.3 Studies Based On The Performance Of Agriculture Due To Credit

Rimal, (2014) discussed the performance of the agriculture sector by describing the agriculture credit is one of the performance indicator. He analysed the performance of the commercial banks in agriculture production in Nepal using data of Cobb Douglas Production Function (2002-2012) obtained from various issues of Economic Survey, Banking and Financial Statistics, Ministry of Finance and Statistical Information on Nepalese Agriculture, Ministry of Agricultural Development, Government of Nepal. The estimated Cobb-Douglas Production Function showed that agricultural credit flow of commercial banks during the study period was positively and significantly impacting the agricultural gross domestic production of Nepal. Agriculture Credit of commercial banks declined in 2009. The share of commercial banks to agriculture gross domestic product has increased through the study period except the year 2009. The increased amount of fertilizers and improved seed hardly have any effect on agriculture production. He recommended that the financial services system focused on urban-area most extend and deepen their services in providing agricultural credit in time and facilitate the agricultural production system of the rural areas of the country.

Lad, (2013) He studied the agriculture credit delivery, basic needs of agriculture financed examined the role of NABARD in agriculture development. He categorized the need of finance in two groups: one is productive need and other one in unproductive need. Under first category purchase of fertilizers, growth of land and credit expenditure on irrigation tools comes while in second category celebration of birth and marriages comes which cannot be said as perfect use of agriculture credit. Coming to the commercial banks, initially these banks were not interested giving finance to agriculture rather indulged in profit making by giving loans to trade and industry. After 1960, the scenario has been changed and commercial banks started to
provide direct and indirect loans. Direct finance is given for agriculture activities on short and long term basis while indirect finance is delivered for distribution of fertilizers and other inputs. The commercial banks have implemented “Village Adoption Scheme” by 1987-88 the commercial banks had given Rs. 3930 crore in advances. Commercial bank lent 4,806 crore to agricultural finance in 1991-92 and in Rs, 68,557 crore in 2005-06. He also discussed the role of Land Development Banks (LDBs) and Regional Rural Banks (RRBs). Because of RBI’s interest to create a new department for agriculture credit ARDC (Agriculture Refinance Development Corporation) came into existence. After that NABARD was set up to deliver agriculture finance, to provide refinance facilities to all banks for landing loans to agriculture activities. Now NABARAD along with many co-operative banks, commercial banks is working efficiency and effectively towards financial problem.

Shukla, Tewari and Dubey, (2012) Studied about the production technologies required for the betterment of agricultural production. Since agriculture is not only being the domestic product and fulfilling the national demand but also is playing a key role in foreign exchange generation. Therefore need for the investment in agriculture sect was felt. They covered the credit flow from cooperatives, scheduled commercial banks and regional rural banks which are the pillars of institutional credit system. They analysed that cooperatives dominated the scene in agricultural credit flow till 1995-96 despite its share in credit supply declining from 61.8 per cent in 1992-93 to 47.6 per cent in 1995-96. Commercial bank credit over-took cooperatives in1996-97 with its share in total agricultural credit consistently increasing from 48.4 per cent in 1996-97 to 69.5 per cent in 2005-06. Share of regional rural banks (RRBs) in total agricultural credit also increased consistently from 5.48 per cent in 1992-93 to 8.43 per cent in 2005-06. The total agricultural credit flow from all institutional agencies shot up to Rs. 180486 crores in the 2005-06 from Rs 15169 crores in 1992-93 after economic liberalisation policy launched in 1991-92. Studied that short term credit provided by the cooperatives and commercial banks continued to grow but still a lot to be done to improve agriculture productivity.

Shabbir, (2013) He studied in his paper mainly the breakup of Priority Sector Advances to Sub-sectors within the overall Priority Sector advances (PSA) After nationalisation of the Banks directed lending to certain sectors, such as, Agriculture,
Small Scale Industries and weaker section and others. Did the comparative study of agriculture sector and small scale industries by SCBs and PSBs from 1969 to 2011 with the objective of upliftment of these sectors and analysed the degree of credit delivery and fulfilment of the targets in the agriculture sectors. Conducted the study by assuming the hypothesis whether banks are eager to provide credit to the priority sectors and banks are interested in giving loans by direct or indirect means. And found that share of agriculture credit has been increased in the total credit provided by the banks which means now the banks are willing to deliver credit to the priority sectors and amount of direct credit has been decreased between the period of 1999 to 2007. The growth rate of lending to small Scale industries by public sector banks was higher before nationalisation but later the growth was modest. As compared to SCBs as a whole, the share of PSBs in credit to SSI has been higher. This implies that non-public sector Scheduled Commercial banks have been giving a lesser percentage of credit to SSI. The growth rate of lending to SSI continuously increased from 2004 to 2007, and out of that the highest growth rate was in 2007 i.e. 25 per cent. Several favourable policy initiatives undertaken by the central Government and the Reserve Bank including, inter alia, the policy package for stepping up of credit to Small and medium enterprises (SMEs) announced on August 10, 2005, have had a positive impact, that is why growth rate of lending to SSI was highest in 2006 and 2007.

Chilumuri, (2013) Studied about the impact of globalization on Indian Banking Sector as globalization helps to break the international barriers to integrate the national economies, trade of goods, flow of finance and corporate investments. Indian Banking system has shown significant growth as it provides many services like Mobile Banking, SMS Banking, Net Banking and ATM services to its clients. Studied about the effect of globalization on scheduled commercial banks with special reference to agriculture sector. It was found that the assets and liabilities growth from 1991-92 to 2001-02 was 349.60% and from 2001-02 to 2010-11 it was 367.82%. The impact of globalization on SCBs total growth rate of assets and liabilities was positive. The deposits growth from 1991-92 to 2001-02 was 353.06% and from 2001-02 to 2010-11 was 366.698%. The loans and advances growth from 1991-92 to 2001-02 was 304.07% and from 2001-02 to 2010-11 was 565.70%. In the total SCBs advances the public sector banks advances were 80.95% in 1996-97 and 76.77% in
2010-11, the remaining share was of private sector and foreign banks advances. The non-performing assets value has reduce in public sector banks and NPAs were increased in new private sector banks. It is found that the branches growth from 1982 to 92 was 54.60%; from 1992 to 2002 it was 9.28% and from 2002-12 it was 46.72%. The public sector banks share in total SCBs branches was 83.05% and private & foreign banks branches share was 16.95%. The majority of public sector banks branches were located in rural and semi-urban areas, and the majority of private and foreign banks branches were in semi-urban, metro and urban areas. He suggested that the private and foreign banks should concentrate on establishing branches in rural areas so as to stimulate savings and services. He also found that the total public sector ATMs share was 60.82% and the private and foreign banks ATMs share was 39.18%. The number of accounts of SCBs in rural area in 2011 were 2,50,253 with Rs.4932 billion deposits and 1,79,795 accounts in metropolitan area with Rs.30689.41 billion deposits. It is suggested that the SCBs should take steps to increase the deposits from rural areas. The growth rate in the total direct and indirect SCBs advances to agriculture from 1981-82 to 1991-92 was 256% from 91-92 to 2001-02 growth rate was 244.23% and from 2001-02 to 2010-11 was 682.45%. It is suggested that to direct a large volume of bank credit flow to agriculture sector was necessary to make it more effective instrument of economic development through SCBs. The comparative analysis of growth pattern of key parameters assets, deposits, advances and branches etc., reveals that the "globalization" had a positive impact on the growth of banking sector. The result projected that globalization is almost a complete success on growth front. To conclude that the recent trend of growth of banking sector showed the trust of Indian economy on globalization and liberalization. This has rendered a positive impact on the growth of Indian banking sector. All indicators shows the positive impact, in each case the average growth rate is high in post-globalization period than in pre-globalization period.

Ananth and Krishnakumar, (2010) Emphasised on Business correspondent (BC) and Business Facilitator (BF) which RBI introduced in 2006. Gave some steps for effective BCs/BFs model. There should be at least one BC for each block in which the bank has a branch; ensuring there is at least one Business Correspondent counter in each significant village or gram panchayat location. Each BC location will need to be equipped with a Point of Transaction (POT) that has a biometric reader. The banks
may sanction short term loans to the BCs to meet the operation cost at Point of Transaction. The Banks can implement a small charge on the customers for giving the service of BC. The Banks will have to take the services of high technology provider’s companies. When satisfied by the work of BC the Banks may give him the higher responsibility of providing long term loans. The Bank would then need to sanction an additional line of credit at a sustainable rate, say 10%, for the BC to originate loans on its own books. Banks should also encourage Business Correspondents to expand the business from domestic level to the international level. As a result it would be a profitable business for both the banks and the BCs appointed. It would not only be viable, but would also help generate a portfolio of assets that could be used as priority sector assets.

Cole, (2008) Quoted that government owned banks in India are bound to perform according to the political party’s will to give them electoral advantage. Analysed the credit distribution of banks before and after elections as elections are held every 5 years according to our constitution. Concluded that credit was delivered in elections year was more than that of off election season and especially in the cities area credit was released more in compared to rural area as margin of victory was very less in cities. Found that government owned banks leads to lower credit rate and low quality financial intermediation. He took a sample of 412 districts over eight years, with 32 elections, allows district fixed-effects and observed decisions made by over 45,000 public sector banks, disbursing millions of loans. Credit varies continuously, adjusts quickly, and repayment rates are observable. Described that sometimes in the view of coming elections politicians are bound to work in public’s interest. While doing the evaluation some limitation of data were also there as he took only 8 years as a time period of the study which is very less as far as estimation of elections is considered. One very important outcome came out that politicians do not hesitate in manipulating the resources to achieve their electoral benefits. Another important outcome was that ownership by the government does a negative impact on the overall economic development because cost of misuse of credit is so high that it is nearly impossible to have good output. Politicians appear to care more about winning re-election than rewarding their supporters, and they do so by targeting “swing”districts.
Golait, (2007) expressed dissatisfaction over the profit seeking activities of commercial banks whereby they were found to be largely extending credit to finance contract farming, value chains, traders and other intermediaries. It implies that most of the commercial banks are looking at low risk options in financing agricultural credit in order to fulfill government norms. Subsequently, a large chunk of small and marginal farmers get devoid of much needed credit. Golait (2007) called for bringing changes in institutional systems and products such as future markets and weather insurance to minimize the risk of lending of commercial banks.

EPW Research Foundation came up with a research report in 2007-08 on changing profile and regional imbalances in agricultural credit in India. The report made a systematic analysis of the evolution, trends and composition of institutional credit extended to the agricultural sector in India and the nature of inter-regional, inter-state and intra-state disparities prevailing in the distribution of farm credit. It reported that the agricultural sector in India is facing multiple challenges. These challenges are primarily due to an agrarian crisis and an agricultural developmental crisis. The agricultural sector is marked by not only declining growth but also by increasing marginalization of poor farmers. The solution to these problems lies in revitalization of entire sector by diversification and expansion of agricultural activities into non-farm economic activities. More enduring measures are required to making agricultural financing a success. Some of the measures outlined in the report are:

(i) resurrection of rural financial architecture;
(ii) increase in rural branch banking and mobile banking;
(iii) creation of a rural cadre of bank officers with specialized qualifications combined with adequate compensation packages;
(iv) establishing linkages between cooperative societies and banking entities;
(v) ensuring close coordination between district planning authorities and banking institutions operating in the district;
(vi) considering micro-finance as an integral part of mainstream banking;
(vii) effectively implementing measures of ‘financial inclusion’;
(viii) prioritizing formulation of credit architecture for underdeveloped regions like central, eastern, and north-eastern regions;
(ix) systematically monitoring guidelines that are issued by RBI and the government; and
to streamline the database on agricultural credit.

Banerjee, Duflo, (2004) Basically studied the reforms of banks in India. Discussed that most of the banking business is regulated by State and nationalised banks. Even non-nationalised bank are bound to follow the regulations of RBI as to whom credit to deliver and what activities they are allowed to. They took the data from Reserve Bank of India and mainly calculated credit/deposit ratio of various public and private sector banks. Analysed the banking operation activities according to the location of the banking unit where it operates during the period 1985-2000 and specially the post period of 1991-92. Burgess and Pande studied the impact of this regulation over the period 1977-1990. They found that a 1 per cent increase in the number of rural banked locations, per capita, resulted in a .42 per cent decline in poverty, and a .34 per cent increase in total output. Cole did empirical study to show the impact of bank nationalization on rural bank growth. Discussed that during 1980-2000 the rate of opening branches of nationalised banks decreased. Having gone through many aspects of Indian banking system They found many problems with the Indian banking sector, ranging from under-lending to unsecured lending. The government has realized the need of doing something extra rather than depending upon only past trends. suggested that the privatization of banks will help to improve the condition as private sector banks grow faster. Giving credit to agricultural activities is now becoming priority for private sector banks too as public sector banks are expected to do the business. On the other hand there is also the risk of failure of private banks.

Ramachandran and Swaminathan (2001) discussed in his paper titled “Does Informal Credit Provide Security? Rural Banking Policy in India” about rural banking and credit policy and the effect of those policies on the credit of rural workers. They tried to examine, the major directions of rural banking and credit policy and indicators of performance of agriculture finance in India since 1969, the year in which 14 major commercial banks were nationalized. Also they attempted to describe and analyse features of indebtedness of rural households, particularly rural worker households, in a south Indian village during different periods of national banking policy. They evaluated the potential of a new policy alternative microcredit projects controlled by non-government organizations - as a solution for problems of rural indebtedness. He
stated Darling’s statement (1925), that “the Indian peasant is born in debt, lives in debt and dies in debt.” Which holds true even if in today’s scenario. They also discussed the concept of microcredit for the poor for income generation through their self employment. They summarized microcredit as very small loans, no collateral, borrowers from among the rural and urban poor, loans for income-generation through market-based self-employment, the formation of borrower groups, and privatization, generally through the mechanism of NGO control over disbursement and the determination of the terms and conditions attached to each loan. Their analysis tried to show that changes in national banking policy have had a rapid, drastic and potentially disastrous effect on the debt portfolios of landless labour households. Wherever due to lack of information through data available could not examine the distribution of credit in the village as a whole. The share of the formal sector in the principal borrowed by landless labour households increased from 17 per cent in the green revolution phase to 80 per cent in the IRDP phase and fell to 22 per cent in the liberalization phase. The share of production and business-related loans in the proximate purposes for which all loans were taken by landless labour households was 23.8 per cent in 1977, rose to 44.2 per cent in 1985 and fell sharply to 22.6 per cent in 1999. The 1999 survey showed new forms of informalization of the credit market, a proliferation of money lending as a whole-time or part-time occupation, and new trends in the personalization of individual loans.

Singh and Pundir, (2000) elaborated the importance of agriculture sector by stating over 25% of Countries GDP is contributed by this priority sector. It means people doing the agriculture jobs are so critical in the development of any country. Therefore no country can be successful if it ignores this sector. Country’s overall development is influenced by a multitude of factors such as natural resources, human resources, technology, and institutions and organisations including co-operatives. India is the largest network of co-operatives in the world as They occupy an important place in India’s rural economy in terms of their coverage of rural population and their share in the total supply of agricultural inputs including credit and contribute significantly to rural development. They distinguished co-operatives from other forms of organisations and highlights the important place they occupy in India’s rural economy. Exclaimed the contribution of cooperatives to rural development that is broadly defined as a set of desirable societal goals such as increase in real per capita
income, improved income distribution and equitable access to education, health care, and employment opportunities. Also identified and discussed some other issues in the management of co-operatives and outlines strategies for their resolution. Found that overwhelming importance in India's rural economy, most of the co-operatives suffer from a variety of internal and external problems. The author commented on the constraints which includes the lack of professionalism in management; an archaic co-operative law, excessive control and interference by government; lack of good elected leadership; small size of business and hence inability to attain financial viability; lack of performance-based reward systems; and internal work culture and environment not congenial to the growth and development of co-operatives as a business enterprise.

Swain, (2002) Investigated empirically the effect of good credit rationing in credit markets of Puri where customers are free to choose the formal or informal sector for credit. He also gave his views how the present situation can be improved. He used the assumption that formal sector provide credit at lower rates and the borrowers are also willing to take credit from formal sector. Since decades the informal sector has been playing dominant role in delivering the rural credit in India. According to the All-India Rural Investment Survey, in 1951-52, almost 83 per cent of the cash loans were provided by the professional moneylenders whereas the formal institutions provided only 8.7 per cent. The Government of India decided to actively intervene in the credit market with the commencement of the Integrated Scheme of Rural Credit (1951). The aim was to set about a systematic expansion of the institutional credit infrastructure, with the Reserve Bank of India (RBI). After the evolution of NABARD in 1982 many reforms were made to facilitate the rural credit and one of them was introduction of Rural Infrastructure Development Fund (RIDF)

Desai, (1989) Discussed about the role of institutions regarding financing agriculture and felt the need that these institutions should try to perform some new functions like better access to extension, inputs, and marketing services as a result of technological changes in the priority sector. It may be stated here that rural financial institutions (RFIs) can promote access to inputs, marketing, and processing services by serving the agricultural inputs sub-system (AIS) and the agricultural produce marketing and processing sub-system (AMPS) besides the agricultural production sub-system (APS). Such an access is indeed the rationale behind direct and indirect rural credit policies. I
his cross sectional study he found that the degree of agricultural progress is positively related with the share of agricultural inputs marketing sub-system (AIS) credit in total institutional credit, agricultural production sub-system (APS) credit for current production growth and stability (CPGS) in total cooperative credit. He concluded that degree of agricultural progress is negatively associated with the share of current production diversification and growth (CPDG) loans (for supplementary activities like dairy, poultry, sheep farming, and biogas) in APS credit. 2. Agricultural produce marketing and processing sub-system (AMPS) credit in total institutional credit. He had suggested that NABARD and RBI need to take action on a priority basis to forge effective and efficient backward and forward linkages of APS with AIS and AMPS by: altering the scope of direct as well as in direct rural credit and promoting more flexible refinance and/or temporary credit accommodation, especially for working capital credit for the three sub-systems.

Bhandari, (2009) Studied the relation between the banking services and poverty reduction in Indian states. As the facilities given by the banks increase, the number of people start to associate with the banks and result shows that it helps in poverty eradication. In his study he took the period from 1980 to 2007 and divided it into three sub groups 1980-90, 1991-99 and 2000-2007. The results showed that the time period of 1991-1999 was the worst in terms of opening accounts. In rural areas, high growth in bank accounts was accompanied by reduction in below poverty line population in Kerala, Gujarat, Rajasthan and Haryana.

2.4 Studies Based On Importance Of Microfinance

Patel, (2014) in an article posted on website India Micro Finance (www.indiamicrofinance.com) reported that the credit flow to agricultural sector in India, after reforms in financial sector in early nineties, has improved. This flow increased by around 243% in the tenth plan and 277% in the eleventh plan over the previous plans, respectively. Despite the increase in flow of credit towards agricultural sector, many pressing issues are still required to be addressed. These include, the unsatisfactory improvement in crop productivity and output; significant disparities in the flow of credit between states, cities, and villages; significant imbalances between short and long term credit; the imbalances between loans
disbursed for agriculture and allied activities; and the difficulties experienced by small farmers, landless labourers, people living in hilly areas, and tribal people in accessing institutional credit.

Kumar, (2012) Elaborated that in developing countries’ policies agricultural credit is considered important sector to develop the nation’s economy. Even though the impact of agriculture credit on the borrowers is very low as far as their economic condition is concerned. He used the data from the nation and applied matching techniques to evaluate this impact for a sample of farmer households, by matching on covariates that were measured before a proportion of these households availed of loans. He analysed that impact of agriculture credit on farmers’ income or wealth status was hard to estimate. It was also difficult to find a credible instrumental variable, because most variables that determine access and demand for credit in the rural Indian context were likely to influence agricultural productivity independently as well as through the link with credit.

Raghavan, (2009) in his paper titled “Micro-Credit and Empowerment: A Study of Kudumbashree Projects in Kerala, India” has tried to examine the socioeconomic impact of the Kudumbashree projects on the rural and urban poor in salvaging them from deprivation and creating gender equity. He concluded that Kudumbashree has become the lifeline to many of the poor women in the State of Kerala. It is a massive anti-poverty programme of the Government of Kerala aiming at eradicating poverty and salvage the destitute from the wretches of extreme deprivation. He pointed out that the formation of 1,65,840 NHGs of the women from 33,45,509 risk families, covering urban, rural and tribal areas of the State helps develop 2,42,489 poor women into vibrant micro-entrepreneurs. Because of this programme, the poor women of the State have become active participants in the planning and implementation process of various ant-poverty programmes. By participating in various incomes generating—cum-development activities, the morale and confidence of women became very high. Capacity of the poor women of the State in several areas has gone up considerably. There is also a marked improvement in the status of women in families and community.
Kumarmangalam and Vetrivel, (2010) Studied about the conceptual framework of microfinance in India. Lack of formal employment makes the poor to borrow from moneylenders at higher rates. Here microfinance come into play a very key role as it is only for the people who do not have sufficient funds to earn their living. The author has evaluated the success and failure of microfinance institutions across the world. Concluded that now poor are more eager to pay higher interest than commercial banks provide the access to credit. Group pressure motivate them to repay more willing and time to time .This indicates that banking on the rural people can be a profitable business too.

Shah et al. (2008): Done the case study in certain villages in Chitrak district of Pakistan and defined that finance was considered as the basic ingredient for each and every economic activity including agriculture where agriculture is the main source of any economy. Hence it is the main duty of the concerned government to give support this sector. So the state has to extend institutional credit to those who cannot afford to fully utilize the available technology. In their study the main source of institutional credit was Zari Taragiati Bank Ltd (ZTBL). The motive of their research was to study the impact of credit on farm productivity and income of the sample farmers in a backward District i.e. Chitrak, of Northern Pakistan. By socio-economic study of the farmers they declared that the farmers are bound to do some non-farm activities. Types of loans obtained by the farmers was basically for production and the farmers who were having large land holding used long term loan for development purpose. T-test was applied for calculating the impact of credit on cropping pattern and concluded that the area under crops showed the significant growth while the area under fruits and vegetable could not show the significant results.

Seibel, (2007) done the study on changing issues in agriculture, rural development and rural finance. He discussed about the issue how Microfinance could be linked to rural entrepreneurs through inclusive financial systems development. Drew conclusion that should provide incentive-driven schemes for upgrading institutions in terms of legal status, super-vision, and outreach. Should try to escape from temporary or a-hoc solutions with no chance of sustainability. Should initiate cooperation between research funding and development agencies.
Rajesh Chakrabarti, (2005) in his paper, “The Indian Microfinance Experience – Accomplishments and Challenges” pointed out that the biggest challenge in development is the simultaneous development of investment potential and improvement of skill levels of the borrowers. A glut of low skilled services is an unwelcome substitute for scarcity of credit. With the microcredit alleviates the credit availability problem, the need for micro-consulting, business planning and services like marketing, are being felt with greater acuteness. Microcredit cannot be expected to be a panacea to rural developmental problems. In some sense, its role is similar to that of credit in the general economy. It is a string that can hold back progress, but it is almost impossible to push on a string. Thus there is a very real need of investments that yield higher returns than the sustainable microcredit interest rates for the microcredit initiative to be truly successful.

Sriram, (2005) in his paper “Information Asymmetry and Trust: A Framework for Studying Microfinance in India” has attempt to examine the trajectory of institutional intermediation in the rural areas, particularly with the poor and how it has evolved over a period of time. He suggested that informal institutions and groups manage close-knit groups and communities much better than formal institutions. However, the opposite is quite true of formal institutions where memory is based on records and not on the basis of interpersonal transactions. Here, the institutions are capable of managing diversity. In fact, the strength of formal institutions is essentially because they are able to manage diversity and reduce the covariance risk. This also gives scope for rapid scalability and replicability. He concluded that as the institutions achieved certain scale, the political economy of the activity dictates that they go beyond interpersonal trust and move towards systems and procedures.

Puhazhendhi and Satyasai, (2000) carried out the impact study for NABARD on SHG-bank linkage programme in 2000. This study was carried out to evaluate the social and economic impact of SHG-Bank Linkage Programme on SHG members. The study was conducted for the country as a whole, covering socio-economic changes in the conditions of 560 SHG member households from 223 SHGs located in 11 states. Pre and post-group situations were compared to assess the impact of SHG on living standard of the members. Change in the various socio-economic parameters like borrowings, savings, assets, employment level, levels of income, consumption
pattern etc, communication skill, self confidence, behavioral changes, family violence etc were taken into consideration to find out the overall change in the socio-economic conditions of the SHG members. The results of the study suggest that out of the total sample, 84 per cent belonged to the economically weaker sections. With regard to meetings, about 65 per cent of the groups recorded more than 90 per cent of attendance during group meetings. As far as changes in socio-economic conditions are concerned the study found out that those people who come together to form SHGs end up better off in social and economic terms. There is a significant improvement in the asset position of the sample households, an average increase of about 72 per cent in the value of assets per household is recorded comparing the pre- and the post-SHG period. Around 59 per cent of the sample households registered an increase in the value of assets from pre- to post-SHG situation. In terms of average household savings, the study recorded more than threefold increase in the household savings. The average borrowing per household also nearly doubled from Rs. 4,282 during the pre-SHG situation to Rs. 8,341 in the post-SHG situation. There is also an increase of more than 17 per cent in the employment situation. The study further reported that the share of households within the SHGs living below the poverty line was reduced from about 42 per cent to about 22 per cent in the post-SHG situation. While looking into the social impact, the study reported that there is significant improvement in the self-confidence, further the study also acknowledge about better treatment within the family and a decline in family violence after joining the SHGs. Also there is improvement in decision-making abilities and communication skills of the SHG members after joining the SHG. The members were also very confident of confronting the various social evils and problems they faced in their everyday lives.

Mayer, (2001) in his study on “Micro Finance, Poverty Alleviation & Improving Food Security: Implication for India” has opined that micro finance did have been emerged as a special vehicle and it can contribute to poverty alleviation and food security. It does this through supplying loans, savings and other financial services that enhance investment, reduce the cost of self-insurance, and contribute to consumption smoothing. Further he suggested that India has expanded microfinance, but it has not yet developed a strong system capable of serving massive numbers of poor in a sustainable fashion. The researcher concluded that the policy of supporting SHG linkages with banks has merit in a country with a large bank network, but it should
not be the only model encouraged. That is why additional efforts are needed to create and nurture competitive MFIs willing to experiment with other models.

Quarte et al. (2012) Described about the agriculture position of African countries which is similar to our country and farmers there also having low income. Discussed about the Ghana where more than 70% of the population is living in rural areas and agriculture is the main source of living and agriculture contributes to country’s GDP significantly. They investigated how middlemen are important in agriculture financing because they make an effect on farmers’ actual margin. The analysis shows that farm gate prices are offered higher but farmers do not get the due margin because middlemen are there for their earnings. And suggested by the study that the state should use its regulatory powers to ensure that the agricultural sector does not suffer unduly from its privatization and liberalization policies. Farmers should also be educated on other forms or sources of credit and marketing channels. They can also form cooperatives to enhance their bargaining power and improve their chances of obtaining credit from formal institutions.

Salami and Arawomo, (2013) Elaborated that for any country to grow the agriculture sector should have the potential to feed the population, employment creation, bring foreign money to the country and provide raw materials to the industry. Their study was based on Africa and analysed that African countries have great agriculture land and have enough resources for agriculture production but still this continent is great importer of food. The main reason behind that is lack of credit and as a result no new technology is adopted and agriculture production remains low. The study examined the extent of agriculture credit and factors affecting the credit in Africa. The data collected was from 1990 to 2011 from 10 different countries of Africa. Found that in spite of low saving the saving rate does an impact on agriculture credit. They use the four governance variables- Corruption index, Rule of Law index, Regulatory quality index, and Government Effectiveness index and concluded that these variables have negative impact on agricultural credit in the continent. The interest rates charged by the commercial banks have negative impact on agriculture credit.

Dev, (2012), He determined that agriculture in India facing how many challenges and how it effects cultivation pattern, growth and participation in small holdings. He also
examined that what lesson did other countries take from India’s experience. He gave the reference of 11th five year plan and stated that the Government is the key to improve the productivity of agriculture by providing support to small and marginal farmers. He suggested the report of National Commission for Enterprises in the Unorganized Sector (NCEUS) can be believed that small and marginal farmers should need a training programme to build their capacities and they should focus on: (1) Special programmes for marginal and small farmers; (2) Emphasis on accelerated land and water management; (3) credit for marginal and small farmers; (4) Farmers' debt relief commission.

Vakulabharanam, (2005) has argued that the reduction of domestic support in terms of subsidy and credit on the one hand, and drastic price fall of agricultural commodities in the international market on the other hand, has led to distress in the farming class of the state.

Mishra, (2007) Reddy and Mishra, (2008) emphasise that crisis in agriculture was well underway by the 1980s and economic reforms in the 1990s have only deepened it. Decline in the supply of electricity to agriculture has been regarded as major cause of distress

Narayanamoorthy, (2007) argues that fall in wheat and rice production is not due to technology fatigue rather due to extensive mono crop cultivation and high use of fertilisers and faulty agricultural pricing. Lack of allocation of funds to irrigation development after liberalisation has also resulted in the stagnation of net area irrigated. This poor growth in surface irrigation has compelled farmers to rely heavily on groundwater irrigation. The increased dependence on groundwater irrigation increases the cost of cultivation and depletion of ground water resources and in addition to this credit unavailability for investment on inputs put farmer in further crisis.

Suri (2007) and Reddy, (2006), argue that agrarian distress is result of the liberalisation policies which prematurely pushed the Indian agriculture into the global markets without a level-playing field; heavy dependence on high-cost paid out inputs and the other factors such as changed cropping pattern from light crops to cash crops;
growing costs of cultivation; volatility of crop output; market vagaries; lack of remunerative prices; indebtedness; neglect of agriculture by the government; decline of public investment have contributed further to agrarian crisis. Same time, they points out that technological factors, ecological, socio cultural and policy related factors have contributed for the crisis.

**Sharma and Prasad, (1971)** They stated that the introduction of latest technology without credit facilities would not have significance influence on the income of the farmers. Agriculture credit has direct relationship with the income level farm productivity and agriculture development.

**Naryanan, (1987)** Studied most of villagers who took loan were small and marginal farmers and agricultural laborers. He further observed that due to inadequate credit given to them, there was no increment in the income of beneficiaries.

**Binswanger and Khandker, (1992)** 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 labour than in increasing crop output.

**Ranga Reddy, (2004)** Studied that the National Commission on Agriculture (1976) projected that the actual requirements of credit for agriculture would be Rs.9, 400 crore by 1985. But, the Planning Commission target for 1984-85 was Rs. 5415 crores, while actual disbursement of credit was Rs. 6167 crores in 1985-85. Although Planning Commission’s target figure for 1984-85 was surpassed by the actual disbursement, the National Commission’s projected figure was not achieved.

**Burgess and Pande, (2005)** found that a one per cent increase in the number of rural banked locations reduced rural poverty by roughly 0.4 per cent and increased total output by 0.30 per cent. 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 diversify action out of agriculture.

**NABARD, (1989)** conducted, “Studies on Self-Help Groups of the Rural Poor”, to understand the background of the emergence of self-help groups, their composition, methods of working and their linkages with the financial institutions, and to examine possibilities for development of linkages between the self-help groups, self help promotion institutions and the financial institutions for providing support to the self-help initiatives of rural development. The survey covered 46 SHGs spread over 11 States and associated with 20 SHPIs (self-help promotion institutions). The study concluded that sample SHGs were formed with an emphasis on self-help and with a view to promote objectives like freedom from exploitation, economic improvement, and raising resources for development. By and large, the sample SHGs were of 'target group' people consisting of small and marginal farmers, agricultural labourers, artisans, scheduled castes and scheduled tribes and women. Homogeneity in terms of caste, specific economic activity, etc., have played a role in organising the poor into SHGs, though in some cases groups comprising different castes or sub-castes were also formed. The SHGs involved mainly in savings and credit activities, have evolved a variety of instruments to promote thrift among their members. These groups were involved in generating a 'common fund' from out of small thrifts, promoted on a regular basis among the members by curtailing their unproductive expenditure. The study further pointed out that SHPIs have played a commendable role in organising the rural poor into self-help groups and thereafter promoting their proper functioning. The study suggested that the absence of a legal status of SHGs seems to be a major constraint in the development of linkages between the SHGs and banks and a more active involvement of government development agencies with the SHGs may lead to securing more recognition for the SHGs.

**Harper Malcolm, (1998)** from his study “Profit for the Poor: Cases in microfinance” concluded that microfinance is a business and microfinance programmes which aim to assist the poor must be designed and managed in a business like way and that microfinance institutions must be managed like any other business. He concluded that new approaches have only reached a small fraction of market: microfinance must be ‘massified’. He suggested that the eventual aim for microfinance should be, to
become as widely available as any other consumer product. Decisions about funding ownership and system should be made toward all this end. According to him what microfinance need is institutional flexibility, good management and open minds.

2.5 Studies Based On Problem Of Credit Delivery And Over Dues

Satyasai, (2008) He examined some constraints that strangle the credit delivery after seeing the importance of the agriculture credit and discussed the measures to solve the issue. The Government policy on agriculture credit has been mainly focussed on institutionalisation for providing cheaper credit to farmers due to which the share of moneylenders has been decreased over the years from 93 per cent in 1950 to 31 per cent in 1991. While there has been some constraints also like failure of multi-agency approach due its deficiency in design and architecture. A serious fault of the multi-agency approach was the ineffective cooperative system. Poor health, lack of adaptation to the needs, politicisation, loss of member orientation and credibility inter alia disoriented the system. They showed with the help of the table that cooperative system is incapacitated due to heavy losses which invariably increased over the past few years. Cooperatives are ailing in most of the districts and lost their eligibility for NABARD’s refinance. This impaired their ability to lend fresh loans and hence, their borrowers lose their freedom to choose the agency or product.

Suggested several measures to be taken to revitalise the system from time to time. Cooperatives are being given a package assistance for revival following the Vaidyanathan Committee Report. RRBs have been amalgamated and are being given capital to cleanse up their balance sheets. Commercial banks have been successfully involved in ‘Farm Credit Package’ for doubling the credit and other initiatives of Government of India. The SHG-bank linkage has been promoted on a large scale to supplement rural credit delivery. But, its high transaction costs make it a costly alternative, especially when the business is handled solely by NGOs/MFIs. A thorough overhauling of the rural credit system and its restructuring is the need of the hour. However, it cannot be effective if done alone in isolation without revitalising the Indian agriculture itself.

Golait, (2007) in the Reserve Bank of India’s Occasional Papers analyzed the current issues in agricultural credit in India. Golait (2007) reported that the credit delivery to
agriculture was inadequate due to the hesitant nature of banking system in providing credit to small and marginal farmers. There is a rise in the demand for agricultural credit due to gap in income realization and expenditure in agriculture, lumpiness of investment in fixed capital formation, and rise in capital needs due to technological innovations. The paper analyses the effect of efforts of government and RBI in increasing the credit flow to agriculture through commercial banks. The share of commercial banks in total agricultural credit increased from 33% in 1992-93 to around 68% in 2005-06. However, the growth of direct finance to agriculture and allied fields decline in 1990s (12 per cent) as compared to 1980s (14 per cent) and 1970s (16 per cent).

Satyasai, (2008) studied the structural constraints in the rural credit delivery system in India and suggested some corrective measures. He emphasized the importance of rural credit to agriculture and rural development along with discussing some structural constraints that hamper the credit delivery. In India the public policy on rural credit has been focused on institutionalization as a means of providing cheaper credit to farmers. This has resulted in decline in the share of moneylenders in rural credit from 93% in early 1950s to 31% in 1991. But by 2002, these moneylenders again emerged as an important source of rural credit with a share of 39% highlighting the ineffectiveness of institutionalization measures and deficiencies in their design and mechanism. The study reported that the cooperative banks are dealing with financial problems, the regional rural banks (RRBs) are in disarray and commercial banks have lost their interest in rural credit. These conditions have contributed to the ineffectiveness of the multiagency rural credit delivery system.

Atibudhi, (2007) compared the state credit scenario in the context of all India situations, and observed the regional disparity across the country in the disbursement of agricultural credit by the commercial banks. The southern region continued to account for bulk of the credit disbursement to agriculture, followed by the western, northern and central regions.

Ray, (2006) Bank reform and Financing the value chain in agriculture. The risk in financing agriculture can be estimated and subsequently mitigated, provided the banker projects the financial conditions of the farm sector. In this context the role of
policy makers is significant. Data on recent levels of farm income, asset quantities and prices of agricultural output are vital to building a suitable projection model. Development of such a database with a high level of speed and accuracy and accessibility of such a database to banker is essential for quantification of risk in agricultural finance. Agricultural capital markets should be widened and deepened with more opportunities to raise equity capital. An independent regulatory agency is to be constituted to supervise the agricultural credit. All institutions like co-operative banks, commercial banks, NABARD, should be brought under this agency. The RBI should concentrate more on regulation of money, debt and foreign market. Agricultural finance should be under separate regulation. The existing forward markets commission, which oversees the commodity exchange, should also be brought under the farm credit. Banks should understand that agriculture is a way of life for the farmers and is only subsequently transformed into a business. It can't simplistically be compared with exposures to industrial and other retail advances. There is, therefore, a need to look beyond mandatory targets, designing new strategies and leveraging existing infrastructure, quantification of credit risk and activating a package of financial services is essential for improving the farm credit system and increasing agricultural output.

Mohan, (2006) Agricultural credit in India-status, issues and future agenda. The flow of credit to the agricultural sector failed to exhibit any appreciable improvement due mainly to the fact that commercial banks were not tuned to the needs and requirements of small and marginal farmers; while co-operatives on the other hand lacked resources to meet the expected demand. The solution that was found, involved the establishment of a separate banking structure, capable of combining the local feel and the professionalism and large resource base of commercial banks. Following the recommendation of the working group on rural banks (Chairman M. Narasimham-RBI 1975) Regional Rural Banks were set up. By the end of 1977 there emerged three separate institutions for providing rural credit which is often described as the “multi agency approach”. Following the recommendations of the committee to review arrangements for Institutional Credit for Agriculture and Rural Development, the NABARD was set up in 1982 to provide credit for the promotion of, among other things, agriculture. NABARD took over the entire undertaking of the ARDC and the refinancing functions of the RBI in relation to state co-operatives and RRBs. Since its
inception, the NABARD has played a central role in providing financial assistance facilitating institutional development and encouraging promotional efforts in the area of agricultural credit. NABARD also administers the Rural Infrastructure Development Fund (RIDF) which was set up in 1995-96. The corpus of RIDF is contributed by scheduled commercial banks to the extent of their shortfall in agricultural lending under the priority sector targets.

Upadhyay, (2005) Banking reforms and Agricultural credit-Indian banks have been suffering from lower rate of returns through concessional interest rates and high defaults from farm credits. If interest income is at least equal to the cost of lending that would bring the break-even condition. If the break-even is not reached, then banks have to cross-subsidize the farmers. The more the default risk, the higher the quantum of cross-subsidy. According to an estimate, cross-subsidy to Indian agriculture by the commercial banks has been increasing. This was Rs.77crore in 1980-81, but it went up to Rs.967 crores in 2000. Banks had to cross-subsidise agricultural sector from the income generated by the other sector. This has also hampered the credit flow to the agriculture in recent years when banks are guided by the commercial principles, particularly after reforms process started.

The analysis demonstrates that the share of credit to agriculture in total cost bank credit has declined in recent years; particularly after economic reforms despite repeated concern expressed by the monetary authorities. There is a need to adopt a proper risk management system distinguishing clearly between risky borrowers. There is a need to focus on diversified activities such as storage, transportation, processing and marketing of agricultural products. The rural areas are undergoing a transformation process in respect of consumption and dietary habits from cereal to non-cereal products. The financial institutions should shed their conservative outlook and identify the emerging areas to address the needs of rural farmers through perspective analysis. Initiatives need to be taken in newer areas such as Aquaculture, Horticulture, Pisciculture, Dairying, Poultry, Food processing and other Agro-processing activities in rural areas. The conventional approach and credit delivery practices will not augment the net credit flow to agriculture nor will it bring any qualitative
Atteri et al. (2005) analyzed the indebtedness of Indian farmers in various regions of the country on the basis of four factors, namely, income sources, farm holding size and purpose-wise distribution of outstanding loan. They found that the source of income for more than 50% of the farmers in India is cultivation of field crop. Their study revealed that despite the fact that nearly 45% of the farmers engaged in agricultural activities are in debt, a very small number of farmers these loans for the purpose of pursing additional activities like plantations, and animal husbandry. The study has practical applications for commercial banks that are pondering over the issue of lending different sectors in agriculture. Taking clues from this study, the banks can formulate policies that are focused on granting credit to those sectors in agriculture that are preferred by farmers. Moreover, specific policies can even be made for sectors like animal husbandry, fishery, etc. such that farmers are able to generate additional income from these activities.

Kumar, (2005) observed constraints facing Indian agriculture and the path ahead in reorienting both agricultural policy and practise to the changing circumstances.

Singh et al. (2004) Mainly studied the problems of overdues and the inability of banks to recover the loans from the debtor. Also analysed the availability, utilization and repayment of crop loan in Rajpur district of Chattisgarh. Forty per cent of the non-defaulter group and 60 per cent of the defaulter group misutilized the crop loan was not up to the extent for production and repayment has been affected.

Vyas, (2004) described that the Indian agricultural situation and pointed out that policy interventions and institutional support to agriculture has been grossly inadequate in addressing agrarian distress.

Viramagami (2003) Suggested that the RBI should provide financial support to PACs. To avoid multiple financing, Co-ordination between financial institutions should maintained. Banks should maintain rules and regulations to face the recovery of credit.

Choudhary (2002) In his study to credit flow of agriculture feels that the recycling of funds is not possible on account of mounting of over dues. The recovery of loans requires a co-operative and collective responsibility of administrative machinery public and loaners. The repaying capacity of their loaners should be taken into
consideration and there should be constant water on end use of the credit by the supervisory staff of different institutions.

Karmakar, (1999), pointed about the various problems of rural credit delivery system in India. The major problem according to him is the repayment and recovery of the loans at the borrowers level and the consequent weakening of the entire institutional credit system. He pointed out that the causes on the internal front were defective loan policies and procedures, inadequate supervision and monitoring and unprofessional management. On the external front, the problems were occurrence of natural floods and droughts, absence of backward and forward linkages, defective legal framework, and lack of support from the government machinery in recoveries. Because of all this, he summarised that instead of mobilizing resources for rural development, the programme for rural development has actually been consuming scarce monetary resources and has not worked out to the advantage of the rural borrowers, the bank and the government.

Jugal (1997) Inferred that the term loan for agricultural purpose granted by zonal development Banks enable the borrowers to improve from mechanization by purchasing tractor, tillers and IP sets for minor irrigation the term loan also helped in increasing irrigation area by 22.40 per cent of land holding as well as cropping patterns and cropping intensity from one crop to two crops a year.

Veerashakarappa (1997) In his study on Institutional finance for rural development, concluded that 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 HYVs.

Johan, Swinnen and Hamish, (1997) studied the problems of financing agriculture in Central and Eastern European agriculture. They analysed the problems in the credit market for agriculture stem from both demand and supply forces from the survey conducted in 1993 & 1995 by Euroconsult in five CEE countries. According to them Credit and risk markets in the most well-developed market economies do not work as per the requirement due to which very important information does not reach to the beneficiaries. Production incorporates time lags inherent in biological processes, and
is subject to the random influence of weather, diseases and pests. Concluded in the study that credit markets do not work up to the mark whether in developing countries or developed countries. Banks do not prefer to lend agriculture loan as it is high risk taking and no profitability activity. Also suggested that if we really want to do for the future of agriculture credit it is that agricultural programs tend to create their own constituency and tend to persist long afterwards, because for political economy reasons they are very hard to remove once they have been implemented. This suggests that one can expect the Central and East European agricultural credit programs to remain. Agricultural programmes should mainly focus on finding the main cause of the credit problem rather than merely seeing the symptoms. After that Government Credit Programmes will have an effective affect to solve the agriculture credit problem.

2.6 Studies Based On Technology And Innovation For Agriculture Credit

Rao, (2014) also reported that the prudential measures taken by the government over the years has improved the performance of commercial banks. These measures have resulted in recovery of past dues of the banks. A number of factors have contributed towards the improvement in gross and net performing assets of commercial banks. These factors include moderate inflation expectations, decline in real interest rates, rising income of households and entry of new private banks. The decline in non-performing assets to advances is a proof of asset quality improvements of banks in India.

Patel, (2014) came up with various suggestions for improving the present conditions. Firstly, the government policy should focus on investing significantly in rural infrastructure to improve the energy, transport, communication, storage, processing and marketing facilities of farmers. Secondly, establishment of state-of-art Agrime technology centres in all agro-ecological regions would provide updates of weather to farmers. Thirdly, expansion of irrigation and reclamation of wasteland measures be adopted. Fourthly, the government should integrate agri-education and research activities. Finally, Patel (2014) suggested the development and use of genetically modified varieties of crops, micro-irrigation system, greenhouse
Satish, (2011) analysed the innovations in agricultural credit market in India. He cited many recent innovations taking place in financing agriculture in the developing world, and especially in India. To boost agricultural production, the Government of India announced a program to double the flow of institutional credit to agriculture starting from 2004-05. The program was aimed at expanding the Kisan Credit Cards, financing new investments, rescheduling and restructuring of loans in areas affected by natural calamities, one time settlement (OTS) for farmers in distress and redemption of loans from informal sources. Again in 2006-07, the Government of India announced the interest subvention and debt waiver scheme to help poor farmers in getting cheap finance from the banking system.

Satish, (2011) has enumerated many innovative schemes and measures taken by the National Bank for Agriculture and Rural Development (NABARD) in agriculture credit markets. These measures include:

(i) product innovations in the form of launch of Kisan Credit Card (KCC),
(ii) process innovations covering the Self-help Group (SHG) bank linkage programs and establishment of Joint Liability Groups,
(iii) institutional innovations by establishing ‘farmers’ club’ that would be made more effective through three policy measures, viz., (a) link them with technology transfer and market access; (b) ensure sustainability of the clubs over a period of 3 to 5 years and (c) convert them into Producers' Groups/Companies/Federation of Farmers' Clubs, and
(iv) Other innovations in the areas of inventory financing and warehousing, supply chain financing, and contract farming.

To improve the accessibility of credit to farmers, the Government of India has time and again initiated several measures to increase sources of institutional credit. These policies are aimed at providing timely and adequate credit support to all farmers with special focus on small and marginal farmers. Through institutional credit, the government intends to enable small farmers to adopt modern means of farming and to improve their agricultural practices to achieve higher productivity. According to a 2012 report by the Department of Agriculture and Cooperation under the Ministry of Agriculture, Government of India, the various government policy measures have
resulted in an increase in the share of institutional credit of the rural households. Table 2.1 shows the progress made in flow of agricultural credit in the last ten years:

Table 2.1:
Flow of Agricultural Credit in India
(Rs. In crores)

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>105000</td>
<td>125309</td>
</tr>
<tr>
<td>2005-06</td>
<td>141000</td>
<td>180486</td>
</tr>
<tr>
<td>2006-07</td>
<td>175000</td>
<td>229400</td>
</tr>
<tr>
<td>2007-08</td>
<td>225000</td>
<td>254658</td>
</tr>
<tr>
<td>2008-09</td>
<td>280000</td>
<td>287149</td>
</tr>
<tr>
<td>2009-10</td>
<td>325000</td>
<td>384514</td>
</tr>
<tr>
<td>2010-11</td>
<td>375000</td>
<td>468291</td>
</tr>
<tr>
<td>2011-12</td>
<td>475000</td>
<td>511029</td>
</tr>
<tr>
<td>2012-13</td>
<td>575000</td>
<td>308025*</td>
</tr>
<tr>
<td>2013-14</td>
<td>700000</td>
<td></td>
</tr>
</tbody>
</table>

* As on 31st October, 2012

technology, promotion of remote sensing technology, and expansion of farm mechanization programs.

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1 Source: Department of Agriculture and Cooperation report (2012)