"The Government should create, issue, and circulate all the currency and credits needed to satisfy the spending power of the Government and the buying power of consumers. By the adoption of these principles, the taxpayers will be saved immense sums of interest. Money will cease to be master and become the servant of humanity."

- Abraham Lincoln
This chapter starts with the background of the problem and reviews the various empirical literatures available on the subject of externalities and common property resources. The literature on the subject is very large and it has been delimited to review some important literature to trace the core issues. On the basis of the identified issues, objectives were drawn to prosecute a fresh study in the study region.

1.1. Introduction

The Government introduced the concept of “Social Control” in the field of banking industry to address the problems of rural finance in 1967. Initially social control was aimed at bringing some creditable changes in the management and the credit policy of the commercial banks. Experiencing the experiment inadequate, the Government came out with the nationalization of 14 major CBs in 1969 (followed by another six banks in 1980), with a view to serve better the needs of development of the economy, in conformity with national priorities and objectives. With effect from nationalization of the State Bank of India and its associate banks took up the lending to agriculture and priority sectors on a large scale. Several innovative experiments like Service Area Approach, Lead Bank Scheme etc., were also introduced mainly with a view to ensure the rural financing system grow in its strength. The Government of India has been taking a lot of initiative to understand the problems faced by the rural borrowers with a view to find effective solutions for the same. Under the 'Lead Bank Scheme' all districts were allotted to commercial banks that were entrusted with the responsibility of preparing credit plans for their respective districts. The 'Village Adoption Scheme' was formulated by commercial banks to carry out leading operations in contributing significantly to the development of agriculture.
1.2. Statement of the Problem

Many commercial banks have been lending indirect rather than direct finance to agriculture. Many private sector banks tend to invest the funds in RIDF of NABARD or SIDBI deposits in attaining the statutory norm of 40 per cent of net bank credit to the priority sector. The NABARD and SIDBI have come into existence as a result of governmental efforts to provide assistance for specific purposes, sectors and regions; their creation as a matter of policy has been motivated by philosophy that the credit needs of certain borrowers might not be otherwise adequately met by the usual private institutions. Really this indirect finance will, in fact, improve the infrastructure facilities in rural areas and create new services. But the poor farmers in general have no purchasing power to buy these services. It is more important to support the basic economic activity of the farmer. The risks farmer faces are much higher than those of other producers. In the absence of a appropriate and all-inclusive public policy, such risks pave the way for either lower productivity or mispricing of the output. Moreover schemes that tried to integrate the mechanism of insuring yields as well as market risks to protect the interests of the farmers remained in nascent stage.

1.3. Need for the study

Indian agricultural productivity suffers mainly because of the expensive credit, a distorted market, intermediaries (who increase cost rather than add value), controlled prices and poor infrastructure, farmer’s poor economic status and fragmented landholdings. The main reason for the decline in agriculture productivity is technology fatigue - less emphasis on efficient and sustainable use of soil, nutrients and water leading to a wane in the productivity.

The rural financing agencies Primary Agriculture Credit Societies (PACS), Co-operative Banks and Commercial Banks are not vertically integrated to complete extent at different phases in this regard. At present commercial banks are giving all types of loans for
agriculture just to reach the target. Commercial banks are not putting more efforts to ensure that all farm produce is subjected to primary and if possible secondary value addition locally. By traversing most of the previous studies the present study felt the research gap in this aspect and does stress the need for redefining the role of commercial banks in discharging the agricultural finance mechanism. There is a need to make banks more participative through policy implementation and create a conductive environment so that the agriculture sector can be cared for like any other sector.

1.4. Review of Literature

The literature on the subject of Agriculture Finance by Commercial Banks is multi dimensional and fairly large. Agriculture Finance sanctioning process needs attention of government with its policies and regulation norms via its various entities. So Agriculture Finance is linked with many internal and external parameters. A few seminal contributions on these parameters have been reviewed separately to identify the major trends and to venture into a new area of research.

(a) Agriculture Versus Rural Poverty

In the early seventies, the World Bank launched Integrated Rural Development (IRD) programs with a commitment to smallholder production and an overarching goal of reducing rural poverty. But, Binswanger (1988) points out that many of the IRD projects failed because they were introduced into an adverse macro-economic environment, and they suffered from a lack of government commitment, lack of profitable technology, neglect of service institutions, lack of beneficiary participation and an inability to solve complex coordination problems.¹

Suppressed rural poverty has been addressed by the Suresh Tendulkar Committee. It has taken more realistic assessment to unfold poverty by considering the parameters that include spending on food as well as education, health and clothing. This new assessment increased the rural poverty (27.2%) by 10 percent i.e., 37.2%. With the current assessment every fourth Indian is living below the poverty line.

Committee for the Estimation of BPL households in rural areas suggests an increase in the coverage of BPL families. This in turn implies automatic expansion in the coverage of the Public Distribution System (PDS) and other government schemes where beneficiaries are decided on BPL basis.\(^2\)

For extending Governmental assistance under anti-poverty programmes, the yardstick followed is the poverty line which is expressed in the form of total household income. This can capture persons suffering from only core poverty (persons who did not satisfy both Monthly Per Capita Consumer Expenditure (MPCE) and calorie criteria) and tertiary poverty (persons who satisfied the calorie criterion but not the expenditure criterion) but not the persons suffering from secondary poverty (only expenditure criterion is met but not the calorie criterion). In view of this, while identifying the (households) persons below poverty line besides using the usual yardstick, the secondary poverty striken people must also be brought under the fold of poverty group.\(^3\)

(b) Land related issues

Banks hesitate to finance tenant farmers/oral lessees as they do not have documentary proof of their right to till the land for raising crops or for investment purposes. Recording of tenancy and ownership rights on land is an important measure to enable access to credit. Certificates by revenue officers or a system of land cultivation certificate by the Village


Panchayats or local bodies may be made acceptable as documentary proof for cultivating the land. The Government defined the objectives of the land reforms – To remove impediments to increase in agricultural production as arise from the agrarian structure inherited from the past; and to eliminate all forms of exploitation and social injustice within the agrarian system, to provide security for the tiller of soil and assure equality of status and opportunity to all sections of the rural population.

Land Revenue Act of 1999 [in particular Section 98(1), 105(1) and (2E)] makes it the responsibility of the state government to enter the name or names of the actual cultivators in the Record of Rights. Land Rents are in direct contravention of the AP (Andhra area) Tenancy Act of 1956 and its 1974 amendment (Act 39 of 1974) under which land rents are controlled. In actual practice tenants are currently paying more than 3 or 4 times the rents stipulated in this Act.

Consolidation of Holdings is designed to solve the problem of fragmentation of holdings. The method adopted is to grant one consolidated holding to the farmer equal to the total of the land in different scattered plots under his position. But the relationship of share-cropping tenancy subsisted in respect of a specific plot of land easily identified in the field. Once consolidation was effected, the identity of the particular plot that the share-cropper had been cultivating was lost and he could be automatically ousted from the land. Thus, the consolidation of holdings has often turned out to be the coup de grace for the share-cropper.

The crisis in agricultural sector has deepened during the period 1991-2004. The causes responsible for this grave situation are multiple and multifarious having many

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elements multiplied in several directions with varied intensity. The policies adopted and lopsided administrative measures taken by the government are mainly responsible for crisis in agriculture which has led to farmers' suicides. This period is marked by the implementation of the economic reforms and provisions of World Trade Organization, which had negative impact on agriculture. The tenant farmers are the worst affected by the policies of the state government. Tenant farming is on the increase in the state. Tenant farmers have to pay heavy rents to the landlords. The rents are much higher than the rates fixed by the government. Secondly, institutional finance is not extended to the tenant farmers. Thirdly no subsidy benefits are given to tenant farmers in the purchase of seed etc. Tenant farming has become not only risky but also highly un-remunerative.

(c) Developing Countries and Agreement on Agriculture

Support under Green Box is regarded as non-trade distorting and hence not subject to reduction commitments. The developed countries have used this arrangement to their maximum advantage. This would be clear from the fact that highest Green Box support to agriculture is provided by the USA which spends more than one third of its GDP from agriculture on this support, Japan uses one-fourth of its GDP from agriculture towards Green Box provisions while such support in Canada and European countries around 13 percent of GDP from agriculture. As against this, India provided Green Box support of only 2.34 percent of its GDP from agriculture in 1995.

As correctly pointed out by Ramesh Chand and Linu Mathew Phillip, this argument not only runs counter to distortion free trade but also ignores the variations capacity and

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structural composition of the economies of developed and developing countries. Since, agriculture constitute a very small part of the developed countries (between 2-4 percent), these countries can provide high level of subsidy. In fact, to subsidies agriculture to the extent of 50 per cent, developed countries have to spend only 1-2 per cent of their total GDP. As against this, developing countries would require about 14 per cent of their total GDP to match the support given by developed countries. This shows that it is not possible for developing countries to offset the disadvantage to their agriculture, due to high level of subsidies provided by developed countries, by raising the level of support.\(^\text{10}\)

A study by Sophia Murphy, Ben Lilliston and Mary Bethale (2005) showed that in 2003, developed countries exported wheat at an average price of 28 per cent below cost of production, soybeans and corn at an average price of 10 per cent below cost of production, rice at an average price of 26 per cent below cost of production and cotton at an average price of 47 per cent below cost of production.\(^\text{11}\)

(d) Globalization and Priority Issues for Indian Agriculture

V.S.Vyas points out “Advocacy of unrestricted exposure to international markets ignores the fact of the dependence of a large majority of rural producers on food grains production as their main source of livelihood; it overestimates the resilience of the system to compensate these producers form heavy and sudden dislocations”.\(^\text{12}\) Deepak Nayyar and Abhijit Sen have shown that World market prices are liable to more year-to-year fluctuations than domestic prices.\(^\text{13}\) Therefore dismantling of trade barriers is likely to increase volatility


of domestic prices and farm income. Accordingly, adequate steps must be taken to protect farm incomes.\textsuperscript{14}

Rao and Jeromi point to the possibility that Globalization may adversely affect certain areas, some crops and some groups of people. This is due to the reason that the benefits from globalization will largely accrue to some areas which are well endowed in terms of resources, some crops which have comparative advantage, and some sections of the population that are engaged in producing the export commodities.\textsuperscript{15} As pointed out by Anitha Ramanna, national and international laws need to be formulated to ensure adequate access to agricultural resources, and not aimed only at establishing ownership rights.\textsuperscript{16} Public investment in agriculture has been declining for quite some years. In the context of international trade there is an added urgency to reverse this trend and increase investment in research, integrated market development, storage and warehousing facilities, road development etc. Public expenditure on research and technology, infrastructure creation and rural development will raise our AMS without attracting reduction commitments.\textsuperscript{17}

(e) Thrust Areas in Agriculture

To get a deeper insight into the subject review of literature has been classified into the thrust areas. Each thrust area is addressed with prominent reviews for better understanding of the research problem.

(I) Agriculture Growth and GDP are highly Correlated

On the basis of their detailed study of Indian agriculture, Archana S.Mathur, Surajit Das and Subbalakshmi Sircar have pointed out that given other factors, a consistent increase

\textsuperscript{17} R.Thamarajakshi, \textit{op.cit.}, p. 27.
in public investment to 15 per cent per annum should lead to agricultural growth of 4 per cent, which is concomitant with the projected growth rate in the Eleventh Five Year Plan. The focus of enhanced government expenditure should particularly be on investment in rural infrastructure comprising irrigation and water management, processing, storage and marketing, apart from timely supplies of improved inputs, credit, and research and extension services. The other factors that are important for a higher agricultural growth are fertilizer usage and agricultural prices.18

According to economic survey, 2006-07, the reasons for the lackluster agricultural growth during the new millennium are the structural weaknesses of the agricultural sector reflected in low level of public investment, exhaustion of the yield potential of new high yielding varieties of wheat and rice, unbalanced fertilizer use, low seeds replacement rate, an inadequate incentive system and post harvest value addition.19

For growth to be at all inclusive, the agricultural strategy must focus on the 85% of farmers who are small and marginal, increasingly female, and who find it difficult to access inputs, credit, and extension or to market their output. While some of these farmers may ultimately exit from farming, the overwhelming majority will continue to remain in the sector and the objective of inclusiveness requires that their needs are attended to. Besides issues such as rights to land (especially for women), it is now well recognized that the poor are best empowered if they function as a group rather than as individuals.20

Productivity of wheat in India is about 35 per cent of the productivity in France. It is 66 per cent (i.e., less than two-thirds) of the productivity in comparison to another

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underdeveloped country, China. As far as rice is concerned, productivity in India is 46 per cent of the productivity in China and Japan (i.e., less than half). The productivity of cotton in India is one-third of the productivity in China. Even in comparison to Pakistan, productivity of cotton in India is just 61 per cent. As far as groundnut is concerned, productivity in India is 34 per cent of the productivity in USA, 40 per cent of the productivity in China and 51 per cent of the productivity in Argentina. Similar conclusions hold for most of the other crops. The low levels of productivity in Indian agriculture point to the possibilities of increasing productivity by adopting appropriate strategies and policies. While India compares favorably in terms of total output, it compares poorly in terms of yield per hectare. India has 60 million hectares of land under irrigation compared with just 47 million in China, but its food grain production is barely 40 per cent of China’s output.21

(II) Financial Literacy

Financial literacy or financial education can broadly be defined as 'providing familiarity with and understanding of financial market products, especially rewards and risks, in order making informed choices. Viewed from this standpoint, financial education primarily relates to personal finance to enable individuals to take effective action to improve overall well-being and avoid distress in matters that are financial.22

Credit Counseling can be defined as 'counseling that explores the possibility of repaying debts outside bankruptcy and educates the debtor about credit, budgeting, and financial management.23

22 'The Role of Financial Education: The Indian Case' - Inaugural Address by Dr. Y. V. Reddy, Governor, RBI at the International Conference on Financial Education organised by OECD and co-hosted by Pension Fund Regulatory and Development Authority at New Delhi on September 21, 2006.
(III) Agricultural Finance

Making his observations on the RBI’s role in agricultural finance B.Rama Rao, a former Governor of the RBI, has stated: "The RBI could not have justified its existence in India if it is confined its activities to the industrial sector and completely ignored agricultural sector, on the prosperity of which industrial development to a large extent depended."

The provision of credit and savings schemes, however, is only part of the required financial structure for development to occur. The development of financial intermediaries (which transfer capital from traditional sectors of the economy to growth-oriented sectors) is an integral part of any viable national financial system. A re-focusing on the institutional requirements of financial systems in the 1980s and 1990s raises the issue of how to integrate informal and formal financial systems and thus develop effective financial intermediaries. The most important economic function of a banking system is financial intermediation between savers and borrowers.

Risk Management arrangements, measures to improve profitability of agriculture and effective extension services would improve the confidence of banks in financing SMFs and reduce their dependence for credit from informal sources.

SHGs for marginal farmers could be formed exclusively so that they would be able to come together according to their convenience. Special loan packages can be offered to them during particular season to have more investment in the productive and timely agriculture activities.

The tackling of farmers' problems thus becomes key factor in rebuilding new India. In order to provide human face to the liberalized economy agricultural credit reforms are urgently needed to bridge the gap between agriculture and other sectors. A drawn of new awakening through policy and practice can usher a new age of happiness of the millions of distressed families of farmers tomorrow.28

The root of the problem is that lenders tend to offer only a limited menu of products, mainly with heavy collateral requirements. Wealthier farmers can obtain larger loans at lower cost from formal lenders because they can credibly pledge assets or future cash flows. Asset-poor households, by contrast, are limited to considerably smaller loans at much higher rates because they have to turn to lenders who must substitute costly monitoring for collateral. Poor farmers may also turn down loans, even if they qualify, because they are unwilling to bear the risk of losing collateral, term “risk rationing.”29

The APCOB and affiliate credit structure in Andhra Pradesh showcase a unique experiment of Single Window Credit Delivery System, as a first of its kind in the country under which, both investment and production credit for agriculture is provided at the grass root level through a single agency. The PACS at village level has been modeled as a one stop shop for the farmer for availing of varied short, medium and long term loans both under production and investment credit, input requirements, produce storage facilities, essential commodities, banking and other rural based services.30

The NCF considers:"Credit is the primary pathway to enhancing small farm productivity and ending farmer suicides".31

30 http://apcob.org/About_Us.aspx
In her broadcast address of July 1, 1969, on bank nationalization, Prime Minister Mrs. Indira Gandhi stated that nationalization was meant for an early realization of the objectives of social control which were spelt out as, (i) removal of control by a few, (ii) provision of adequate credit for agriculture and small industry and export, (iii) giving a professional bent to management, (iv) encouragement of a new class of entrepreneurs, and (v) the provision of adequate training as well as terms of service for bank staff.32

"...We need more thinking on the credit front. While the financial system should do more for the credit needs of farmers, we need to raise some questions. What do farmers need – a lower rate of interest or reliable access to credit at reasonable rates? Is our existing institutional framework adequate for meeting the requirements of our farmers? Do we need to create new institutional structures such as SHGs, micro finance institutions, etc, to provide improved and reliable access to credit? Or do we need to bring in Moneylenders under some form of regulation? It is necessary that we find answers to these questions in the near future."

- Hon'ble Prime Minister of India, Dr. Manmohan Singh (in his address at the 2nd Agricultural Summit, October 18, 2006)

(IV) Agricultural Insurance

The major role played by insurance programmes is the indemnification of risk-averse individuals who might be adversely affected by natural probabilistic phenomenon. The philosophy of insurance market is based on large numbers where the incidence of risk is distributed over individual. Insurance, by offering the possibility of shifting risks, enables individuals to engage in risky activities which they would not undertake otherwise (Ahsan et al., 1982).33 A properly designed and implemented crop insurance programme will protect

the numerous vulnerable small and marginal farmers from hardship, bring in stability in the farm incomes and increase the farm production (Bhende 2002).34

The farmer is likely to allocate resources in profit maximizing way if he is sure that he will be compensated when his income is catastrophically low for reasons beyond his control. A farmer may grow more profitable crops even though they are risky. Similarly, farmer may adopt improved but uncertain technology when he is assured of compensation in case of failure (Hazell 1992). This will increase value added from agriculture, and income of the farm family.35

Bhende (2005) found that income of the farm households from semi-arid tropics engaged predominantly in rain-fed farming was positively associated with the level of risk. Hence, the availability of formal instrument for diffusion of risk like crop insurance will facilitate farmers to adopt risky but remunerative technology and farm activities, resulting in increased income.36

The frequency and severity of risks in agriculture particularly in last few decades have increased on account of climate variability. The principal evidence of climatic change has been rising temperatures, erratic rainfall pattern, and increase in the severity of droughts, floods, and cyclones which have caused huge losses in agricultural production and the livestock population. India has developed response mechanisms for primary (crop failures) and to some extent secondary (livestock deaths) consequences of climate variability. However, a tertiary mechanism which goes beyond resource transfer to resource assessment and management, through climate forecasting, climate information generation and


dissemination, early warning system, mapping of agricultural losses through remote sensing technology, and a pre- and post climate change response need to be put in place on a decentralized basis.\textsuperscript{37}

The agricultural sector is exposed to a variety of risks which occur with high frequency. These include climate and weather risks, natural catastrophes pest and diseases, which cause highly variable production outcomes. Production risks are exacerbated by price risks, credit risks, technological risks and institutional risks. Risk management in agriculture ranges from informal mechanism like avoidance of highly risky crops, diversification across crops and across income sources to formal mechanisms like agriculture insurance, minimum support price system and futures markets.\textsuperscript{38}

Micro Insurance is not considered a separate type of insurance and just viewed as insurance available in small sums i.e. insurance with small benefits or insurance involving low levels of premium or insurance for persons working in the informal economy.\textsuperscript{39}

An analysis of data from US agriculture indicates that the producer’s first response to risk is to restrict the use of debt. Price support programmes and crop insurance are substitutes in reducing producer risk. The availability of crop insurance in a setting with price supports allows producers to service higher levels of debt with no increase in risk (Atwood et al., 1996).\textsuperscript{40}


\textsuperscript{38} Government of India, Planning Commission,\textit{ Working Group on Risk Management in Agriculture for the Eleventh Five Year Plan 2007-12, }p.ii.


(V) Agricultural Marketing

A study by D.S. Sidhu revealed that farmers obtained only about 53 per cent of the price of rice, 31 per cent being the share of middlemen (the remaining 16 per cent being the marketing cost). In the case of vegetables and fruits, the share of farmers was even less—39 per cent in case of the former and 34 per cent in case of the latter. The share of middlemen in the case of vegetables was 29.5 per cent and in the case of fruits it was 46.5 per cent.41

Eleventh Five Year Plan proposes to address the following issues related to agricultural marketing—marketing system improvement and conductive policy environment; strengthening of marketing infrastructure and investment needs; improving market information system with the use of Information and Communication Technology (ICT); human resource development for agricultural marketing; and promoting exports/external trade.42

"Market reforms should begin with production planning, so that every link in the cultivation-consumption-commerce chain receives adequate and timely attention." The NCF Concludes: We should not remain silent spectators to agriculture decay. Both food and human security and national sovereignty are at stake. Overall economic growth rates have little meaning if we do not look after the economic health and survival of over 60 per cent of our population."43 A cool chain is regarded as a series of storage facilities, providing ideal conditions for preserving perishable agro-commodities from their point of origin to the point of consumption. It consists of pre-cooling unit, refrigerated transport, cold storage and

41 Quoted in A.S. Kahlon and M.V. George, Agricultural and Price Policies, (New Delhi, 1985), Table 4.1. p.39.
refrigerated retail shops. Many reports pointed out "one-third of our horticulture produce especially fruits and vegetable are wasted mainly on account of poor cold storage and other storage facilities".

(VI) Financial Inclusion

MFIs often target rural areas, where social capital is stronger. But, it works less well for crop activities, where all producers are subject to a common set of weather risks (when one cannot pay, often no one can pay) and where project gestation periods are long and share the same timing. Weather risk also undermines the financial stability of local MFIs, and most explicitly limits their share of lending to agriculture to reduce exposure to risk. Moreover, many microfinance organizations have targeting criteria for maximum landholding that restrict their lending to agricultural activities. To meet the underserved agricultural market, MFIs have begun to innovate.

According to a recent study, the dependence on non-institutional agencies is high amongst low landholding classes; it is as high as 47 to 77 per cent amongst farmers owing below one hectare of land and 42 per cent for the 1 to 2 hectare category.

"Financial inclusion, thus, has become an issue of worldwide concern, relevant equally in economies of the under-developed, developing and developed nations. Building an inclusive financial sector has gained growing global recognition bringing to the fore the need for development strategies that touch all lives, instead of a select few."

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47 The book is a result of a project undertaken by the UN Department of Economic and Social Affairs (DESA) and the UN Capital Development Fund (UNCDF) to analyze the obstacles to financial inclusion and to report on efforts to overcome those obstacles in various countries.
“However, inclusive finance does not require that everyone who is eligible uses each of these services, but they should be able to choose to use them, if they so desired. To this end, strategies for building inclusive financial sectors have to be creative, flexible, and appropriate to the national situation and if necessary, nationally owned.”

Globe Telecom, a mobile service provider in Philippines provides an e-wallet facility to its customers. The product turns cell phone into an e-wallet, and the customers can use their phones to transact business. Non subscribers can send money electronically to Globe mobile subscribers. Banks have been advised to undertake, on a pilot basis, 100 per cent financial inclusion in at least one district in each state. Based on the success of the pilot, the State-Level Bankers Committee in the states will draw a time-bound plan for achieving 100 percent financial inclusions in other districts of the state.

Deepening the outreach of the microfinance programme is an effective way in reaching out to the excluded segments. Commercial Banks have played a very important role in the SHG-Bank Linkage Programme. As at the end of March 2007, as many as 50 Commercial Banks are involved in the programme, having linked 15.95 lakh SHGs forming more than 54% of the total SHGs credit-linked in the country. This programme should be strengthened and carried further, playing a key role in financial inclusion.

(VII) Technical Inclusion

In a study focusing on efficiency of agriculture of developing countries, 30 cases from 14 different countries were interpreted through technical efficiency indices. As a result of the

48 The Blue Book – Chapter 1: Setting the stage for building inclusive financial sectors, p.3. Quoted in NABARD Report of the Committee on Financial Inclusion
49 http://www1.globe.com.ph
study, it was found out that it was possible to retain more output regardless of excess input utilization under the given technological constraint.\textsuperscript{52}

With the emergence of the ‘new agriculture’ and the availability and rapid uptake of information and communication technology (ICT) tools, the governments are refocusing development resources in rural areas. Excellent recent reviews and studies provide information on the vision and momentum towards bringing information and knowledge to the village level (Arunachalam, 2004; Kuriyan and Toyama, 2007; Dossani et al., 2005).\textsuperscript{53}

There needs to be a multi-agency approach to our pursuit of financial inclusion. In this regard, our main stream financial institutions, namely, Commercial Banks, Cooperatives and Regional Rural Banks (RRBs) have a critical role to play in the process of financial inclusion. Further, other institutions, such as technical service providers and business correspondent services too need to actively collaborate with the mainstream institutions to ensure 100 per cent financial inclusion.\textsuperscript{54}

(VIII) Gender Perspective in Agriculture

The principle of gender equality is enshrined in the Indian Constitution in the Preamble, Fundamental Rights, Fundamental Duties and Directive Principles. The Constitution not only grants equality to women but also empowers the State to adopt measures of positive discrimination in favor of women.\textsuperscript{55}

\begin{itemize}
\item \textsuperscript{54} K.C.Chakrabarty, “Commercial Banking-Shape of Future Challenges”, \textit{The Hindu Survey of Indian Industry} – 2010.
\item \textsuperscript{55} Government of India, Ministry of Chemicals and Fertilizers, Department of Fertilizers, \textit{Annual Report 2009-2010}, (New Delhi, 2010).
\end{itemize}
Empowerment is the process of enabling people, especially women to acquire and possess power resources to make decisions on their own or resist decisions that are made by others, which affect them.\footnote{Reddy .G.N., "Empowering Women through Self Help Groups and Micro-Credit", \textit{Journal of Rural Development}, Vol. 21(4), 2002.}

Rural women are an important segment of the society because of their active participation in home and farm affairs, the extent of participation in the decision making activities in house hold, agricultural and socio-cultural affair reflect the status of women in the family as well as the society. Proper education is only way to change the image of rural women who are undervalued their work and sacrifice.\footnote{Dr. Baij Nath Singh, “Undervaluation of Work and Status of Rural Women: A Study”, \textit{Southern Economist}, Volume 44, Number 21, p. 23.}

1.5. Objectives

The basic objective of the study agricultural finance by commercial banks can be delineated into the following sub objectives. They are:

1. To appraise the commercial banks credit delivery mechanism to the agriculture sector.
2. To evaluate the norms followed by commercial banks to priority sector lending.
3. To critically analyze the efficacy of the National Agriculture Insurance Scheme.
4. To know and analyze farmers perceptions on agricultural finance.

1.6. Hypotheses

The entire sketch of the investigation rests upon the following hypotheses:

1. Commercial banks credit delivery mechanism and credit provided to agriculture sector is inadequate.
2. Performance of National Agriculture Insurance (NAIS) is not in conformity with its objectives of establishment.
1.7. Data Base

The present study is mainly based on empirical data collected from primary and secondary sources. Primary data which are attitudinal in nature are collected from farmers, banking professionals through two well structured schedules. In addition direct personnel investigation is carried out to explore the problem domain by interacting with farmers and bankers and has been presented in the form of case studies. The schedules were designed keeping in view the objectives of the present research and were pre-tested by means of a pilot study. The relevant secondary data were culled out from the reports, records and websites of the RBI and GOI as the study domain is vast. The data so collected have been processed and analyzed by using SPSS.

1.8. Methodology

The study has been carried out in two phases. In the first phase evaluates statistical profile of agricultural finance at aggregate and disaggregate level to justify the retrospect aspect of the study. It gives a brief account on what has been done in the past in this regard.

In the second phase the study attempts to elucidate the perception of the farmers and bankers on agricultural finance by commercial banks. While preparing the schedule for farmers, in order to minimize the regional differences, the study followed the Comprehensive District Agriculture Plan of Kurnool District of Andhra Pradesh and the district’s Agro-climatic zones to avoid extreme biases in selecting irrigated and rain fed villages. At first stage, the study identified Kurnool District on the basis of familiarity and accessibility. At the second stage, the research study purposively selected four mandals. The sample farmers in Nandyal, Panyam, Bandiatmakur, Gadivemula mandals are 140, 140, 108 and 112 respectively. Farmers’ perception on agricultural finance depends upon category. That’s why out of four mandals 100 samples are randomly drawn from each of the five categories viz., marginal, small, semi-medium, medium and large. The total sample size (n) therefore forms
1.9. Period of Study

- Pilot study was conducted in 2009-10.
- Field study was conducted in 2010-11.

1.10. Scope and Limitations of the study

The study has been conducted in the Kurnool district of Rayalaseema Region of Andhra Pradesh because of the familiarity and accessibility of the farmers and bankers of this district. Problems in agriculture depend upon many internal and external parameters. Constraints in agricultural development are region specific such as:

1. Farmers’ perceptions are attitudinal in nature and depend upon socio economic development of the district.

2. Constraints in agricultural finance are region specific.

A thesis is said to be a fragile exercise to cover vast area. Hence, due to the limitations of resources and constraints mentioned above the thesis identified only a few
areas in this micro level study. Hence, generalizations cannot be made based on this micro level study.

1.11. Tools of Analysis

Besides analyzed tools, quantitative techniques such as charts, diagrams and graphs are drawn wherever relevant to illuminate dry facts and figures.

1.12. Chapter Scheme

Chapter I: Introduction and Methodology

- This chapter contains Theoretical background of the topic, Statement of the Problem, Need for the Study, Review of Literature, The Objectives of the Study, Hypotheses to be tested, Research Methodology, Period of the Study, Scope and Limitations of the Present Study.

Chapter II: Role of Commercial Banks in Agricultural Finance

- This chapter holds Banking rural credit – pre and post nationalization period, Move towards social control in Section I, Priority issues for Indian Agriculture, Gender perspectives in agriculture, Agricultural marketing and trading in Section II, Section III deals with Legislation relating to money lending and Section IV discusses the elements of Priority Sector lending.

Chapter III: Priority Sector and Agricultural Finance: A Retrospective Analysis

This chapter is divided into two sections as follows.

Section–I

Statistical profile of Priority Sector and Agricultural Finance at Aggregate Level

- This section reveals the statistical data relating to priority sector and agricultural finance at aggregate level. Data has been compiled Region wise with a special focus on Southern Region and finally pointed at Andhra Pradesh Region wise. Appropriate hypotheses are put forth and tested.
Section-II

Statistical profile of Priority Sector and Agricultural Finance at Disaggregate Level

- This section discloses the profile, statistical data of Kurnool district and progress of commercial banks agricultural finance under Lead Bank Scheme.

Chapter IV: Agricultural Finance by Commercial Banks – Policies and Schemes

- This chapter monitors the Sources of Agriculture Credit, Debt Waiver and Debt Relief Scheme, Micro Finance scenario, Existing Policies and Schemes related to indebtedness and measures taken to improve institutional credit so far and progress and performance of Agricultural Insurance Schemes.

Chapter V: Analysis of Farmers’ Perception – An Empirical Analysis

- In this chapter an attempt has been made to analyze the farmers’ perceptions relating to agricultural finance and farming practices by employing quantitative tools such as ANOVA and Chi Square tests to evaluate the level of significance.

Chapter VI: Summary of Findings and Conclusions

- This Chapter presents summary of foregoing chapters, Conclusions arrived at, Suggestions/hints for the policy makers and Avenues for further research to the scholars’ who would like to undertake research in this area in future.