1.1 INTRODUCTION

India is on the move. India aspired for economic independence after attaining political independence in 1947. Since then India has been striving hard to achieve the goal of economic prosperity. The India of the 2k is quite different from the India of the 1950’s. Today, it is confident, dynamic, progressive, strong and assertive as compared to the India of 1950’s which was weak, passive, distorted, stagnant and regressive. Since the inception of economic planning in the 1950’s the country’s economy has undergone qualitative and quantitative changes. Some are visible and noticeable and some are invisible and not noticeable. In some areas, changes are slow and in some, they are fast. National income and per capita income has gone up many times. Structural changes in occupational structure, sectoral share in national income, development of basic and heavy industry, rise in food grain output, changes in the composition and direction of foreign trade, rising literacy rate, increasing life expectancy etc. are some of the significant changes.

The change in technology and methods of cultivation increased the need for credit. Farmers’ need for working capital has increased so as to meet the costs of fertilizers, seeds, irrigation facilities, pesticides and so on. Credit is a vital factor in farm production in Indian agriculture where the prospect for plough back is weak as compared to trade and industry. The small and marginal farmers constitute the bulk of agricultural population whose production is at the subsistence level. They are virtually without surplus or savings left for future investment and production purposes. After harvest they possess very little surplus for further consumption after repayment of credit. A farmers’ income fluctuates as agriculture is a ‘gamble in monsoon’ and is liable for drought, floods, excessive rainfall, pests, cattle disease, fluctuating prices and yields. The farmers’ problem is one of seasonal production cycle, while his needs are non-seasonal. Agriculture has two uncertainties viz., production uncertainty and price uncertainty, whereas industries face only price uncertainty. Farmers seek credit not only for production purposes but also to finance basic consumption needs and to repay debts. Hence, the rural people, especially agriculturists, depended mostly on the non-institutional
agencies like money lenders, commission agents and traders for their requirements.

The problem of rural development in India is multidimensional and complex in character. The solution to economic development lies in the removal of abject poverty and ignorance which are widely prevalent in the country. Rural development covers, besides agricultural development in general, a comprehensive set of activities pertaining to all aspects of rural economy. There are other sectors in the rural scene such as infrastructure development, cottage and small scale industries and development of tertiary sector which play an important role in the overall economic development. Rural development has been defined by the World Bank in its sector policy paper as "the strategy designed to improve the economic and social life of a specific group of people, i.e., the rural people". It involves extending the benefits of development to the poorest among those who seek livelihood in the rural areas. The group includes small farmers, tenants and the landless (Dr. Bensoon Kunjukunju, 2002). But Indian villages are still lacking in basic facilities of life besides poor health, illiteracy, high incidence of communicable and contagious diseases, dominance of agriculture, low level of productivity, scarcity of skilled manpower etc, also plague the rural areas. There are also wide disparities of incomes. The situation in respect of interpersonal and inter-regional inequalities is no less alarming. In a developing country like India, where wealth and poverty exist side by side, a small minority enjoys excessive riches while the vast majority has only the barest necessities of life and sometimes not even that (Leelamma Devasi, 1996). Since its inception on 14th March 1950, the Planning Commission has given to the nation ten Five Year Plans and six Annual Plans. The sole aim of all these plans was not only to allocate resources, but also to germinate the seeds of change for economic growth and simultaneous equitable distribution of income as well to achieve progress and prosperity in all spheres of life. Removal of poverty, hunger, ill-health and inequality are still the relevant issues for socio-economic planning in India.
1.2 PLANNED ECONOMIC DEVELOPMENT

The national government launched Five Year Plans in the 1950's to tackle the economic problems. The public sector took up the major responsibility of nation building in strategic areas. The strategy of planning stressed the overall development of the economy. The economic planning aimed at developing agricultural, industrial and tertiary sectors. The basic infrastructure was to be developed from the scratch. Indian agricultural scene still presents a disappointing picture but no effort has been spared to modernize it. The result is the green revolution and the position of near self-sufficiency on the food front. The industrial sector was shedding its backward character and moving fast to achieve international standards. The development of basic infrastructure like railways, roadways, telephone, electricity etc. has picked up at a promising speed. Indian economy is no longer a stagnant economy. It is under-developed in some respects but developing at a fast speed, although Indians economy is still under-developed compared to the advanced rich economies of Western Europe, Japan, U.S.A. etc. but it is a growing economy. Pandit Jawaharlal Nehru, the first Prime Minister of India, was strongly in favour of the adoption of mixed economy as the path of development. The socialistic pattern of society adopted by the Indian Parliament in 1954 affirmed India's faith in the mixed path of development. Even the founders of our constitution were very clear about the choice of the economic organization for the nation. The Directive Principles of State Policy have defined the role of the state in the economic life of the people. The constitution states that the state shall strive to promote the welfare of the people by securing and protecting, as effectively as it may, a social order in which justice, social, economic and political shall form part of all the institutions of the national life.

The Indian economy is a planned mixed economy. The growth of the public sector and economic planning were the distinctive features of the Indian mid-path. The state was vigorously interfering in the economic spheres
through the public sector, economic planning, industrial and licensing policies and other regulatory measures.

1.3 THE PROCESS OF LIBERALIZATION

Prior to 1990, the Indian economy was highly regulated. Its growth impulses and development potential were arrested due to excessive licensing, bureaucratic controls, restrictions, permits, quotas etc. The vast network of uncalled for and suffocating controls and restrictions virtually strangulated industry, business and trade. Liberalization aims at freeing the industrial, tertiary and foreign trade sectors from suffocating controls. The private sector in India has been subjected to vigorous controls. It did less of sound regulation and more of blocking the path of the private sector. Under the new Industrial Policy of 1991, the government has brought revolutionary changes to liberalize the Indian economy.

With the objective of liberalization of industrial sector, major policy changes initiated since July 1991 include removal of entry barriers, reduction in the area of the public sectors, rationalization of the approach to monopolistic and restrictive trade practices, liberalization of foreign investment policy etc. Since 1991, Indian industry has undergone a sea-change. A large number of reforms such as reduction in licensing, reduction of areas reserved for the public sector, increase in the limits of foreign equity participation, liberalization of trade and exchange rate policies have been initiated. Until December 1996, 35 industries, as mentioned in Annexure III of the New Industrial Policy, were eligible for automatic approval. In December 1996, Foreign Direct Investment upto 74 percent equity participation was allowed in 9 more industries. These are electricity generation, roads, bridges, ports, runways, water ways, pipelines etc. The Foreign Investment Promotion Council has been constituted to promote foreign investment.

The Globalization process set in motion with the signing of Dunkal Draft integrates Indian economy with the world economy. Two main issues
arise with respect to trade liberalization. One is the issue of protecting domestic production and producers of certain commodities, and the other that of coping with price volatility caused by fluctuations in international markets. Note that the convergence hypothesis predicts three interrelated outcomes: faster growth of poorer countries, declining world poverty and, above all, declining income inequality. The real impact of the Liberalization and Globalization policies are yet be understood.

1.4 AGRICULTURE IN INDIA

Agriculture is generally understood to mean both the cultivation of crops and the rearing of livestock, and thus the beginnings of agriculture go back to the first domestication of plants and animals. Agriculture is the backbone of Indian economy. The prosperity of the country depends upon the prosperity of the agricultural sector. It is the largest and most vital sector of Indian Economy. More than 67 percent of the Indian population directly depends upon the agricultural sector and almost all the rural population (about 74 percent) serves on this sector in one way or the other. It is the main source of livelihood for more than three-fourth of the country's population and supplies food grains and other farm outputs to the non-agricultural population also. It is a major supplier of basic inputs to several industries such as sugar, cotton textile, food processing, silk, paper, fruit processing, tea, coffee, leather etc. Much of trade and industry of the urban sector revolve round the agricultural sector. It creates demand for manufactured goods produced in the industrial sector. The farm sector occupies a very crucial place in our strategy of planned development. John P. Levis has rightly said that India's struggle to achieve a radical economic transformation by peaceful means is to be won or lost in the country side.

It is of utmost importance to understand the role of Indian agriculture in the national economy in order to discard false notions of such people who think that India can develop even without developing the agricultural sector. The signing of the Agreement on Agriculture binds India to liberalize its
external trade and operate within the rules laid down by the WTO. The rules themselves are an outcome of multilateral negotiations.

1.5 RURAL DEVELOPMENT

The concept of Rural Development has emerged with new force and is almost at the top of the agenda in national policies of developing countries of Asia, Africa and Latin America. The developed countries have also recognized this need and have directed their efforts towards meeting the basic needs of the poorest people in developing countries. The World Bank very specifically has pledged its support to improving productivity and welfare of the rural poor in these countries. Rural Development as a concept has been variously conceived and interpreted. In the past, rural development was often considered synonymous with agricultural development. However, in more recent years, rural development has transuded the area of agricultural development and is looked upon in national development plans in a broader and wide perspectives.

Rural development is upliftment of the rural people and more specifically the alleviation of rural poverty. Rural development continues to be the central concern of development planning in India. Rural development is a wide concept, encompassing all aspects of improvement in the life of people. It implies both economic betterment of the people and effective social transformation. But in its limited interpretation rural development has come to mean a direct attack on rural poverty through special Employment Programmes, Land Reforms, Area Development Programmes and measures to provide Safe Drinking Water Supply, Rural Housing and Rural Sanitation. Efforts continue to bring down the poverty levels by providing institutional credit and subsidies.

Rural development, in the ultimate analysis, involves the provision of opportunities for the optimum utilization of the human resources in rural areas. Human resources development, in its turn, takes place only if there is adequate nutrition and adequate work opportunities. It is, therefore, necessary to base
rural development programmes primarily on the need for providing opportunities for the rural population to achieve an optimum utilization of their physical and mental potential. Such programmes should have the following four major components:

(a) Economic emancipation of the family, with particular attention to provision of adequate employment opportunities to women who are largely engaged at present in unpaid and non-special jobs, often characterized by physical drudgery.

(b) Education of children and adults.

(c) Provision of minimum needs, such as safe drinking water, health care, rural communication.

(d) Promotion of the small family norm through population control and contraceptive education.

1.6 RURAL DEVELOPMENT AND FIVE YEAR PLANS

In order to understand the rural development process there is a need to analyze the existing rural development programmes and their sustainability. During the First Five Year Plan in India, the rural development approach of planning was community development programme followed by the National Extension Scheme and introduction of Panchayat Raj institutions at the grassroots level. The efforts made in this direction were aimed at initiating the participation of rural people in development programmes to have an overall development in rural areas.

During the Second Plan period some specific schemes were undertaken regarding rural development, such as multi-purpose tribal development, block and package programmes. Despite these approaches the benefits did not reach the people. This is due to lack of effective implementation.

The important feature of the Third Plan with regard to rural development was mainly to enlarge the possibility of development of areas, which had in the past been relatively backward. The measures suggested to enlarge the development activities include, intensive development of
agriculture, extension of irrigation, village and small scale industries, large scale development of power, development of road and transportation, provision of universal primary education for the age group 6-11 years, improvement in the conditions of living and water supply.

During the Fourth Plan, the Planning Commission introduced the process of formulating district planning mechanisms. In this plan period, the village, block and district plans were prepared which then were integrated into national plan. But in the absence of proper identification of problems of the local areas, truthful plan implementation at the block and district level did not result effectively.

During the Fifth Plan micro level planning was concentrated at the grass root level and implementation of minimum needs programme was a major step in the direction of rural development.

During the Sixth Plan period some concrete steps were taken in rural development planning by integrating different programmes and implementing programmes under Integrated Rural Development Programme (IRDP). The implementation of IRDP requires a detailed block level planning. The need for micro-level planning for eradication of rural poverty was stressed in the revised sixth plan (1985) and also in subsequent plan documents.

During the Seventh Plan the Government associated NGOs with rural development programmes, particularly in the poverty alleviation. Since 1987 MYRADA has consistently fostered the Self- Help Groups (SHGs) concept and strategy. And Jowahar Gram Yojana (JRY) was launched as centrally sponsored scheme on 1st April 1989 by merging National Rural Employment Programme and Rural Landless Employment Guarantee Programme.

During the Eighth Plan some new plans were launched e.g., Pradhan Mantri Rozgar Yojana (PMRY) on 2-10-1993 and initially was in operation in urban areas from 1994. The scheme is being implemented through out the country. The objective of the scheme is to provide self-employment opportunities to educated youth in the age group of 18 to 35 years. The Employment Assurance Scheme was launched in 1993. The objectives of
plans are to create additional employment opportunities during the plan period. The SHG Bank Linkage Programme was also introduced in this plan.

Under the Ninth Plan IRDP and allied programme such as TRYSEM, DWCRA, SITRA & GKY along with MWS were merged into a single programme under Swarnajayanthi Gram Swarozgar Yojana with effect from April 1999. The SGSY is a holistic programme and aims at covering all aspects of self employment, namely organization of rural poor, training, participatory approach to planning of Self-Employment ventures and provision of infrastructure facilities, technology, credit and marketing arrangements. The scheme is yet to be firmly announced.

During the Tenth Plan an innovative scheme in rural drinking water was introduced to ensure safe drinking water for all by 2004. The Prime Minister launched a new ambitious scheme on September 2001 to provide additional employment in a rural area under the Sampoorna Grameen Rozgar Yojana (SGRY) with an annual outlay of Rs. 10,000 crores. And on December 25, 2000 the Government had launched Pradhan Mantri Gram Sadak Yojana (PMGSY). The SGSY is a new and holistic scheme. Self-employment Programme launched during the year 1999-2000 aimed at bringing all assisted Swarozgari (beneficiaries) above the poverty line by providing those income-generating assets through a mix of bank credit and government.

The Indian government has made sincere steps in achieving sustainable rural development. It has implemented various employment generation programmes for the rural poor right from the first Five Year Plan. They are National Rural Employment Programme, Rural Landless Employment Guarantee Programme, TRYSEM, and Jawahar – Rozgar Yojana.

1.7 RURAL DEVELOPMENT AND POVERTY ALLEVIATION PROGRAMME

The Planning Commission has been estimating the incidence of poverty using the methodology of Lakadwala Committee* (Expert group on
estimation of proportion and number of poor). The estimates of incidence of poverty from 1960-61 to 1999-2000 and poverty projection for 2007 indicate that there was a significant decline in proportion of people living below poverty line, from 39.65 percent in 1960-61 to 25.35 percent in 1999-2000. The percentage of rural and urban poverty was 38.9 and 40.4 respectively, in 1960-61, which declined to 27.1 and 23.6 percent respectively and in 1999-2000. But in absolute terms, practically the number of rural poor increased from 173 million in 1960-61 to 260 million in 1999-2000.

1.8 STRATEGY AND PROGRAMMES

In India at the beginning of the new millennium, the number of poor in the rural areas was 260 million. After independence poverty eradication has been one of the major objectives of the development of planning process in India. For the attainment of international goals,* reduction of poverty is a prime issue in India. In India, small and marginal farmers, agricultural wage earners and casual workers engaged in non-agricultural activities are known as rural poor. There are various dimensions of rural poverty. Particularly the dimensions relating to education, health and other basic services have been systematically and progressively internalized in the planning process in India. The central and the state governments are trying to make sufficient allocation for the provision of health, education and other facilities for the well being of the poor. Anti-poverty strategy and programmes have definitely provided

Lakdawala Committee: The Planning Commission estimates the number of poor in the country based on a set of indicators decided by the Export Group on Estimation of Proportion and Number of Poor constituted by the Planning Commission. The committee was chaired by Prof. Lakdawala and submitted its report in 1993 and was accepted by the government in 1997.

Millennium Development Goals (MDGs): The Millennium Development Goals are Eight international development goals: eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality and empower women, reduce child mortality, improve maternal health, combat HIV/AIDS malaria and other diseases, ensure environmental sustainability, develop a global partnership for development of 192 United Nations member states. The main aim of MDGs is to spur improving social and economic conditions in the world’s poorest.
avenues for employment and income of the rural poor. The success of anti-poverty strategy and programmes can be seen from the decline in the poverty ratio in the rural areas from 37.3 percent in 1993-94 to 27.1 percent in 1999-2000.

Since Independence various anti poverty schemes and programmes were launched by the Central and the States' Community Development Programme (CDP), The Small Farmers Development Agency (SFDA), Crash Programme for Rural Employment (CSRE), Food for Work Programme (FWP), Minimum Needs Programme (MNP), Antyodaya Programme (AD), Drought Prone Area Programme (DPAP), Integrated Tribal Development Agency (ITDA), Hill Area Development Programme (HADP), Command Area Development Programme (CADP), Integrated Rural Development Programme (IRDP), Swarnajayanthi Gram Swarozgar Yojana (SGSY), Jawahar Rozgar Yojana / Jowahar Gram Samridhi Yojana (JRY / JGSY), Employment Assurance Scheme (EAS), Sampoorna Gramin Rozgar Yojana (SGRY), Pradhan Mantri Gramodaya Yojana (PMGY).

1.9 RURAL DEVELOPMENT PLANS BY THE PANCHAYAT

The 73rd Constitution Amendment Act, 1992 has provision for the establishment of Panchayat Raj Institutions at village level. The Eleventh Schedule (Article 243.G) of the same has listed 29 items for consideration in development plans. Panchayats have power to prepare plans for economic and social development and to implement schemes for such development in their respective areas:

(i) Economic aspects in Rural Development Plan.

Various items as per Eleventh Schedule such as:

- Item No. 1 : Agricultural Productivity
- Item No. 2 : Land Improvement
- Item No. 3 : Minor Irrigation
- Item No. 4 : Animal Husbandry
- Item No. 5 : Fisheries
Item No. 6: Minor forest products, etc., are related to economic development of rural area and hence they should be incorporated in development plan.

(ii) Social aspects in Rural Development Plan:

These aim at welfare of the people, provision of better education facilities, health services, recreational facilities etc. and a change in social attitudes of the people.

- Item No. 10: Rural Housing.
- Item No. 11: Drinking Water.
- Item No. 14: Rural Electrification.
- Item No. 17: Education.
- Item No. 18: Technical and Vocational Education.
- Item No. 19: Adult and Non-formal Education.
- Item No. 24: Family Welfare.
- Item No. 25: Women and Child Development etc. are mostly related to social development of the rural areas and should be a part of development plan.

(iii) Spatial aspects in Rural Development Plan.

The development of rural area basically depends on location of various economic and social activities, their irrigation and proper linkages within and outside the areas. Similarly, anticipated development activities, set up of organizational framework at different levels, etc. also affect the size of existing settlements, emergence of new settlements and overall development of the area.

- Item No. 8: Small Scale Industries.
- Item No. 9: Village and Cottage Industry.
- Item No. 13: Transport and Communication, which decide the location of various functional units.

Hence, development plan of any rural area needs to take care of all these aspects for proper and balanced development (Pawan Kumar, 2006).
1.10 DEVELOPMENT OF AGRICULTURE CO-OPERATIVES IN INDIA

In the wake of India’s Independence and with the establishment of planning process in 1950’s, Co-operatives have come to be considered as an instrument of planned economic development. In 1950-51 when India’s population stood at 361 million, India faced the problem of serious food shortage. Late Pt. Jawaharlal Nehru, the first Prime Minister of India, who was a great visionary, wanted India to be self-sufficient in food-grains through promoting agriculture growth and rural development.

During the 50’s and 60’s emphasis was laid on expansion of cultivated area and increasing per hectare yields with stress on accelerating process of area expansion through reclamation of waste lands and extending irrigation facilities through implementation of minor, medium and major multi-purpose irrigation projects. The concept of ownership to the tiller of the soil was evolved through the policy of abolition of landlordism*. Along with these developments, supply of critical agricultural inputs to the farmers was ensured under Integrated Rural Development Approach. In 1958, the National Development Council of India in its Resolution stated that the responsibility and initiative for socio-economic development at the village level should be placed fully on the village Co-operatives and village panchayats. In 1961, highlighting the role of Co-operatives, Late Pt. Nehru stated that, “My outlook is to convulse India with Co-operative movement or with cooperation”. Under the planning mechanism introduced since 1950-51, both public and private sectors were to play their role under the concept of mixed economy and Co-operatives were to play the role of the balancing factor for curbing monopolistic tendencies and exploitation. All these efforts helped India to attain self-sufficiency in food-grains and led to generation of green revolution in our country.

Land Reform: It constitutes one of the major institutional reforms for ushering in egalitarian growth. The main components of the land reforms (LRs) undertaken by the government are: abolition of zamindaris / jagirdaris and other intermediaries; regulation of tenancy; consolidation of landholdings; and distribution of ceiling surplus land to landless and marginal land holders.
Co-operative movement has been acknowledged as an important instrument towards achieving socio-economic transformation of the rural areas with special emphasis on poverty alleviation. This movement has completed 100 years of its eventful existence and now covers 100 percent of villages and 75 percent of rural households. Close association of Co-operatives with the development of the agriculture sector is very important as about 60 percent of the total workforce in India is engaged in the agriculture sector. This movement has developed into more than 5 lakhs Co-operative societies in various sectors with a membership of 230 million. They have established themselves in various segments like credit and banking, fertilizers, dairy, sugar, marketing etc. This movement occupies a key position in promoting the agricultural growth rural development and agro-processing activities (Dr. Sawai Singh Sisodia, 2006).

1.11 NEED FOR CO-OPERATIVES IN RURAL DEVELOPMENT

The approach to rural development through Co-operatives have been attempted in diverse fields such as credit, marketing and processing agricultural produce, promotion of agro-industries, rural artisans and farming systems. The success of green and white revolutions could not have been possible in the absence of an efficient input service system provided by the Co-operatives. Every Five Year Plan emphasized the importance for implementing development programmes in the rural areas. It has to accelerate the growth of agricultural production, increase employment opportunities and more importantly raise productivity and above all to alleviate rural poverty. India has introduced many poverty alleviation programmes in the recent years, and Co-operative movement has a very important role to play in rural areas in implementing development Programmes. Further, Co-operative institutions are situated in rural areas, so they can easily understand rural problems. Co-operatives distinct advantage over other forms of organisation is evident from the following characteristics of co-operatives:
(i) A Co-operative has better intimate knowledge of the local situation in which it operates.

(ii) It is nearer to the people and can have appreciated their needs.

(iii) It is capable of identifying the small producers who need help on priority basis.

(iv) A Co-operative has horizontal and vertical linkages so that it could provide integrated services to a producer.

(v) Co-operative structure is federal in character to enable the individual member in a village society to avail services of a federation even at the national level.

1.12 ROLE OF CO-OPERATIVES IN AGRICULTURE AND RURAL DEVELOPMENT

The establishment and growth of Co-operatives is regarded as one of the important instruments for socio-economic change and for human development. The International Labour Organisation (ILO) considered co-operatives to be established and developed as a means of increasing national income, increase revenues and employment by a fuller utilization of resources aimed at bringing fresh areas into productive use. In India co-operation has been developed and is being developed as a constructive instrument for economic and social upliftment. As an emerging sector it is not only confined credit, there has been horizontal and vertical expansion of the co-operatives. It is embracing wider and wider fields of action and is considered a diversified movement (S.N. Tripathy, 1998).

The organized Co-operatives, consisting of members, working for ameliorating the conditions of the rural poor through rural development approach would magnificently create social consciousness by inculcating democratic ideas, sense of social responsibility and amelioration of poverty. They strengthen groups to mobilize their talent and leadership for rural reconstruction cutting across the conventional stratification in the society. This would be possible only if poverty alleviation and other rural development
programmes are suitably interlinked and dovetailed for surpassing results with quicker pace in the path of rural reconstruction and growth of economy.

1.13 ROLE OF NABARD IN AGRICULTURE AND RURAL DEVELOPMENT

National Bank for Agriculture and Rural Development (NABARD) was established as an apex rural development bank in the year 1982, through an Act of parliament, to provide refinance for agriculture, allied activities, small scale industries, cottage industries, rural artisans and crafts in an integrated manner. NABARD supports rural credit system by way of refinance for short-term, production / marketing activities, medium-term and long-term loans for technically feasible and financially viable projects in both farm and non-farm sectors, through State Co-operative Banks (SCBs), Regional Rural Banks (RRBs) and State Co-operative Agriculture and Rural Development Banks (SCARDBs).

NABARD provides finance to State Governments for completion of rural infrastructure development projects such as major and minor irrigation projects, soil conservation, rural roads and bridges, through PRIs from the “Rural Infrastructure Development Fund” (RIDF) created for the purpose. NABARD also provides loans to State Governments to enable them to contribute to the share capital of Co-operative credit institutions. NABARD works in coordination with the various Central / State government agencies, and NGO’s to implement projects like, watershed development, dry land farming, waste land development, forestry, Swarnajayanthi Grama Swarozgar Yojana (SGSY) and other Poverty Alleviation Programmes.

NABARD has also been providing promotional grants to various ‘NGOs for various programmes such as mother units, ancillarisation common facility centers, training including skill up gradation and entrepreneurship development, marketing etc.
1.14 REVIEW OF LITERATURE

Efforts to review a few reports and other literature on various aspects of agricultural finance has been made here. Topics reviewed are grouped into five categories, viz. (1) Reports of important Committees (2) Agricultural Credit (3) Rural Credit (4) Rural Development and (5) Micro Credit.

1.14.1 COMMITTEE REPORTS

The idea of an all-India organization for agricultural development was noted by the AGRICULTURAL FINANCE COMMITTEE (Gadgil Committee, 1945). After investigating agricultural situation and existing credit institutions, the committee found that Co-operatives have not proved reliable for balanced and planned distribution of credit. In the view of the committee the progress of the Co-operatives was very slow and uneven. Therefore, the committee concluded that autonomous public corporations should be established for agricultural credit. The operation of the corporation should be supervised by the state but day-to-day working and normal business to be conducted on an independent basis. The committee listed the examples of several countries.

ALL INDIA RURAL CREDIT SURVEY COMMITTEE (1951-54) also examined the question of setting-up of an all-India organization. But the committee disfavored the idea of a corporation because there were Co-operatives and other banking institutions already available to provide agricultural finance. In their view, the RBI has appropriate resources, personnel and experience along with statutory powers to took after the agricultural credit structure in the country.

THE COMMITTEE ON CO-OPERATIVE CREDIT (V.L. Mehta Committee 1960) apprised for widening the RBI's contribution to Long-term Operations Found on a large scale. It did not favour any separate corporation for agricultural development. Accordingly, in the Third Five Year Plan a suitable legislative action was taken to set-up a Development Finance Corporation for Agriculture. In the plan, the function of corporation was
elaborated in the following terms: “Corporation will purchase debentures floated by Central Land Mortgage Bank in the normal course and will also provide funds for schemes for increasing agricultural production which are remunerative in character but involve considerable investment or long period of waiting, such as rubber, coffee, cashew nut and areca nut plantations, irrigation and soil conservation and development of orchards and fruit gardens. The loans advanced by the corporation will be channeled through the Central Land Mortgage Banks”.

THE COMMITTEE ON CO-OPERATION (Mirdha Committee 1965) revived the idea of a National Agricultural Corporation. After reviewing the role of RBI etc. in the sphere of agricultural credit, the committee recommended for taking up necessary steps to establish a National Co-operative Bank which would act as apex bank of the co-operative credit structure in the country.

ALL INDIA RURAL CREDIT REVIEW COMMITTEE (1969) rejected the proposal to delineate the activities of agricultural credit from the RBI and place it under the National Level Agricultural Bank. The committee favoured that agricultural credit infrastructure should be continued under RBI and a statutory Agricultural Credit Board for formulation, review and modification of agricultural policy should be established. Accordingly, a statutory Agricultural Credit Board replaced the earlier standing Advisory Committee on Rural and Co-operative Credit.

THE ADMINISTRATIVE REFORMS COMMISSION (1970) also disfavoured the creation of a separate bank for agriculture. The commission observed “while the need for greater and more pointed attention to agricultural financing was inevitable, but suggesting establishment of an agency for this purpose without a direct link with the central bank of the country, was open to serious objection”.

THE BANKING COMMISSION (1972) favoured combining the Agricultural Refinance and Development Corporation (ARDC) and the Agricultural Finance Corporation Ltd. (AFC) to form a new institution within
the Reserve Bank of India (RBI) but stressed that all short-term credit should be under the control of a single authority, that is the Reserve Bank of India (RBI).

**THE NATIONAL COMMISSION ON AGRICULTURE (1976)** exhorted the RBI to take steps in accordance with its historic role to “integrating the total structure for financing agriculture and rural development from ground level upwards right upto creation of an Agricultural Development Bank of India as the apex organization”.

**THE COMMITTEE TO REVIEW ARRANGEMENTS FOR INSTITUTIONAL CREDIT FOR AGRICULTURE AND RURAL DEVELOPMENT (CRAFICARD) (1981)** is an important work in the series of studies by the Reserve Bank of India. The committee noted that problems of agricultural credit had not only grown in complexity and size but had also merged with the larger task of rural development. The main recommendation of the committee was the separation of the Agricultural Credit Department (ACD) from RBI that handled refinance for the co-operative credit system and its merger with Agricultural Refinance and Development Corporation (ARDC). As a result, the committee recommended the setting up of a new apex bank – the National Bank for Agriculture and Rural Development Bank (NABARD) for providing undivided attention, forceful direction, and pointed focus on the credit problems arising out of the integrated approach to rural development. The implementation of this recommendation resulted into the setting up of NABARD in July 1982.

**THE REPORT OF THE AGRICULTURAL CREDIT REVIEW COMMITTEE (1989).** The report of the ‘Agricultural Credit Review Committee’, known as Khusro Committee 1989, was one of the comprehensive studies undertaken by the RBI in the field of agricultural credit. In the agriculture sector, the continuous declining size of farms, over exploitation of water in the green revolution areas and the shortage of energy were identified as constrains on the existing production. It also observed that the greater growth of Indian agriculture will need agricultural development
programmes in different states supported by financial institutions to make agricultural and rural economies more viable, productive, progressive and profitable. One objective of bank nationalization, i.e., increased credit flow to weaker sections and rural areas, has been achieved.

REPORT OF THE COMMITTEE ON FINANCIAL SYSTEMS, 1991, commonly known as Narashimham Committee, has gone through many aspects of priority sector lending to make financial sector more competitive efficient, productive, profitable, and transparent. The main findings are: (a) to bring down Statutory Liquidity Ratio (SLR) and Cash Reserve Ratio (CRR); (b) to phase out the directed credit programmes; (c) to phase out the concessional rates; and (d) to abolish licensing regarding the branch expansion. Some other recommendations relate to organization and management of the bank system. It has recommended doing away with priority sector lending and concessional credit in a phased manner. These recommendations are in line with the policy of globalization, liberalization and privatization.

THE COMMITTEE ON BANKING SECTOR REFORMS, 1998, reviewed the progress in the reforms in the banking sector with particular reference to the recommendations made by the Committee on Financial Systems in 1991. Regarding agricultural credit the committee noted that the recommendations relating to directed credit of the Committee on Financial System 1991 have not been accepted. In some cases, while the problem has been recognized, the approach adopted has differed as in the case of Non-Performing Assets (NPAs). Often, as international experience has shown, a high incidence of NPAs could be traced to policies for directed credit. While the high level of NPAs has been a proximate cause for the low profitability levels of our public sector banks, other factors like large number of unremunerative branches, low productivity overstaffing, arcane methods of operation directed credit, and high pre-emption of funds have also contributed. Thus, the strengthening of the agricultural credit institutions is indispensable for a sustainable agricultural development.
1.14.2 AGRICULTURE CREDIT

GUNASEKARAN (1995) in his study, ‘Financing of Agriculture by Commercial Banks reference to lending and recovery’ at Thanjavur District in Tamil Nadu, compared commercial banks lending activities with co-operative banks. His study found that commercial banks were on par with co-operatives in agricultural lending. This study revealed that recovery position of the commercial bank was more than that of co-operative banks reason being adoption of proper recovery system in commercial banks.

SEKAR and DR. B. RAJAGOPALAN (1997) did at comparative analysis of the non-farm sector finance supplied by the NABARD in South Arcot District of Tamil Nadu. They estimated the credit requirement of the people for non-farm activities. They found that NABARD credit is more useful to middle and low income group people.

KRISHNA KUMARI (1998) concluded in her study that the small farmers and marginal farmers face the problem of restricted credit facility as compared to large farmers whether it be in the informal money market dominated by merchants, professional money-lender and landlord money-lender (or) the institutional credit supplied by commercial banks and co-operative institutions. The ratio of informal credit and institutional credit provided to farmers varied from country to country. Unfortunately, in evolving credit programmes, small farmers are at great disadvantage as compared to the large farmers who are appropriating most of the credit facilities. The operation of the credit system reveals a bias in favor of large farmers for a few important reasons.

MUDGAL (1998) concluded that the co-operatives had played a very important role in our agriculture system. Credit co-operatives had a considerable share in the success of Green Revolution. Similarly, in bringing about the White Revolution, co-operative’s role is well known to the world. To imagine Indian agriculture without co-operatives is really difficult.

J.P. MISHRA and SK. MAURYA (2005) studied the “Impact of Agricultural credit on crop and milk production in Gola Block of Gorakhpur”.


The study identified that agricultural credit has increased production, productivity income, and employment of borrowers. The study identified non-availability of credit and inputs at right time. The study suggested that financial institutions as well as government should provide finance and other inputs on time so that agricultural production can be increased efficiently.

1.14.3 RURAL CREDIT

RUDRA PRATAP SINGH (1993) in his study stated that the NABARD supported many programmes in rural and agriculture development. But his study covered only Co-operative Banks and Regional Rural Banks. The study revealed that all NABARD refinance was useful to the rural people, especially for rural development programmes. Finally he found that overall performance of the NABARD was satisfactory.

RANGA REDDY (1990) concluded that the overdue position of small and marginal farmers was almost constant. The percentage share of small and marginal farmers in the short and medium-term loans by co-operatives was greater than their share in overdue. It implies that small and marginal farmers are prompt in repaying loans, when compared to other constituents of agriculture. The co-operatives have failed to meet the investment, production and consumption credit needs of small farmers. The small farmers are prompt in repaying their loans compared to the other categories of farmers.

TANILMANI and MANIVEL (1997) have pointed out that the timely recovery of loan amount from the borrower-members assumes paramount importance for the sound and efficient functioning of Primary Agricultural Co-operative Banks (PACS). Functional viability and operational stability of PACS are highly attributed to the timely recovery from borrowers.

BINA AGARWAL (1997) analyzed the interrelationships between gender, poverty and the environment in rural India, focusing especially on regional variations and temporal shifts over 1971-91. Briefly identifying the major factors underlying environment degradation, the study traced why and how this degradation and the appropriation of natural resources by the state
(statization) and by some individuals (privatization) tend to have particularly adverse implications for the female members of poor rural households. She further examined Government and community initiated attempts at environmental protection and regeneration and computed an aggregate index GEP (V) to address those issues.

NARENDRA AND GOSAVI (2005) in their study “Recovery performance of Maharashtra State Co-operative Agricultural and Rural Multi Purpose Development Bank”, reveal that the recovery performance of the bank is far from satisfactory. The study identified the district branches of MSCARDB were not able to continue its lending activities as a result of mounting overdues. The study found that high level of overdue seriously affected the selected banks. Finally the study mentioned the remedies to overcome the problems of overdue.

K. PRABAKAR and RAJKUMAR (2006) made their study on “Emerging trend of NABARD refinance for Swarnajayanthi Gram Swarozgar Yojana (SGSY) for Tamil Nadu during 1990-2000 to 2004-05”. The study pointed out that the financial assistance provided by different financial institutions in Tamil Nadu during 1999-2000 to 2004-05 under the scheme stood at Rs. 23,318.41 lakhs. Against this, these institutions got a refinance from NABARD accounting for 74% of total assistance extended to various beneficiary borrowers by these institutions. The study also pointed out that the top 5 districts in refinance were Thiruchirapalli, Salem, Thirunelveli, Thiruvannamalai, and Villupuram districts. The study found that refinancing by NABARD for IRDP is being implemented very successfully in the state.

S.S MULEY (2007) in his study, “Role of Co-operative Banks in Rural Credit”, revealed that the Co-operative credit institutions played an important role in rural areas. Primary Agriculture Co-operative Society (PACS), District Central Co-operative Banks (DCCBs) provided short-term and medium term loan and Primary Co-operative Agriculture and Rural Development Banks (PCARDBs) and State Co-operative Agriculture and Rural Development Banks (SCARDBs) provided long term loan in rural area.
The study found that PACS, DCCBs, SCBs, PCARDBs, and SCARDBs recorded increasing trend in providing loan during the period 1991 to 2003. But as compared to commercial banks, the share of Co-operative banks in agriculture sector declined from 44 percent in 1997-98 to 34 percent in 2002-03. The study also revealed that the recovery performance of Co-operative banks was not satisfactory.

D. RAMESH (2007) in his study, “Rural credit delivery performance and challenges before MDCCB”, revealed that the main issue in the new millennium is to reorient the functioning and management of the co-operative institutions. The study emphasized the need for well conceived action programmes to provide specified action programmes to co-operatives in the areas of professionalization and efficiency, induction of modern technology, systematic training through effective interplay of inter-Co-operative relationship, mobilization of resources, and enhancing participation of members in decision making process and reducing dependence on government assistance.

1.14.4 RURAL DEVELOPMENT

An evaluation study on IRDP conducted by the Kerala State Planning Board (1983) revealed that about 23 per set of families assisted were above the stipulated poverty line and therefore not eligible for assistance. In most of the blocks the household survey could not be properly conducted and the list of households eligible for assistance under the programme could not be drawn up. There had been an over-emphasis on agriculture and allied schemes and a very low emphasis on small scale industrial schemes. There were long delays in sanctioning and also disbursement of loans.

C.N.P. NAIR AND T.G. NAIR (1984) brought out the fact that the target for IRDP was fixed for the whole country without considering the varying socio-economic conditions and the magnitude of poverty in different regions or states. The study showed that most of the beneficiaries were not
eligible for the scheme since they were above the stipulated income level at
the time of selection for assistance.

**TRIPATHY** (1985) in his study analyzed the effectiveness of the organizational arrangements, the role of financing institutions, the process of identification etc. in the context of IRDP in the four states of Andhra Pradesh, Karnataka, Tamil Nadu and Kerala. The study concluded that the standard of living of beneficiaries of these four states had improved and that the impact of credit on the rural poor was quite substantial.

**GOYAL** (1987) in his research study entitled “Rural Development and Banks” attempted to review the functioning of the Lead Bank Scheme in Rajasthan with particular reference to the district of Ajmeer. The study pointed out that the Lead Bank Scheme could not make its headway in the district because of the interference of local politicians, defective implementation at the grassroots level, wrong identification of the beneficiaries, delay in recoveries, problem of overdue, improper utilization of funds by loanees and politicians in sanctioning loans.

**RAMANAND PANDEY** (1989) in his research work entitled “Commercial Banks and Rural Development” attempted to investigate the role, importance and need for commercial banking for rural development in general and with reference to the Siwan District (Bihar State) in particular. The study observed that nationalization of commercial banks had been quite beneficial to rural development in Bihar. However, keeping in view the poverty of the masses and vast credit requirements of the people, the commercial banks could meet only a very small portion of the credit needs of the people of the district. Also the performance of commercial banks in the balanced economic development of Bihar was not satisfactory.

**SUNDARAM** (1994) in his study mainly highlighted India’s experiments with anti-poverty rural development programmes. The scholar observed that “the rural poor can raise their income only when they have access to institutional credit and inputs”. Lending by commercial banks and Co-operatives did not meet even 40 per cent of the estimated credit
requirements of the rural poor. The study stressed the need for evolving an ideal rural credit system in order to ensure greater flow of institutional credit to the rural poor.

AJITH SINGH (1995) evaluated the role of banking in the development of rural sector in India. The study observed that after nationalization, commercial banks realized the importance of rural development and their responsibilities towards the rural society and opened a large number of branches in rural and semi-urban areas.

SHIVAH (1995) in his study “Field Level Implementation of Rural Development Projects” made an in-depth analysis of different aspects of field level implementation of rural development projects and found that administrative authorities had a pervasive influence on the minds of rural people.

1.14.5 MICRO CREDIT

HANAUMANTHA RAO (1994) interrelated the five themes viz. agricultural growth, rural poverty, environmental degradation, participatory rural development, and economic reforms in relation to agriculture. Both growth and poverty interact with environment in complex ways, each affecting the other. The author makes a critical appraisal of the participatory processes and also of some recent reforms – which have implications both for poverty and environment.

KABEER (1998) distinguishes between women as marginal, joint or primary decision makers, using a matrix, which considers women’s role in decision-making regarding the use of the loan, participation in running the business, and the use of profits. She writes that it is important to acknowledge this complexity in household gender relations, and to reflect on the mix of structural, individual and programme factors, which influence the degree of control they have over their loans.

SHENGEN FUN AND PETER HAZELL (2000) have made an empirical analysis of Rural India with particular reference to less favoured areas. They concluded that poverty, food, security and environmental
problems of many low potential areas are likely to remain serious in the
decades ahead as population continues to grow.

PUYALAVANNAN (2003) in his study stated that Tamilnadu is one
of the leading states in the formation of SHGs. It has wider network of co-
operative banks and has good network of experienced NGOs who have done
spade work at greater length in the formation and promotion of SHGs. They
facilitate linkage of SHGs with co-operative banks.

HASMUKH DESAI (2006) in his study concluded that SHG
approach has improved the participation and lives of the rural people but it
essentially depends on the method and nature of intervention. The role of the
facilitators cannot be ignored and it is they who impact the success or failure
of the approach. This requires skill and knowledge on the part of the
facilitator particularly for nurturing the group at the initial stages. The attitude
of the members is also equally important and they should realize that
formation of a group is not merely for the purpose of availing schemes and
other forms of benefit implemented by various organisations. A thorough
understanding of the principle of self help is lacking.

SUBAH SING YADAV (2006) pointed out in her study that about 13
lakh rural poor families had access to financial services through over 98500
SHGs in Rajasthan. During the last for years SHG Bank linkage programme
has witnessed significant progress in Rajasthan. The performance of the
government development departments, NGOs and the Banks under the
programme was commendable.

J. SHEELA AND M. JAYAMALA (2006) in their study “The Role
of SHG women in value based emancipation” found that most of the SHG
women have been involved only in micro credit/savings. They were not
properly facilitated through conducting periodical meetings, training
programmes and awareness camps for their improvement. Their active
participation in economic activities was very much limited due to the lack of
effective approach by the NGOs. Though the women have formed groups
they have poor decision making capacity for their self-development.
1.15 STATEMENT OF THE PROBLEM

Poor countries are poor because of the absence of development. Agricultural backwardness and the lack of adequate human resources development to facilitate dynamic economic growth impeded rural development. Normally the accepted view of economic development is that it is synonymous with industrialization to raise the level of income and standard of living of people. While industrialized countries have emerged as advanced nations, predominantly agricultural countries are generally found to be poor. But Jacob Viner argued that a high degree of industrialization is not necessary for raising per capita income of a country, which can be also be achieved by improving agricultural growth and farm productivity without having any great recourse to the development of industries.

Credit is vital factor in farm production in Indian agriculture where the prospect for plough back is weak as compared to trade and industry. The vast number of small and marginal farmers approximating to 70 percent of farmers constitutes the bulk of agricultural population at the subsistence level virtually without surplus or savings left for future investment and production purposes. Agricultural development forms the basis of rural development.

Rural development is necessary not only because an overwhelming majority of the population lives in villages but because the development of rural activities is essential to the acceleration of pace of the overall economic development of the country. It has assumed greater importance in India today than in the earlier period in the process of development of the country. There is much evidence to show that public interest in it has been growing rapidly. The Government has initiated a number of programmes to solve the chronic problems of village in India. Even then, the percentage of people living below the poverty line in rural areas has been steadily increasing from year to year.

The problems faced by Agriculture and Rural development are: (i) Failure of Institutional Credit System, (ii) Problems on faulty planning and strategy as they relate to poor participation and low sustenance, (iii) The identification of the objective of people's participation actually unveils the
criticality of several rural development programmes, (iv) Difficult to identify the present needs of the rural and urban people, (v) Government policy changes, (vi) Non-Adoption to latest technology, (vii) Lack of poor communication channels.

NABARD plays an important role in the development of agriculture by providing finance both for Seasonal Agricultural Operations and for Rural Development. NABARD’s role in bringing about overall growth of the rural areas by evolving and implementing holistic schemes for rural development cannot be undermined. So this study has been undertaken to study the role as well as the impact of NABARD finance and schemes on the rural population.

1.16 OBJECTIVES OF THE STUDY

The study has the following five objectives

1. To study the origin and growth of National Bank for Agriculture and Rural Development (NABARD).
2. To study the organizational set-up, functions and management of National Bank for Agriculture and Rural Development (NABARD) in Tamil Nadu region.
3. To study the role of National Bank for Agriculture and Rural Development (NABARD) assisted institutions in agricultural and allied activities.
4. To study the role of National Bank for Agriculture and Rural Development (NABARD) in Micro-finance.
5. To analyze the role of National Bank for Agriculture and Rural Development (NABARD) in Rural Development with special reference to RIDF.

1.17 DEFINITION CONCEPT

Agricultural Labourer

A person is considered as an agricultural labourer if he follows any of the following agricultural operations in the capacity of a labourer on hire or exchange: (i) farming, (ii) dairy farming, (iii) production of any horticultural
commodity, (iv) raising of livestock, bee keeping or poultry farming, and (v) any work performed on a farm in connection with farm operations.

**Small Farmer**

A farmer who owns land between one to two hectares of land is called small farmer.

**Medium Farmer**

A farmer who owns land between two to four hectares of land is called medium farmer.

**Large Farmer**

A farmer who own land above four hectares is called large farmer.

**Family Expenditure**

Family expenditure consists of expenditure on durable and non-durable consumption items such as food, clothes, fuel, medicine, education, household goods, traveling, recreation, marriages, and social ceremonies.

**Owned Land**

This includes land owned as well as the land over which there is a right of permanent heritage possession.

**Operational Holding**

All land which is used wholly or partly for agricultural production and is operated (directed / managed) by a household alone or jointly with other households, with or without the assistance of others and regardless of title, size or location, constitutes operational holding.

**Institutional Agencies**

Agricultural credit agencies approved and controlled by the Reserve Bank of India.

**Credit**

Credit is a financial facility which enables a person or business to borrow money to purchase products, raw material, components, and so on, and to pay for them over an extended time period. This is linked with creditworthiness in the sense that it is a source of honor and pride, of a
person’s financial standing and of the acknowledgement of being paid by an entry on the credit side of an account.

**Demand for Agricultural Credit**

Credit requirement of the farmers for fulfilling the production needs for raising various crops.

**Credit Gap**

The difference between the credit required and credit supplied by all agencies for the purpose of credit during a period of one year.

**Loan**

It is the advance of a specified sum of money to a person or business (the borrower) by another person or business, or more particularly by a specialist financial institution (the lender), which makes its profits from the interest charged on loans. It is something lent, especially a sum of money to be returned normally with interest.

**Finance**

The provision of money when and where required. Finance may be short-term (usually upto one year), medium-term (usually over one year and upto 5 to 7 years), and long term usually over 5 year to 20 year.

**Micro Finance**

Micro finance is the “provision of thrift, credit and other financial services provided to the poor in rural, semi-urban or urban areas enabling them to raise their income levels and improve standard of living”.

**Micro Credit**

Micro credit is the extension of very small loans (micro loans) to those in poverty, deigned to spur entrepreneurship.

**SHG**

A Self help Group (SHG) is a group of about 10 to 20 people both male and female, usually women, from a similar class and region, who come together to form a savings and credit organization. They pooled financial resources to make small interest bearing loans to their members. This process creates an ethic that focuses on savings first. The setting of terms and
conditions and accounting of the loan are done in the group by designated members.

Debt

Debt is defined as an amount of money owed by a person, firm, or government to a lender. It is a state of obligation to something owed.

Overdue

A part of the outstanding loans becomes overdue loan if not realized within certain definite time limit. It is defined as: Overdue are equal to the amount due for payment minus amounts actually repaid. The loan availed but unpaid at the end of stipulated payment period.

1.18 METHODOLOGY

Survey method was followed for this study and analytical techniques were used extensively. Data for the study were collected from primary and secondary sources. Primary data were collected using pre-tested questionnaire framed in three different modules to collect data from the respondents of Co-operatives, Commercial Banks, and from Self-Help Groups. Secondary data was collected from NABARD Regional Office, Chennai and from other identified financial institutions i.e., Primary Agriculture Co-operative Banks (5), Primary Co-operative Agriculture and Rural Development Bank (1), and Branches of Commercial Banks (3). Secondary data were also collected from published and unpublished reports, annual reports, books, journals, research reports etc.

1.19 SAMPLE DESIGN

A multi stage sampling procedure was adopted for the study.

First stage: Selection of District

The Nagappattinam district is a predominantly agricultural district with the net sown area constituting nearly 53 percent of the total geographical area as against only 39 percent for the state as a whole. The district is served by well developed canal irrigation system with net irrigated area constituting 83 percent of net sown area as against 51.74 percent for the state. The basic
infrastructure available in a district and social factors are important issues which determine the ability of the district to derive benefit from various schemes. So, Nagapattinam district was selected as the target area of the study.

**Second stage: Selection of Block**

In the second stage Sempanorkoil block was selected because it was availing the largest institutional finance for the purpose of agricultural and allied activities. And many rural development programmes were launched and implemented by NABARD in this block.

**Third stage: Selection of Banks**

In the third stage three different types of banking institutions were selected. Five Primary Agricultural Co-operative Societies (PACS), one Primary Co-operative Agricultural and Rural Development Bank (PCARDB) and three Branches of Commercial Banks (CBs) in the Block were selected on simple random basis.

**Fourth stage: Stratification of loans by purpose.**

In the fourth stage of sampling four principal types of loans advanced by the banks and refinanced by the NABARD were selected. Loans advanced by PACS can be broadly grouped into two viz., Seasonal Agricultural operation (SAO), and Self Help Groups’ Loans (SHG). Loans advanced by the PCARDB can be classified into two sector viz., Farm Sector (FS), and Non-Farm Sector (NFS). Loans advanced by the CBs can be classified into four viz., SAO, FS, NFS, and SHG loan.

**Fifth stage: Selection of Respondents**

Random sampling technique was adopted for the selection of beneficiaries. 200 borrowers were selected in PACS, viz., 100 from SAO and 100 from SHG members. From PCARDB 100 borrowers were selected in two sectors, viz., 50 from Farm Sector (FS) and 50 from Non-Farm Sector (NFS). In CBs 300 respondents were selected in four sectors, viz., 100 from SAO, 50 from FS, 50 from NFS, and 100 from SHG. And also 100 rural households were selected for the purpose of RIDF.
MULTI-STAGE SAMPLING

Number of district in Tamil Nadu = (27)

Stage – I
Selection of District
Based on Programmes

Stage – II
Selection of Block
Number of Blocks in Nagapattinam District (11)
Based on Purpose

Stage – III
Selection of Banks
Based on Purpose

Stage – IV
Identification of major purposes for which NABARD refinance was provided

Stage – V
Selection of Borrower-Respondents

Total No. of Sample respondents - 600
1.20 PERIOD OF STUDY

The study covered a period of ten years i.e. 1996-97 to 2005-06.

1.21 INSTRUMENTATION

Keeping in view the objectives of the study, structured schedules were prepared.

1. Institutional Schedules:
   a. Schedule for PACS and PCARDB.
   b. Schedule for Commercial Banks.

2. Member / Respondent Schedules:
   a. An interview schedule for PACS, PCARDB and Commercial Banks.
   b. An interview schedule for SHG members in PACS and CBs.
   c. Participatory Rural Appraisal Method schedule for selected village people.

3. Community Based Organisations Schedules:
   a. Schedule for SHGs

1.22 FRAME WORK ANALYSIS

The data collected were reduced to tables for better understanding, analysis and interpretation. The collected data were tabulated and subjected to statistical analysis such as Paired ‘t’ test, Chi-square test, Simple and Multi-Correlation Analysis, Multi Regression Analysis and Analysis of Variation (ANOVA).

1. Paired ‘t’ test

The impact of bank loan on agricultural production income and total income of the borrowers was measured by taking the pre-loan and post-loan income, asset position, employment, debt, standard of living and these are analysed with the help of paired ‘t’ test.

The formula is:

\[ t = \frac{M_1 - M_2}{CD} \]
Where,

- $M_1 =$ the mean of the first sample (Pre-loan)
- $M_2 =$ the mean of the second sample (Pre-loan)
- $CD =$ the Standard of Error.

2. Regression

To examine whether the bank loan issued based on the recovery performance or not, regression techniques was used.

$$y = a - bx$$

Where,

- $y =$ Amount of loan issued
- $x =$ Amount of Loan Recovered.

3. Multi Regression

The Regression Analysis was used to study the social, economic and democratic benefit. The Multiple Regression equation takes the form of following formula:

$$y = b_0 + b_1 x_1 + b_2 x_2 + \ldots + b_n x_n + C$$

where,

- $y =$ dependent variables of Social, Economic and Democratic impact,
- $x_1 =$ Gender
- $x_2 =$ Age
- $x_3 =$ Marital Status
- $x_4 =$ Size of Family
- $x_5 =$ Community
- $x_6 =$ Education
- $x_7 =$ Types of Occupation
- $x_8 =$ Type of House
- $x_9 =$ Size of Land
- $x_{10} =$ Amount of Loan
\[ x_{11} = \text{Amount of Production Income, and} \]
\[ x_{12} = \text{Amount of Total Income,} \]
\[ C = \text{Constant.} \]

Regression Analysis was used to understand the relationship between socio-economic variables and social impact, economic impact, democratic impact and empowerment.

4. Chi-square Test

To examine the association between the institutions and standard of living, using Chi-square test is applied. The formula is:

\[ \chi^2 = \sum \frac{(O_{ij} - E_{ij})^2}{E_{ij}} \]

Where, \( O_{ij} \) = observed frequency of \((i,j)\)th cell

\( E_{ij} \) = expected frequency of \((i,j)\)th cell

5. Analysis of Variance (ANOVA)

Variation in credit supply, credit gap and variation in income between sectors of the respondents among the different purpose and different bank wise are assessed using ANOVA results.

1.23 LIMITATION OF THE STUDY

The study seeks to understand the role of NABARD in agriculture and rural development. The scope of the study being wide the sample frame work for the study may not lend itself for wider generalization’s. The study area, Sempanorkoil Block in Nagapattinam District, even though well served by financial institutions, do not have RRBs. This study was mainly confined to three major functions of NABARD i.e. Agriculture Development, Rural Development and Micro Finance. While studying agricultural loans medium terms loans were not covered. Further, infrastructure development through NABARD funds could not be studied in entirety and the flagship programme i.e. Rural Roads, which received the largest share of funds was only studied.
Despite these limitations, the study identified some definite trends in the development of agriculture and rural development as a result of NABARD’s developmental role through rural financial institutions.

1.23 CHAPTER SCHEME

This study report is presented in six chapters as under:

1. The first chapter is design and execution of the study.
2. The second chapter deals with Organizational set-up, functions and Management of NABARD’s Regional Office, Chennai.
3. The third chapter deals with the Performance of NABARD Assisted Institutions at Grass Root Level.
4. The fourth chapter deals with the NABARD’s role in Micro-finance.
5. The fifth chapter deals with the NABARD’s and Rural Infrastructure Development.
6. The last chapter presents a summary of major findings, conclusion and suggestions.