CHAPTER - II
REVIEW OF LITERATURE

Acquaintance with the contribution of previous investigations will broaden the perspective and deepen the understanding of the researchers. With this objective in mind, some related studies have been reviewed and the list has been presented in this chapter.

Malhotra (1990) observed that both RBI and NABARD were involved in various aspects of co-ordination and liaisoning at the district level. As it would be advantageous to have a single agency to plan, co-ordinate and monitor credit programmes of banks and co-operatives at the district level, NABARD has been identified as the appropriate agency to undertake these functions. For this purpose, NABARD will be setting up offices in all the districts within the next four to five years. These offices will be compact outfits with a manager and twenty three technical subject matter specialists, with personal computer support. NABARD’s presence at the district level will be in close proximity with gross-roots realities and bring about a new dynamism in its activities for both agricultural and non-agricultural rural development.

Bansal and Agarwal (1991) say that the NABARD is now the single integrated agency for meeting the credit needs of all types of agricultural and rural development activities in the country. It also contemplates undertaking of all works relating to the establishment of RRBs and administration of refinance scheme and monitoring of the performance of RRBs. Ever since the NABARD came into being,
it has been playing an important role in strengthening and re-organizing the cooperative structure in the National Economy. It has actively taken over the responsibilities of the Reserve Bank of India in relation to rural financing and rural reconstruction.

Shivaji\(^3\) (1993) revealed that NABARD has been providing a variety of training to offices of the commercial banks, RRBs, SCBs/DCCBs and SLDBs as to its own staff. It has also established a central training institute at Lucknow called Bankers Institute for Rural Development (BIRD) with a capacity to run two streams of training course with 30 participants each, besides two regional training centres at Bolpur and Mangalore. NABARD has also been providing financial and other support to the junior level training centres of SLDBs and also to the executives of cooperative banks.

According to Narasimban\(^4\) (1993), the limits under the general line of credit, (GLCI) provided by the Reserve Bank of India to the National Bank for Agricultural and Rural Development (NABARD) for short term seasonal agricultural operations were enhanced in January 1993 by Rs. 400 crore from Rs. 2,700 crore to support the Rabi agricultural operations, it has been decided to further enhance the limits under GLCCI by Rs. 400 crore from Rs. 3,300 NABARD has been provided additional resources of Rs. 1,000 crores to support agricultural activities.

Puhazhendi (1995)\(^5\) studied 19 SHGs and five bank branches in Karnataka and Tamil Nadu and concluded that the intermediation of SHGs reduced the time
spent by bank personnel in identification of borrowers, documentation, follow up 
and recoveries effecting 40 per-cent reduction in the transaction cost of bank, as 
compared to direct lending to individual borrowers. Transaction cost of borrowers 
was reduced by 85 per-cent.

Karnati Lingaiah and Anjana Devi (1996) 6 reported that agricultural 
credit is one of the most crucial inputs in all agricultural development programmes. 
Institutional credit has been adopted to provide cheaper and sufficient credit to 
farmers from 1950 onwards. The major policy in the sphere of agricultural credit 
has been its progressive institutionalization for supplying agriculture and rural 
development programmes with adequate and timely flow of credit to assist weaker 
sections and under developed areas- saying the functions of NABARD, they 
indicate that NABARD provides short-term, medium term and long-term and credit 
to State Cooperative Banks, Regional Rural Banks, Land Development Banks and 
other financial institutions approved by Reserve Bank of India. They highlighted 
that NABARD inspects in the functioning of the above mentioned banks and 
institutions and maintains a research and development fund to promote research in 
agriculture and rural development. NABARD also provides purpose-wise refinance 
assistance to different schemes like Minor Irrigation Land Development, Farm 
Mechanization, Plant Horticulture, Poultry, Sheep Breeding, Piggery, Fisheries and 
Dairy Development.

Rajesh Suneja (1997) 7 suggested that the NABARD should try to impose 
upon itself certain disciplines like the time taken to dispose of schemes and 
proposals which are present for consideration. The co-operative banks should also
have a feeling that NABARD is their apex body in the matter of taking up their problems with the Government and other financial institutions. Hence, NABARD should have its own restructuring for streamlining its operations. Moreover, it should raise the bulk of its resources from the market and the bulk of its lending should be at market related interest rates-subsidized lending by NABARD should necessarily be a relatively small segment of its total lending. Development of under-banked states should engage more attention of NABARD while the relevant procedures should be simplified. For this purpose, it should explore further avenues of refinancing more institutions.

Robinson (2000) defined microfinance as small scale financial services provided to the people who work in agriculture, fishing and herding; who operate small or micro enterprises; who provide services; who work for wages or commission; and other individuals and groups at the local levels of developing countries, both rural and urban. Financial services usually include credit and savings, but there are Microfinance Institutions (MFIs) which provides additional services such as issue of cheques, drafts, guarantees, etc.

Shivamaggi (2000) observed that rural infrastructure development fund of the national bank for agricultural and rural development NABARD is helping infrastructure projects to a significant extent the development of brand names for agricultural products water saving technology, cold storage, agro-processing and packaging have also be assisted. Rural development projects tend to suffer if the banking policy makers do not adopt a bold and flexible approach to rural credit. One recent development under the leadership of NABARD and Non-
Government Organization (NGOs) is the formation of informal self help groups (SHGs) broadly on the model of the gramean banks of Bangladesh. The number of SGHs linked to banks is now around 33,000 NABARD has ambitious plan for these groups. But much depends on the initiative and efforts of voluntary organizations. Rural banking in India has made tremendous quantitative progress. But quality is a different matter. On the whole, it has to be admitted that the policy makers have yet to arrive at a banking structure and operational system which suit agriculturists credit and saving needs and at the same time promote modern agriculture.

Dinabandhu Mahal (2000) in his article has highlighted that National Bank for Agriculture and Rural development (NABARD) is giving great importance for the effective implementation of the schemes under the non-form sector. The co-operatives have been playing a significant role in dispensing credit. The NABARD provides various other facilities like establishment of technical monitoring and evaluation (TIME) cell, training to the participating banks. It is true that if the co-operative banks would expand their network in the rural areas it would take various benefits under the NFS financing and undertake proper asset management definitely they would not only achieve viability but also proper and compete with other financial institutions.

Nanda (2000) observed that NABARD has been directing its parties and programs to support the rural credit institutions towards achieving the goal of providing adequate and timely credit support for on-farm, off-farm and non-farm operations in the rural sectors. Various schemes have been formulated and implemented by NABARD for policy and refinance support to banks, in different
fields like creation of aggregation facilities, farm mechanization, plantation horticulture animal husbandry, watershed, development, and agro-processing infrastructure in rural areas. NABARD is supporting large scale investment in rural infrastructure that includes a wide range of support services like irrigation, food control, soil conservation, watershed development, roads bridges, marketing in rural areas. These efforts will go a long way towards improving the productivity and profitability of agriculture and the quality of life in the rural areas. This should also lead to increased credit absorption capacity in the rural areas.

In addition to self help, micro financing and NGO intervention, the author proposes a new strategy called the community development society model marking a new social movement in Kerala, which is an effective way of eradicating poverty of the below poverty line families. NABARD (1997) in its report conveys that the savings of over Rs. 3.5 million was mobilized and distributed as loans for income generating activities to more than 5200 members.

Patel (2000) 12 observed that the rural credit structure in India has completed 95 years and is unparalleled in the world. It serves around 120 million rural households in about seven lakh villages through its 92000 primary agricultural credit societies, 11426 branches of short term co-operatives 32948 branches of commercial banks and 11426 branches of regional rural banks. After independence, the rural credit system has disbursed credit for farm development. He recommends that it is necessary to form an internal committee consisting of a representative each from the RBI, NABARD and Ministry of Finance to examine the recommendations of several working groups expert committees.
The National Bank for Agriculture and Rural Development (NABARD, 2000) conducted a study on the impact of Micro Finance (MF) on the living standards of SHGs members. The study aimed to find out how far the SHG bank linkage programme had lightened the burden of life for the average member of SHG and to analysis the betterment of household by gaining access to micro finance. The study covered 560 SHG member households from 223 SHGs spread over 11 states. It showed positive results. There were perceptible and wholesome changes in the living standards of the SHG members, in terms of ownership of assets, increase in savings and borrowing capacity, income generating activities and income levels. The study revealed that almost all the members developed saving habits in the post-SHG situation as against 23 per-cent of households who had this habit earlier and the average borrowing per year household increased from Rs. 4,282 to Rs. 8,341. The study concluded that the involvement in the group significantly contributed in improving the self-confidence of the members. The feelings of self-worth and communication with others improved after association with the SHGs and the members were relatively more assertive in confronting social evils and problem situation. As a result, there was a fall in the incidence of family violence.

In his budget presentation for 2000-2001, the then union finance minister Yashwant Sinha expressed that sustained and broad based growth of agriculture is essential for alleviating poverty, generating incomes and employment, assuring, food security and sustaining a buoyant domestic market for industry and services. Credit must flow to agriculture through institutional channels of commercial banks,
co-operative banks and regional rural banks. Yashwant Sinha also stated that the government has launched wide array of initiatives to promote the flow of rural credit. He proposed to strengthen the earlier programmes and launch further initiatives. The rural infrastructure development fund (RIDF) managed by the NABARD has emerged as a popular and effective scheme for financing rural infrastructure projects.

Patel¹⁵ (2001) in his study, expresses the importance of NABARD in estimating a production as well as investment credit requirements for the period from 1998-99 to 2007-08 in the context of doubling country’s food production. He emphasis that our farm development policy needs to be re-oriented suitably and our farm credit policy be relooked. He indicates that the banking sectors (co-operative Banks, commercial Banks and Regional Rural Banks) should be efficient to meet area specific needs. He lays emphasis on certain areas need to be examined; redefining the concept of rural credit, arranging to conduct feasibility study on the proposed rural banking subsidiaries as recommended by the Narasimham Committee, examining the feasibility of integrating the short term and long term co-operative credit wings, examining the scope and extent to which RRBs can continue to maintain their identity of merges with sponsors banks, reviewing the present role and involvement of the state governments, examining and recommending the concrete role which the supporting institutional infrastructure in respect of training the beneficiaries, providing technology and extension support, input delivery system, processing, preservation storage transport and marketing facilities and studying the existing status and recommend the legal framework for
speeding recovery of banks dues with the evolution of the developmental role to be played by the National Bank.

Das Gupta16 (2001) says that NABARD will definitely encourage the bankers to lend more in rural areas. Refinance to the states by NABARD should be with held if the repayment performance of rural loans at state level falls below 75 per-cent. NABARD can consider giving grants to states for better repayments.

Arjun Sengupta17 (2001) says that NABARD will have to take on huge responsibilities, take a lot of risks, become an active operator in the field and would need large funds. The state governments were very hesitant to draw long-term loans from NABARD up to the available limits. This could not be explained by the refinance rates of NABARD, which were substantially lower than the market rates, especially for loans below Rs. 2 lakhs.

Dubhashi (2001)18 concluded that RBI and NABARD have also been insisting for some time that the duality of control over co-operatives deserved to be ended. The role of the government should be limited to the legal tasks of registration and liquidation, whereas the banking-related functions would be fully brought under the Banking regulation act under the control and supervision of NABARD. The Capoor committee reflects the thinking of the RBI and the NABARD in favour of delimiting the control of the government over the co-operative credit institutions, the later two institutions would like to tighten their own grip in the name of sound banking.
Laxmi R. Kulshrestha and Archana Gupta (2002) observed that discussion about the launching of NABARD’s pilot scheme micro finance in the development of the buzz world of the nineties to cure the illness of rural poverty gained visibility in the Indian development landscape.

Hitesh and Viramgami (2003) view that NABARD has a dual role to play as an apex institution and a refinance institution. NABARD services as a refinancing institution for all kinds of production and investment credit to agriculture, small scale industries, cottage industries, handicrafts, real artisans and other allied economic activities with a view to promoting integrated rural development, it provides long term, medium term and short term credit to state co-operative banks, regional rural banks, land development and other financial institutions approved by RBI. During 1993-94, NABARD has given short term agricultural credit of Rs 3940 crores, medium term credit of Rs 8 crores and long term credit of Rs 3232 crores. The NABARD is playing an energetic role is strengthening and re-organizing the co-operative structure in the country and is also working towards an effective integration of co-operative credit institutions.

Selvanathan (2004) in his study has found that NABARD has estimated the production as well as investment credit requirements in the context of doubling the food production for the period 1998-99 to 2007-08. Accordingly, average annual disbursements of Rs. 1281-76 billion and Rs. 32866 billion respectively would be made as against disbursements of Rs. 107.45 billion and Rs. 62.68 million per annum respectively made on the basis of average value of the past 14 years period.
Kamalakannan (2005) expressed the role of NABARD in the development of women entrepreneurs especially in rural areas. Assistance to Rural women in non farm development, assistance for marketing of nonfarm products of rural women, formation of self help groups and rural entrepreneurship development programmes are the major fields in which the NABARD plays its role. These assistance and programme have been introduced to promote the entrepreneurial talent among rural women and to provide gainful employment to the rural people.

To meet the challenge of scaling up access, they stress enabling policy, legal and regulatory frame work as the task of NABARD attention to quality and importance of financial sustainability, clear targeting of clients, appropriate products and services and good staffing, inclusiveness and competition, overcoming geographical concentration, longer-term reforms to scale up access, freeing up interest rates, entry of new private banks in rural finance, and restructuring the RRBs and co-operative banks.

The study by the Economic and political weekly research foundation (2006) highlights that credit delivery to the farm and informal sectors has deteriorated because the institutional structures have been allowed to weaken. The latest example is the curtailment of the refinancing capabilities of the national bank for agriculture and rural development. The time has come to reorient such an approach and ensure that NABARD operates as a non-commercial apex institution engaged in financing and promoting bank lending activities for the informal sector.

The agriculture credit functions of the reserve bank of India (RBI) and
refinance functions of the then agricultural refinance and development corporation (ARDC) were transferred to NABARD on its formation. This followed the recommendations contained in the Narasimham committee to review the arrangements for Institutional Credit for agriculture and Rural development (CRAFICARD) which has been set up by RBI in March 1997. This apex national bank was to oversee and develop the entire rural credit system including agricultural credit.

Gurmeet Singh\textsuperscript{24} (2009) opines that the rural credit system in India witnessed many reforms over the last five and a half decades. However, credit supply from the Co-operatives did not match the demand for credit. The establishment of NABARD in 1982 and the ongoing financial sector reforms since 1992 have been supplementing the institutional mechanism.

Arunchalam\textsuperscript{25} (2009) reported that in the mid 1980’s NABARD and Myrada promoted self help groups (SHGs) in India. In 1986-87 NABARD provided Myrada with rupees one million to train these groups and match their savings. Three policy decisions were taken by the Reserve Bank of India and followed in a commercial manner over the past 30 years by NABARD. These were:

- To allow banks to lend to unregistered groups provided they saved, maintained records of decisions, and accounts
- To allow banks to lend to groups without asking for the purpose prior to lending; and
- To lend without physical collateral provided there was adequate social
capital – an affinity based on mutual trust, backed up by the habit of savings and at least six months experience of internal lending.

These three decisions represent a major reform in financial sector\(^{26}\) which has not been recognized adequately. NABARD then launched the SHG – Bank Linkage program in 1992. Today, over 42 lakh SHGs are linked with commercial, private and regional rural banks. With an average size of 15 members per group, the total number who have benefited from loans is over 600 lakh. This makes the SHG – bank linkage programme movement the largest micro finance movement in the world

Prabakkar Rajkumar (2010)\(^{27}\) suggested that NABARD should consider the following suggestions to improve its performance in its various activities:

- Gender planning and maintenance of gender disaggregated data are of utmost importance and need to be built up on an on-going basis.
- Women related action research projects and area programmes to be supported.
- Support for conducting skill training, skill up-gradation, REDPs and other economic training for rural poor women assume significance in the context of women empowerment.
- Supplementary and alternative models for effective credit delivery system for women need to be encouraged and supported and
- Use of second tier financial intermediaries such as Voluntary Agencies (VAS), Non-Government Organizations (NGOs) yields better results.

Human development\(^{28}\) if not engendered is endangered. Empowering
people particularly women is a sure way to link growth and human development. NABARD’S financial assistance through various schemes to make the rural women equal partners in the economic prosperity of India.

Based on the above past studies reviewed in the chapter, the present study is conducted the “Impact of NABARD on the Rural Development” in Kanyakumari district of Tamil nadu state.

The foregoing review of earlier studies made in different parts of India, has helped the researcher to under the dimensions of the problem. It will be a guide to conduct a meaningful study on the NABARD Investments and their impact on Rural Development in kanyakumari District.

Despite the significant strides achieved in terms of spread, network and outreach of rural financial institutions, the quantum of flow of financial resources to agriculture continues to be inadequate (Golait, 2007)²⁹

As a result, agrarian distress on account of deceleration of 2 agricultural growth since late 1990’s has been recognized as one of the major impediments in the development process of India. The adverse impact of such slowdown is more serious in the rainfed regions especially on small and marginal farmers with limited resources. Recent studies on agrarian distress have revealed that indebtedness is one of the factors linked with farmers’ suicides on account of crop failure and related issues. This situation brings out the fact that the existing institutional arrangement for credit delivery is not adequate and suitable to address the agrarian distress in the country (Barah and Sirohi, 2011)³⁰.
There are evidences to suggest a close link of debt to distress and suicides in farmers as indicated in higher suicide mortality rate (SMR - suicide death for 100,000 persons). SMR for male farmers in India was much higher at 17.5 than non-famers at 14.2 during 2001-05 period (Mishra, 2007)\(^3\).

The most common risk factors for farmer suicides are – ‘indebtedness’ (87% of suicides) and ‘economic decline’ (74%) (Mishra, 2006)\(^2\).

Reserve Bank of India (2006) also reported that one common factor that can be seen across all regions is that manifestation of economic distress is primarily through indebtedness. The distress may be ‘systemic’ (faced by a large number of households) or ‘idiosyncratic’ (specific to the particular household). This systemic distress may be due to production loses in two consecutive years due to natural calamities and consequent inability to repay loans resulting in increased indebtedness. A farmer will be considered to be ‘idiosyncratic’ distress if he meets any or both of the following criteria:

- The farmer is indebted to the formal and informal sources of credit to the extent of more than the monetary value of the land and other productive assets owned by the family (negative net worth) and/or
- The interest liability on loans from formal and informal sources exceeds 50 per-cent, of his gross family income (liquidity crisis leading to inability to meet even consumption requirements).

Inadequacy of credit outreach by the formal banking system was highlighted by the findings of the 59th round of National Sample Survey Organization (NSSO)
survey of 2003 on ‘Indebtedness of Farmer Households’. According to the Survey, of the 89.35 million farmer households forming 60.4 per-cent of the total rural households, only 43.42 million households (48.6 per-cent) availed financial services especially loans. Thus, 51.4 per-cent 3 farmer households have either not availed loans or have been denied loans (NSSO, 2005)\textsuperscript{33}.

In this context it is pertinent to mention that the Planning Commission of India in the Approach Paper to 11th Five Year Plan 2007-2012 observed that ‘there is evidence that farm debt is increasing much faster than farm incomes’ (Government of India 2006)\textsuperscript{34}.

The situation was quite disturbing in Maharashtra, Karnataka, Andhra Pradesh, Kerala and even in the agriculturally most progressive state of Punjab (Reddy et.al, 1998; Vasavu, 1999; Deshpande, 2002; Sainath, 2005; Mishra, 2005)\textsuperscript{35}.

In a study of indebtedness of farmers in Andhra Pradesh it was reported that 70% of the farmer households were dependent on informal sources (mainly money lenders) for their credit needs (Gulab and Reddy, 2007)\textsuperscript{36}.

Satish (2006)\textsuperscript{37} reviewed the distress in agriculture in punjab. He observed that since the nationalisation of banks and the green revolution, institutional credit for agriculture has grown in Punjab. But the growth had not been uniform and in line with the demand for such credit. Indebtedness has also increased in the state, but a large part of the debt has been for non-productive purposes. The incidence of suicides in Punjab has not been higher than the all India average and studies reveal
that while indebtedness is indeed one of the major causes of suicides, it is neither
the only cause nor the main one. There is thus no direct causal relationship between
institutional credit, indebtedness and suicides in rural Punjab.

In a study in Maharashtra, Kale (2011) found that low productivity, low
annual income, existence of income liability gap, indebtedness and availing of non-
institutional credit were proved as important causes of suicide in Maharashtra.’

Recognizing the need for increased institutional credit for agriculture, the
Government of India initiated a series of policy measures since independence of the
country. As a result the institutional credit structure in the country has shown a
significant growth both in volume and complexity over the past few decades. At
present there is an extensive banking infrastructure comprising 33,411 rural and
semi urban branches of commercial banks, 14501 branches of Regional Rural
Banks, around 12000 branches of District Central Cooperative Banks and nearly
1,00,000 co-operative credit societies at the village level which translates into at
least one credit outlet for about 5000 rural people or 1000 households. This is
remarkable and extensive network. (Puhazhendhi, 2011)

Another major innovation was the introduction of the Kisan Credit Card
(KCC) scheme in August1998 to provide credit to farmers in flexible manner. Now
it has emerged as a major mechanism for purveying credit to agriculture. Up to
September 2010, about 970.64 lakh KCCs have been issued (Government of
India, 2011).
The National Commission on Farmers (NCF) \(^{41}\) under the chairmanship of Prof. M.S. Swaminathan submitted its final report in October 2007. It has stated that ‘Improvement in the outreach and efficiency of the rural banking system is the need of the hour. Towards this end, the financial services would be galvanised for timely, adequate and easy reach to the farmers at reasonable interest rates. The banking system would endeavour to meet the large credit potential needed to raise agriculture to higher thresholds and for the growth of rural and agribusiness enterprises and employment’ (Government of India, 2007).

Financial Inclusion is another important initiative of Government of India and Reserve Bank of India, through which poor and financially excluded people, like small and marginal farmers and oral lessees, are to be mainstreamed in the banking system thereby reducing dependence on money lenders and other informal sources of credit. For this purpose Committee on Financial Inclusion (Chaired by Dr. C. Rangarajan) recommended setting up of two funds, namely, Financial Inclusion Fund and Financial Inclusion Technology Fund, each of Rs 500 crore. Through these efforts are being made for providing credit facilities to the ‘financially excluded’ population, majority of whom are small and marginal farmers and landless (NABARD, 2011) \(^{42}\).

Jugal (1997) \(^{43}\) inferred that the term loan for agricultural purpose granted by zonal development Banks enable the barrowers to improve from mechanization by purchasing tractor, tillers and IP sets for minor irrigation the term loan also helped in increasing irrigation area by 22.40 per-cent of land holding as well as cropping patterns and cropping intensity from one crop to two crops a year.
Veerashekarpappa (1997) in his study on Institutional finance for rural development concluded that institutional finance was instrumental in acquiring productive form assets and development of irrigation facilities this result in changes in the cropping pattern increase in the cropping intensity and adoption of HYVs.

Sharma (2000) has discussed development activities of floriculture and credit support in his article on “NABARD’s role- credit support to floriculture” He mentioned “NABARD” has sanctioned the several scheme for floricultural development. He observed major emphasis has given to floriculture under controlled conditions. The states, which are contributing a lot of floriculture, are Maharashtra, Andhra Pradesh, Karnataka and Tamil Nadu. NABARD has much refinance to floriculture project. The bank has contributed in a very big way to improving the export earning of fresh flowers by the sanctioning of export oriented project in cut flowers.

He observed that “NABARD “ has played very important role regarding refinance facilities to floriculture unit which are, to arrange periodical meetings with concerned research institutions or bankers, to circulate the model schemes of different types of flowers, to publishing the quarterly document entitled “Technical Digest”- Research result, holding experience and sharing dialogue with bankers. He also observed the constraint in financing floriculture project i.e. import of varieties and technologies increase the project cost, lack of cold storage facilities at airport, inadequacy of air cargo space, delay in clearance of import of exotic plant and seed materials.
The NABARD impact evaluation of SHGs covered by the bank-linkage programme (Puhazhendi and Satyasai, 2000) study covers the changes in socio-economic conditions of 560 members of 223 SHGs in 11 states before and after (spanning a three-year period) their association with the SHG. Impact of the SHGs in terms of economic status of the households, according to the study is as given below.

Another study of 70 SHGs promoted in Tamil Nadu through four leading NGOs, was undertaken by NABARD during 1996-97 (Puhazhendi, 2000) assessed the performance of groups using a scoring system covering indicators such as homogeneity of groups, regularity in holding meetings attendance at meetings, increase in rate of savings, share of production loan to total loan, training, NGO involvement and effective leadership for ASSEFA, MYRADA, DHAN Foundation and LEAD Self – Help Groups As much as 61 per-cent of groups were found to be performing well, 29 per-cent were found to be average and 10 per-cent were poor. In the Tamil Nadu study, economic impact was assessed through net increase in family income, which was found to have more than doubled for the sample groups during the period of participation in the SHG. Social impacts identified related to literacy levels, housing facilities and food security. Empowerment of women was observed in the form of participation of financial decisions in the family, checking liquor addiction of male family members and sending children to school. The groups were also found to be influential in the community with some women becoming members of panchayats.
A study on ‘SHG-Bank Linkage Programme for the rural poor-An Impact assessment’ was conducted by **NABARD (2002)**. Among 115 SHG members of 60 groups in states namely Orissa, Chattisgarh and Jharkand, there was an increase of Rs. 12,319 in the family income of the SHG members after the intervention of SHGs while 45 per-cent of the households were observed to have accumulated assets after joining the SHG. As far as social impact is concerned there was a significant improvement the status of women in aspects such as joint decision making at household level, talking freely with outsiders and officials, demanding for rights, domestic violence, exposure to outside world etc.

**Navadkar et al (2001)** in their study on “Self-Help Group- Bank linkage for Micro Credit funding to rural poor” examined the micro credit funding in India and its progress in Self Help Groups (SHG). The results of the study indicated that the NABARD and Rashtriya Mahila Koh (RMK) are the two important funding agencies for Non-Governmental Agencies (NGOs) or SHGs. The study founded that there was significant progress in SHGs linkage programme from 1992-1993 to 1999-2000 and the SHGs received loans at the interest rate of 12 per-cent per annum directly from the banks or NGOs. The study also suggested that the SHG-Bank linkage should be strengthened to provide micro-credit to the rural poor.

A study commissioned by NABARD in Tumkur and Mysore(Karnataka) covering 900 respondents revealed that banks in many cases had a higher risk perception and gave smaller size loans which resulted in inadequate loans resulting multiple borrowing and access to informal sources of funds.
Next vital step of the microfinance history in India is the SHG- Bank Linkage Program (SHG-BLP). The linking with the banks started by NABARD granted MYRDA one million Rupees to evaluate the possibilities of collaboration between SHGs in India and the banks in order to organize the rural savings and improving credit delivery to the segment. In 1992, a trial for SHG-BLP with 500 groups could start and this is considered as a milestone in the development of banking for the poor. (Bansal, 2011; Seibel, 2005) In the year 2005, 1,618,456 SHGs has been financed by the SHG-BLP, with a reach of an estimated 121.5 million people (Swain, 2007). These SHGs by the linkage program, recorded to have a high and exact time on repayments, often with higher per-cent age than 95 per-cent (Karmakar, 2008)\textsuperscript{50}.

\textbf{NABARD (2001)}\textsuperscript{51} conducted a study on Rural Non-Farm sector in Ludhiana and Sangrur districts of Punjab during 1999-00 covered PCARDBs, Commercial Banks, RRBs, and State Cooperative Bank. The study revealed that total recurring employment created by the sample NFS activities was 507,830 man days with average potential of 25,883 man days per unit. Around 30 per-cent of the sample borrowers repaid their loans regularly.

\textbf{NABARD (2001)}\textsuperscript{52} conducted an ex-post evaluation study on rural non-farm sector in Ludhiyana and Sangrur districts of Punjab. This study reported that the recovery per-cent age of RNFS loans in sample banks were 89 per-cent in Ludhiyana and 85 per-cent in Sangrur district during the year 1998. Effective monitoring and follow-up was reported to be the main reason for higher percentage of recoveries.
**NABARD (2003)** has undertaken an evaluation study on District Rural Industries Project in Tirunelveli District of Tamilnadu. This study found that recovery of loans under RNFS was good in the case of PCARDBs and RRBs but not satisfactory in the case of Commercial banks when compared the recovery registered under agricultural loan.

**NABARD (2004)** conducted a study on Rural Non-farm sector activities in Kollam and Allapuzha Districts of Kerala. The activities covered were Fish Processing, Concrete Works, Mat Making, Furniture Making, Brick Manufacturing and Common Catering. This study reported that the highest number of man days of employment generated (960 male + 160 female) were found in Brick Manufacturing Industry. It was observed that the repayment performance in smaller investments, i.e., Concrete Work, Fish Processing and Mat Making was better than those of bigger investments, i.e., Furniture Making, Brick Manufacturing and Multi Catering Units.

**NABARD in 2004** conducted a study on Employment Generation and health and Sustainability of RNFS units in Shimoga District, Karnataka. The study covered 146 units financed by Sahayadri Grahmin Bank, KSCARDB, Shimoga DCCB and Commercial Banks. The study revealed that the handicrafts units generated 10,848 man days of employment during the study period followed by 56,482 man days by Manufacturing Industry 45,698 man days by Agro based Industry, 60,425 man days by Service Industry, and 40,050 man days by Retail Trade/ Small Business.
NABARD (2004)\textsuperscript{56} evaluated that in Kollam and Alappuzha districts of Kerala, the repayment of RNFS loans was appreciable for smaller investment activities covering below Rs.50000 to Rs.100000. These activities include fish processing and mat making. Wilful defaulters and improper follow up action taken by the banks for recovering the overdue were some of the reasons for the poor recovery.

NABARD (2005)\textsuperscript{57} found that credit flow to RNFS has increased over the time due to insufficient and irregular orders (fashion technology), weaning away of the members from the group by private traders (coir mat) and non-utilization of the machines (coir rope). In Bhilwara District of Rajasthan, NABARD (2006)\textsuperscript{58} revealed that the repayment performance was excellent by 92.2 per-cent. The excellent repayment performance was due to the manufacturing and service activities financed by the banks. The defaulters accounted for 46 per-cent to sample size. The wilful default was reported by 35 per-cent of total defaulters.

The concept of microfinance is not new. Savings and credit groups that have operated for centuries include the "susus" of Ghana, "chit funds" in India, "tandas" in Mexico, "arisan" in Indonesia, "cheetu" in Sri Lanka, "tontines" in West Africa, and "pasanaku" in Bolivia, as well as numerous savings clubs and burial societies found all over the world. But the latest version of the same ‘Microfinance’ received an impetus in the mid-1990s, after the World Summit for Social Development was held in Copenhagen in March 1995 and with the United Nations declaring the year 1996 as the International Year of Eradication of Poverty and 1997-2006, as the first International Decade for the Eradication of Poverty. Around the same time, the
World Micro Credit Summit at Washington D C in February 1997 announced a
global target of supporting 100 million of the world's poorest families, especially
women, with micro credit for self employment and other financial and business
services by the year 2005(Nair, 2001)\textsuperscript{59}.

The initial idea of the creation of buyer power was conceptualized around
grassroots cooperatives and micro-credit and number of initiatives around the
provision of small loans to get the disadvantaged out of poverty and to make them
accept entrepreneurial responsibilities were central considerations (Chatterjee
2009)\textsuperscript{60}.

But what we see as a formal microfinance today evolved in Bangladesh, Indonesia, Philippines and Sri Lanka and has now been customized and adopted in
India too. In India, a very large number of the poor continued to remain excluded
from the large and organized formal banking system. Hence the need for an
alternative credit delivery mechanism which would meet the requirements of the
poor was acutely felt in the late 1980s (Ramanathan, 2009)\textsuperscript{61}.

Though the concept of micro-finance in India was introduced sometimes in
1985, it was widely accepted and implemented in 1996 only. The National Bank for
Agriculture and Rural Development (NABARD) was the pioneer which initiated a
search for alternative policies, systems and procedures, savings and loan products,
other complementary services, and new delivery mechanisms, that would fulfill the
requirements of the poorest by improving their access efficiency with the help of an
already existing wide network of bank branches. Thus, the Self Help Group (SHG) - Bank Linkage Program (BLP) took shape.

The intent initially was philanthropy and charity but gradually microfinance gained ground as a profitable business proposition. The charity model gels well with the destitute i.e. the poorest of the poor but the relative poor will benefit more from the business model (Srnc & E.Svobodová, 2009)\textsuperscript{62}.

As on date, microfinance has multiple players like Cooperatives, Regional Rural Banks (RRBs), Commercial Banks (CBs), MFIs, Non Governmental Organization (NGOs) etc.

Government of India’s Rural Development and Poverty Alleviation Programmes have been evaluated by various Government organisations viz. Programme Evaluation Organisation of the Planning Commission, Concurrent Evaluations carried out by the Ministry of Rural Development with the help of reputed institutions located at the regional level, RBI, NABARD, IFMR, NIUA, NIRD and other organisations like Universities, Research Institutes, NGOs, and Individuals. Their approaches, conceptualisation and methodology laid their focus on the success and shortfalls in terms of performance, as measured by income and employment generation or assets creation. But they have not attempted to quantify the negative externalities of the programmes, as their conceptualisation (theoretical caveat) was limited in focus and was constrained by the immediate requirement of the policy makers.
Various studies undertaken by distinguished scholars have broadened the understanding of the related issues. For example, Hanumantha Rao in 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.

Manikkumaran (1997) examined last 30 years secondary data from 1960-1990 and found that the agricultural growth is inversely related to rural poverty and directly related to environmental quality in the State of Tamil Nadu.

Bina Agarwal in 1997 analysed 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 environmental degradation, the study traces 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 Governmental and community initiated attempts at environmental protection and regeneration and computed an aggregate index GEP (V) to address those issues.

The relationship between poverty, environment and development is quite complex and not amenable for easy generalization. There is a widely held view,
particularly in the West; the poverty is the main cause of environmental
deterioration, because the poor are not in a position to use natural resources
sustainably (Duraippah 1996, Prakash 1997). The degradation in turn, it is
believed leads to aggravation of poverty.

The poor in this view are perceived as having a short time horizon,
discounting the future benefits from conservation rather heavily owing to the
urgency to make a livelihood and avoid hunger. Such a time horizon leads to
unsustainable use of natural resources (M.V. Nadkarni, 2000). Poor farmers put in
a tremendous amount of planning and labour into building and maintaining terraced
fields, controlling soil erosion, nurturing tree species for fuel, fodder and soil
fixing, and intricate soil and engineering mechanisms responsible for conserving,
harvesting and distributing irrigation water (Prakash 1997). When the poor appear
to degrade the environment, it is basically because of lack of incentives and
appropriate institutions, including lack of clarity on property rights.

Jodha (1986) defined CPRs as “the resources accessible to the whole
community of a village and to which no individual has exclusive property rights. In
the dry regions of India, they include village pastures, common forests, waste lands,
common threshing grounds, waste dumping places, watershed drainages, village
ponds, tanks, rivers / rivulets and river beds, etc.” There are number of factors
attributed for the marginalisation of the use of CPRs. (Jodha 1986 1985a, 1985b,
Tony Beck and Madan G Ghosh (2000)\textsuperscript{69} estimated roughly that the CPRs currently add some US $ 5 billion a year to the incomes of poor rural households in India, or about 12 % to household income of poor rural households. In Pani (water) panchayats (R.S. Deshpande and Ratna Reddy: 1990), every rural household has an equal share in irrigation and water resources. The water rights are tradable, so that even the landless labourers gain from the irrigation resources generated. Grass roots democracy is used to integrate environmental regeneration and rural development to alleviate poverty.

Less favoured lands are extensive in the developing world. These lands are characterized by lower agricultural potential, often because of poorer soils, shorter growing seasons, and lower and uncertain rainfall, but also because past neglect has left them with limited infrastructure and poor access to markets. Population size continues to grow in many less favoured areas, and this growth has not been matched by increases in yields. The result is worsening poverty and food insecurity problems, which in turn is contributing to the widespread degradation of natural resources (e.g. Mining of soil fertility, soil erosion, deforestation, and loss of biodiversity) as people seek to expand the cropped area (Trudy Owens and John Hoddinott 1999)\textsuperscript{70}.

According to a report prepared by the Technical Advisory Committee of the CGIAR, marginal and sparsely populated arid lands account for 75 % and 85% respectively, of the total agricultural area in Asia and Sub-Saharan Africa (CGIAR 1998). Their shares in total agricultural production are lower but still large. Peter Hazell and James Garett (1996)\textsuperscript{71} estimated that less favoured lands in China and India account for about one third and 40% of total agricultural output, respectively.
Shenggen Fan and Peter Hazell (2000)22 have made an empirical analysis of Rural India with particular reference to less favoured areas. They concluded that the 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. The discussion above points out that the studies on poverty focused on a single theme that is one of measuring the impact of poverty alleviation programmes in the country adopting different methodologies. The yardsticks employed by the researchers have helped only to quantify the positive impact of various developmental programmes. They have neglected the negative externalities in their exercises. Thus the available literature on development and environment as well as the view of policy makers of various national and international organizations lead towards a new conceptualization and consequent policy framework. In view of this development all over the world, policy makers have of late turned their attention towards environmental issues, in achieving faster economic development. The time has come now to review all the developmental projects from totally a different perspective. It warrants reconceptualisation of various developmental projects, and evolving of a suitable methodology for adoption.

The studies above point out that the access to CPRs by the poor is diminishing due to various factors. CPRs have been and still remain crucial resources and provide substantial benefits to the poor. It could be listed some shortfalls of the Govt. They are: a) lack of suitable policy to manage the common property resources, b) the resources accessible to the whole community of a village and to which no individual has exclusive property rights, c) lack of incentives and appropriate institutions, d) the Govt. policies of population, food, natural resources, etc. are not well integrated, they obstruct the optimal use of the local resources and e) less favoured areas have not been paid much attention and deserve to earmark more funds to solve the problems of poverty, food insecurity and environment.
The complex relationship in between poverty, environment and development has to be identified, zone-wise and activity wise. The present project intends to give certain specific policy directions to conserve the local resources and to provide a better security of livelihood to the poor. This leads to drawing up objectives for prosecuting a fresh study in the micro setting of the seven selected villages in the State of Tamil Nadu.

RESEARCH GAP

The literature reviews attempted above is not exhaustive though substantial. The review reveals that while several studies are available on the role of NABARD towards rural development, there is hardly any noteworthy work relating to refinance operations of NABARD. It is well-known fact that Sivagangai District is one of the most backward district in Tamilnadu. Sivagangai district ranks 15th position in women’s per capita income, combined GER and LEB and second in literacy rate. It is interesting to note that there is not much divergence between human development values and gender development values in the Sivagangai district. The human development index is 640 and gender equality ratio is 635 which is almost equal. Hence, there is gender equality in human development in Sivagangai district. The reviews referred has not been touched up on the women empowerment, human development through NABARD. The present studies fill this gap in the existing literature on refinance operations of NABARD. Such a kind of studies will be of much useful to planners and programme implementers to understand the factors facilitating beneficiaries of NABARD.
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