After more than sixty years after planned development in India, the rural transects are still facing impoverishment; a consequence of failure of trickle down of development efforts to the grass roots. Inspite of planner's motivation to achieve development with equality popularly known as 'inclusive growth', the country has been facing wide regional disparities both between urban and rural and between regions. Poverty, a cause and consequence of underdevelopment is a continuing issue to be tackled with. Rural indebtedness has been an agenda of discussion right from the time of independence. Safe, easy and affordable credit and other financial services to the poor and vulnerable groups, disadvantaged areas and lagging sectors is recognised as a pre-condition for accelerating growth and reducing income disparities and poverty. Access to well-functioning financial system by creating equal opportunities, enables economically and socially excluded people to integrate better into the economy and actively contribute to development and protects themselves against economic shocks (RBI, 2009).

Financial inclusion is important because it is considered as an important condition for sustaining growth (Subbarao, 2009). Such access is especially powerful for the poor as it provides them opportunity to build savings, make investments and avail credit. Access to financial services also helps the poor to
insure themselves against income shocks and equips them to meet emergencies such as illness, death in the family or loss of employment. It helps them to get away from the clutches of usurious money lenders. Financial inclusion also permits governments to make payments such as social security transfers and National Rural Employment Guarantee Programme (NREGA) wages into bank accounts of beneficiaries. A review of available literature on rural financial architecture on concepts, focus and studies on financial inclusion is presented in this chapter.

2.1 The Indian Rural Financial Scene

The history of regulating rural financial situation in India dates back to colonial period, which was dominated by moneylenders. The Taccavi loan Act in 1871-79, Land Improvement Loan Act in 1871 and 1893 empowered Local Governments to advance long term loans for investment in land from State funds. Further, Agriculturists Loan Act in 1884 enabled provision of short period loans for purchase of working capital and the Deccan Agricultural Relief Act, 1879 was enacted to regulate the business of money lenders. The cooperative forms of organizations were introduced in India by Cooperative Societies Act in 1904 which was modified in 1912 to overcome the deficiencies of the former, establishing a three tier system at village, district and provincial level. Though this was an earnest step in institutionalising rural financial scene, failure of cooperatives to finance agriculture and other allied activities was identified by Malcom Darling’s Report (1935) and the Statutory Report of RBI (1937).

The post independence scenario of rural credit delivery was based on the All India Rural Credit Survey Committee Report (AIRCSC) in 1954 which noted that cooperatives are a failure which accounted for only 3.1% of aggregate rural debt in the country. One of the major steps for State intervention in rural financing was the establishment of SBI, nationalizing the Imperial bank of India. With all these efforts to enact effective regulations, the rural financial scenario remained grim, gripped in the hands of usurious moneylenders who acted as capital contributors in the event of absence of adequate institutional mechanism to serve rural demand. This was
reiterated by the finding of All India Rural Credit Review Committee (AIRCRC) in 1969 that the money lenders ultimate motive was of accumulating assets pledged by borrowers. A policy of social control was enacted prior to nationalisation of commercial banks in 1969, to establish ‘mass banking’ replacing the then prevalent ‘class banking’. This was followed by the establishment of specialized rural focused institutions, the Regional Rural Banks (RRBs) sponsored by the commercial banks in 1975, which was expected to combine the local feel of cooperatives and the business acumen of commercial banks. The second phase of nationalisation was enacted in 1980. However with all these efforts the rural financial architecture remained deficient to serve the financial needs of the rural poor owing to a host of factors. 1991, marked the era of financial liberalisation, with a reversal from the so called objectives of serving the un-served and under served. The reversal of policies with orientation on business than on policy stances of eliminating uneven development was clearly reflected in closing down and reduction of rural branches. Leeladhar, 2005 observed that despite making significant improvements in all areas relating to financial viability, profitability and competitiveness, there are concerns that banks have not been able to include vast segment of the population, especially the underprivileged sections of the society, into the fold of basic banking services. However in 2003, the RBI policy of ‘financial inclusion' to provide access to financial services to the poor can be earmarked as another bold initiative in serving the rural transects targeting inclusive growth. Committee on financial inclusion in 2008 (Rangarajan committee) observed that financial inclusion of hitherto excluded segments of the population is critical to sustain and accelerate growth momentum. For achievement of the same, the committee has put forward multi-pronged strategies including establishment of National Mission on Financial Inclusion, revitalizing the RRBs and Cooperatives, introducing MFI model (SHG- bank linkage) and Business Facilitator and Business Correspondent Model.

2.2 Conceptual Framework of Financial Inclusion/ Exclusion

Financial exclusion has been a point of discussion for the planners and policy makers most recently; the emphasis being shifted to ‘inclusive growth’
incorporating those who have missed the ‘bus of development’ and are still abode on the realms of poverty, even after the massive planned economic development along more than six decades of independence. The definitions of financial inclusion or exclusion vary across the geographic regions decided by the concomitant economic development. This study focuses on financial inclusion with respect to the poorest of the poor and emphasizing a wider connotation of the term ‘financial services’ than defining it in a narrow perspective of owning a savings account with a bank. The definition of several aspects of the term propounded by several authors and committees and commissions is reviewed here to arrive at an acceptable working definition.

The earliest references to “financial exclusion” seem to date from the early to mid 1990s. The vast majority of published works examining financial exclusion, either as the central focus or as a part focus, emanate from the United Kingdom. Definitions of financial inclusion in literature tend to vary on dimensions such as ‘breadth’, ‘focus’ and ‘degree’ of exclusion (RBI, 2009). The breadth dimension is the broadest of all definitions which defines financial inclusion as a consequence of social inclusion which prevents the poor and the disadvantaged from gaining access to the mainstream financial system. The prominence of the term financial exclusion in the late 1990s parallels the rising prominence of the concept of social exclusion in social policy; the notion of “exclusion” is common to both (Chart Link and Associates, 2004). Some of the definitions of financial inclusion reiterating this view are as follows. Financial Exclusion refer to situation in which people encounter difficulties accessing and/or using financial services and products in the mainstream market that are appropriate to their needs (European Commission, 2008). Leyshon and Thrift (1995) define financial exclusion as “those processes that serve to prevent certain social groups and individuals from gaining access to the financial system”. According to Sinclair (2001), financial exclusion means the inability to access necessary financial services in an appropriate form. Financial exclusion can be seen as a consequence of social exclusion. Exclusion can come about as a result of problems with access, conditions, prices, marketing or self-exclusion in response to negative experiences or perceptions. Report of the
Committee on Financial Inclusion defines financial inclusion as delivery of financial services at an affordable cost to vast sections of disadvantaged and low-income groups. (GOI, 2008). Unrestrained access to public goods and services is the *sine qua non* of an open and efficient society. This view is reiterated in the definition “the process of ensuring access to timely and adequate credit and financial services to vulnerable groups at an affordable cost (Kamath, 2007). As banking services are in the nature of public good, it is essential that availability of banking and payment services to the entire population without discrimination is the prime objective of the public policy. In India the focus of financial inclusion at present is confined to ensuring a bare minimum access to a savings bank account. The international definitions of financial inclusion have been viewed in much wider perspective (Leeladhar, 2005).

The ‘focus’ dimension links the other dimensions of exclusion. This dimension essentially takes care of the potential difficulties faced by some segments of the population, viz, individuals, households or communities in accessing mainstream financial services. It is a process that ensures ease of access, availability and usage of formal financial system for all members of an economy (Sharma, 2008). These definitions emphasize several dimensions of financial inclusion, viz., accessibility, suitability, availability and usage of the financial system. These dimensions together build an inclusive financial system. Another issue that needs to be taken care of is whether to measure access or usage; because in transaction banking and insurance we can find that people do not use it even if they are having access to it. Access dimension implies mere access to services while usage dimension is a broader term requiring examination of aspects like access, suitability, availability and actual usage. The World Bank also distinguishes between those who are ‘formally served’ that is those who have access to financial services from a bank and / or other formal providers and those who are ‘financially served’ who also include people who use informal providers. In contrast to the other work described above, the term ‘financially excluded’ is only used to describe those who have no access at all (World Bank, 2005). This study considers only the formal sector which includes all legally endorsed financial
service providers for the purpose of measuring financial inclusion. Hence "financial inclusion" also infers accessibility and usage of financial services from formal service providers. The United Nations (UN, 2006) define financially included as the financial sector that provides 'access' to credit for all 'bankable' people and firms, to insurance for all insurable people and firms and to savings and payments services for everyone. Inclusive finance does not require that everyone who is eligible use each of the services, but they should be able to choose to use them if desired.

The 'degree' dimension is the narrowest of all and defines financial exclusion as exclusion from usage of particular sources of credit and other financial services including insurance, bill payment services and accessible and appropriate deposit accounts. World Bank (2005) describes exclusion as a phenomenon where access to key areas such as transaction banking, savings, credit and insurance. For the purpose of the study this definition has been accepted as the benchmark. Though all services including credit, savings and insurance offered by the banks and other financial institutions are taken as the benchmark, more weightage is given to credit segment. Financial inclusion may be interpreted as the ability of every individual to access basic financial services which include savings, loans and insurance in a manner that is reasonably convenient and flexible in terms of access and design and reliable in the sense that savings are safe and that insurance claim will be paid with certainty (Mor and Ananth, 2007). In India, the focus of the financial inclusion at present is more or less confined to ensuring a bare minimum access to a savings bank account without frills to all. However, having a current account/savings account on its own, cannot be regarded as an accurate indicator of financial inclusion. [Vallabh and Chathrath, 2006]. Financial inclusion is characterized primarily as either general access to loans or access to savings accounts. [Arunachalam R.S, 2008]. Very few risk management and vulnerability reducing products are available to small holder producers. Financial inclusion cannot be restricted merely to opening savings accounts and/or providing credit for consumption/consumer spending but should also encompass delivering financial products tailor-made to cope with the fluctuating earning pattern of the poor. Rogaly 1999 defines financial exclusion in the perspective of exclusion from
particular sources of credit and other financial services (including insurance, bill-payment services, and accessible and appropriate deposit accounts)"

The review of literature suggests that most of the definitions are context specific, originating from country specific problems related to financial exclusion with regard to the respective socio economic dimensions which assumes importance in the public policy perspective.

On the basis of the above review the following working definition has been accepted with regard to financial inclusion throughout the study

“Financial inclusion may be interpreted poor households’ access to basic financial services from formal and semiformal service providers which include savings, loans and insurance and other financial services in a manner that is reasonably convenient and flexible in terms of access and design."

In this perspective, the study attempts to measure financial inclusion as a composite measure that takes into consideration access to transaction banking, savings, credit and insurance.

**Transaction banking:** refers to access to bank’s financial services other than savings, credit and insurance.

**Savings:** Lesser savings leads to lesser capital formation implying lesser development. Not having a savings account can lead to financial exclusion.

**Credit:** credit is the most valid indicator for assessing the status of financial inclusion. Though other indicators are measured, credit access and indebtedness of a family determines the level of well being achieved. Credit measured as a sole measure of financial inclusion can also be useful that it may provide status of the stakeholder considering aspects like source, cost of borrowing, adequacy, proximity etc.

**Insurance:** Insurance provides coverage to the accidents/emergencies arising in a society affecting human lives, assets or livelihoods. Recent developments have
increased popularity and access to insurance. Also Government has enacted insurance policies for the benefit of sea faring fishers. Insurance inclusion is measured as sub element in the financial inclusion designating appropriate weights.

2.3 Approaches to Measuring Financial Inclusion

The literature on financial inclusion lacks a comprehensive measure that can be used to indicate the extent of financial inclusion across countries because of diversity in possible quantifiable indicators and factors inducing inclusion/exclusion. The degree of financial inclusiveness has been less thought about, though indicators of depth of banking system, capital markets, and insurance sector are widely available. Individual indicators such as number of bank accounts and branches can provide only a partial picture. Macro and micro assessment of financial inclusion indicators provides different angles. While the macro indicators help policy makers in assessment of status and depth of financial inclusion, the micro view throws light into the outreach and constraints associated with financial inclusion. Some of the prevalent approaches of measuring financial inclusion are reviewed below.

2.3.1 Macro Assessments

Macro indicators of financial inclusion are built up on available financial monitoring indicators such as number of bank accounts, coverage of population by bank branches, per capita credit, deposit etc. Alternatively this does not suffice an indicator explaining access to financial services. Access is not easy to measure, and empirical evidence linking access to development outcomes has been quite limited because of lack of data. Existing evidence on the causal relations between financial development, growth, and poverty is consistent with theory. However, most of the evidence comes either from highly aggregated indicators that use financial depth measures instead of access or from micro studies that use financial or real wealth as proxy for credit constraints (World Bank, 2008). Economic approach to measuring financial inclusion/exclusion depicts it based on simple economic concepts using ‘exclusion curve’, which plots the proportion of the population in a particular income band that consumes a particular financial service.
A steep rise in the exclusion curve around a particular income band suggests the likelihood that there is an income threshold for acquisition of the service, below which most consumers will be completely unable to afford the service, or below which the product is inappropriate is termed as income exclusion. Price exclusion depicts a relatively even rise in ownership of a given service across income bands which suggest that consumers are able to purchase a service based on their perception of its value and their willingness to pay, which is only partly influenced by their income level (Chant and Link Associates, 2004).

The approach to financial inclusion in India encompasses concentrating on vast majority who are excluded (Thorat, 2007, Sharma, 2008, Subbarao, 2009, RBI, 2009). Financial Inclusion can be monitored in two ways, one; exclusion from payments system, ie not having access to a bank account. The second type of exclusion is from formal credit markets, requiring the excluded to approach informal and exploitative markets. Through nationalisation of banks in 1969, it was envisaged to extend coverage of banks in unbanked areas, thus increasing the scope of covering larger population. Recently the focus has been concentrated on providing affordable basic banking services.

The macro indicators- encompassing aggregate data sets have severe limitations. The number of accounts of the population does not imply access, further there can be multiple accounts for a single person. Therefore the individual survey data can provide better picture of the situation amenable for policy decisions. However the macro view of supply and demand side indicators of financial inclusion/ exclusion is inevitable in framing policies and implementation of plans to support the development process.

2.3.2 Micro Assessments

As indicated earlier, the core/headline indicators of financial inclusion can be arrived from individual survey data that would help in eliminating data insufficiency barriers of measurement. While the micro level assessment can provide a detailed picture; the argument of whether to contend with ‘individual’ or ‘household’ level of exclusion has to be framed out. A study on financial services provision and prevention
of financial exclusion carried out in Europe under the auspicious of European Commission (EC, 2008) discussed on whether to assess financial exclusion at individual, family/household level. If the assessment is made at the individual level, people appear to be financially excluded even though their partner may make extensive use of financial services. In most countries there is a legal age limit below which credit facilities cannot be granted. As a consequence many studies have looked at adults aged 18 or over, although others cover people from the age of 16 or 15. On the other hand, by assessing access at the family level (that is the head of household and their partner if they have one) a clearer idea of the proportion of the population with no ready access is available, even through a partner, but underestimate the proportion of people at risk of being financially excluded if they experienced the break-up of their family. It also underestimates the number of people who are affected. For this reason the United Kingdom Government, in its monitoring, estimates the number of adults living in family units without access to banking. Assessing access at the household level (that is considering all adults living in a household) compounds these problems still further as there is much less stability of households than of family units. Moreover, household level analysis does not provide estimates of the financial exclusion faced by young adults still living at home.

Suran and Narayana, 2009 used the financial diary approach with a view to understand and map the financial flows of poor families in fishing hamlets. This approach verifies income sources of selected families with a view to understand income and expenditure pattern for a period of 50 days during trawl ban period (monsoon resource conservation measure enacted in the coastal waters of Kerala usually for a period of 45 days during June to August) and consequent incidence of debt, demand pattern and evaluation of sources of finance.

2.3.3 Financial Service Supply Assessments

The financial inclusion studies can be classified in a mixed perspective of macro and micro studies, viewing from the angle of supply and demand of institutional finance.
The institutional supply of credit to poor has been researched both at macro and micro levels. The macro economic perspective analyses country level experiences in routing finances to poor while the micro angle scrutinises institution level performance in credit delivery. Macro economic variables to capture geographic and demographic pattern of banking system includes number of branches and ATMs relative to population and area and actual use of deposit and credit services (number of loan/deposit accounts relative to population and average loan and deposit size relative to GDP per capita) etc. In the analysis of cross country outreach variations in 99 countries using correlation and regression it was found that larger economies enjoy larger levels of outreach due to scale economies in banking service provision and the availability of better communication and transportation facilities (Beck et al, 2005). Better governance and a more effective system of credit information sharing are positively correlated with outreach. Cross-country evidence suggests a positive relationship between financial intermediary development and poverty alleviation. Arora and Leach, 2005 presents a comparative analysis of Indian and South African financial scenario, being countries which have pursued different political paths. Where India’s state-led planning heavily emphasised reaching out to the rural poor and other marginalised sections of the population, South Africa excluded blacks from economic, political and social participation. The South African case emphasizes the market-led approach in financial inclusion of the unbanked. The country’s achievement in this sector is commendable with 167 per cent of domestic credit (as a percentage of GDP) in 2001, as against 55 per cent by India, while that of low and middle-income countries as a whole stood at 69 per cent and for high income countries, at 173 per cent. However, almost half of the 44.8 million population remains on the periphery of the economy and is disconnected from financial services. Of the 9.4 million who are unbanked, 88 per cent are black, 9 per cent coloured, 1 per cent Asians and one per cent white. A major obstacle in accessing financial services is the cost of providing them on a small scale. In addition to banking costs, for many clients, there is an additional cost of transport to a point of access and the opportunity costs associated with travel time. So cost reduction exercise would need to include an increase in points of interaction with
the banking system (including branches, points of sale, or through use of alternative technology such as cell phones).

The Indian perspective of supply side financing has been discussed widely in light of priority agenda of financial inclusion strategy of the RBI. Even after concerted efforts by Government and the Reserve Bank in pursuing the goals of financial inclusion, out of 6,00,000 habitations in the country, only 30000 have a commercial bank branch. Just about 40% of the population across the country has bank accounts, and this ratio is much lower in the north east of the country. The proportion of people having any kind of life insurance cover is as low as 10% and the proportion having non life insurance is an abysmally low of 0.6%. People having debit cards comprise only 13% and those having credit cards only a marginal 2%.

The lack luster performance of Indian banking sector has been criticized in the 10th Five Year Plan document, Dimensions and Strategies (volume I); “The banking system must be encouraged to reach out to the enterprises in the informal sector through innovative means. This is effectively what is intended by the various targets specified for priority sector lending by commercial banks. However, priority sector lending has created a culture of mechanical lending in public sector banks, in which there is little effort at credit appraisal of lendings made to priority sectors” (GOI, 2007). The need for reaching out to the informal sector through innovative means has been rightly emphasised in the document. According to the Census 2001, only 4.16 crore households out of 13.83 crore households in rural India are reported to have availed banking services. With all efforts made by banks and SHGs, only 30 per cent of rural households are linked to the banking sector. Over 9.67 crore of rural households - inferentially a vast majority of them are dependent on farming – are yet to be reached by banks. Among them 5.59 crore households are the deprived lot, who do not own any of the assets listed in the Census enumerations.

Anjanikumar et al, 2007, analysed the performance of rural credit and factors affecting the choice of credit sources. The study was based on the Debt and
Investment Survey of NSSO, conducted in 48th round and 59th round. They found that performance of rural credit delivery has improved since the indicator of dependence of non institutional sources of finance showed considerable reduction. The share of non institutional sources of rural credit has declined from 91 per cent in 1951 to 44 per cent in 1991-92 and a dramatic achievement was noticed in the increase of share of institutional sources of rural credit from less than 9% in 1951 to 56% in 1991-92. Later on this trend seemed to stagnate and the role of exploitative sources persisted. The share of institutional financing fell in the states like Bihar, Chandigarh, Tamil Nadu and most of the North Eastern States. Rural households continued to depend upon informal sources such as money lenders, traders, landlords etc. The study found that interest charged by informal moneylenders was exploitative and therefore stable, reliable and reasonable credit delivery system is a necessity to prevent the exploitation of rural households by informal moneylenders.

The micro angle of supply side financing looks into the institutional perspectives, particularly the problems related to financing and the underlying factors. Financial services inclusion research (supply side) carried out by SEEDA (South East England Development Agency) to assess the nature and extent of Community Development Finance Institutions (CDFI) including Credit Unions in the region and sustainability of finances assessed gaps and sustainability of CDFI’s. The study made use of extensive secondary information in addition to primary information from stakeholders. The findings of the study emphasized that Credit Unions and CDFIs in the South East have potential for financial inclusion in the region lest their scale of challenges and issues are resolved (SEEDA, 2004).

2.3.4 Financial Service Demand Assessments

Attempts have been made all over the world to synthesize the needs of the poor to arrive at demand for financial services by the poor. BMRB Social Research, 2006 on behalf of the Financial Inclusion Taskforce conducted a study to assess the access to financial services of those on margins of banking in Great Britain with the main objective of assessing financial exclusion to access cash and
transfer money. The elements of financial exclusion of relevance to this research relate to lack of ownership, or lack of full transactional use of a bank account. A clear link was established between marginally banked household status and other social exclusion indicators. The research found that reasons for not owning a bank account were two-fold: either due to personal circumstance or personal choice. While circumstances such as lacking the relevant identification or credit rating to open a bank account were important, the large majority of unbanked individuals had made a personal choice not to open an account.

The rural population in India is subjected to great deal of indebtedness and is subject to exploitation in the credit market. Rural households need credit for investing in agriculture and smoothing out seasonal fluctuations in earnings. Since cash flows and savings in rural areas are not sizeable to fit into the consumption needs like education, clothing and household necessities including non-food expenses, they need to rely upon credit [Vallab and Chathrath, 2006]. The financially excluded sections in India largely comprise marginal farmers, landless labourers, oral lessees, self employed and unorganised sector enterprises, urban slum dwellers, migrants, ethnic minorities and socially excluded groups, senior citizens and women. While there are pockets of large excluded population in all parts of the country, the North East, Eastern and Central regions contain most of the financially excluded population (Thorat, 2007).

The marine fisheries sector in India is not different form the other rural transects. A study conducted by the Microfinance Consulting Group in the auspicious of FAO and the UNTRS (Arunachalam et al, 2008) to analyse provision of financial services to low-income fisherfolk, observed that a combination of variability in catch, technology upgrades, over capitalisation, rising costs, aggressive fishing, over crowding, etc. have made economics of fishing and fishing related occupations uncertain. The investment and operational costs have gone up considerably without any drastic increase in output. This has resulted in fishermen getting increasingly dependent on loans to finance their expenditures and also using loans as coping mechanisms. Expenditures take the form of capital expenditures: which include purchase of boats, launches, nets and engines etc;
Running expenses: which include boat, net and engine repairs, ice fuel and food etc and Other Expenditures: which include medical, emergency and other expenditure for family including education. The study by Suran and Narayana, 2009 reiterated the above mentioned findings, in their study on financial needs of the poor households in the coastal settlements of Kerala using the financial diary approach with adequate stress on different aspects of incidence of debt, demand pattern and evaluation of sources of finance.

2.3.5 Indebtedness Assessments

The most important financial service requirement of rural poor is credit, which has almost been the topic of discussion right from the time of independence. Seasonality and uncertainty in agricultural production has always forced the farmers to borrow from different sources of finance. Credit to rural area, particularly, the agricultural sector has always been debatable topic, in terms of issues including lesser accessibility to institutional credit by farmers, mounting non performing assets to the lender on account of non repayment of the debt owing to different reasons including failure of crop. Some major milestones in rural credit are the acceptance of Rural Credit Survey Committee Report (1954), nationalisation of commercial banks, establishment of RRBs and establishment of NABARD. Several simultaneous measures like establishment of the lead bank scheme, direct lending for the priority sectors, differential rate of interest scheme, the service area approach, the SHG bank linkage scheme, the most recent Kissan credit card scheme, special agricultural plans and RIDF have also been launched to further the rural development process. Inspite of these developments rural areas continue to be in the darkness for want of institutional credit coupled with wide spread dominance of non-institutional sources. Several committees have suggested means to increase availability of credit to rural areas including the Expert Committee on Rural Credit (V.S Vyas), Committee on Agricultural Credit through Commercial Banks (Chairperson R.V Gupta), Committee on Cooperatives (Chairperson Vikhe Patil), Advisory Committee on Flow of Credit to Agriculture (Chairperson V.S Vyas) and Task force on Revival of Cooperative Credit Institutions (Chairperson A. Vaidyanathan). The menace of exploitative moneylenders has remained inspite of the above said Government efforts.
Governments have tried to give impetus to agriculture and allied sectors by budget allocations; most recent is the debt waiver scheme announced in the 2008 budget intending to rescue the farmers from the deluge of debt. Some of the studies are discussed herein dealing with agricultural sector in general and fisheries sector in particular. A macro scan of the underlying patterns in rural credit supply has been probed by Anjanikumar et al, 2007 using the NSSO debt and investment estimates. The study found that the access and distribution of rural credit is skewed in favour of better and endowed regions and within the same region is in favour of better off households. The persistence of moneylenders remained a matter of concern because of exploitative interest rates and their undesirable financial deepening. Almost similar finding was reported by Sharma, 2006. Using the NSSO estimates it was established that cultivation was the major source of more than one half of the indebted farmer households and that more than 70% of them were marginal farmers. The amount of outstanding debt had positive and statistically significant relationship with the size class of land possessed and per capita capital expenditure in most of the states. Capital and current expenditure on farm business together accounted for more than one half of the total outstanding debt in majority of the states. The debt outstanding to moneylenders and traders was around three fifths in Andhra Pradesh and Rajasthan, 2/5 in Tamilnadu and Punjab, 1/3rd in Assam, Bihar, Haryana ad Madhya Pradesh. A research paper by Aravind, 2007, outlined and examined the hypothesis that decline in the ratio of investment to production credit over time will lead to reduction in output per unit of crop loan, so that there is positive association between the two. Its verification and confirmation has provided significant policy implications in the sense that it had theoretically and empirically demonstrated the weakness of the current piecemeal approach for improving it by determining the optimal range within which crop to term loan of scheduled commercial banks should vary. The ideal range estimated is that investment credit should be around two third to three fourth of the production credit. A study probing into the sources and pattern of credit and utilization of borrowed funds in irrigated and non irrigated regions in Puri district of Orissa (Panda, 1985) which probed into overdues and factors associated with increasing overdues revealed that while...
farmers in the irrigated region depended more on institutional credit, those in the non irrigated regions depended on non-institutional sources. Large and medium farmers were found to divert credit for non productive purposes than the small farmers. Incidentally, bulk of the chronic defaulters was found in the medium and large farm categories irrespective of the regions under study. Size of loan, utilization of loan for unproductive purpose and repaying capacity were found to influence overdues pattern.

There is no dearth of studies on indebtedness in fisheries, since it is considered as one of the sectors which have been persistently in indebtedness to non formal sources because of the highly uncertain earning pattern. Some of the studies in fisheries sector has highlighted this problem in particular. BOBP initiated a pilot project in 1980 in four fishing villages of Thanjavur district in Tamil Nadu. Located in Adirampattinam about 40 kilometres from Thanjavur, the four villages are Karaijur Street consisting of 334 families, Sunnambukara Street with 149 families, Tharagar Street with 88 families, Arumuga Kittangi Street with 46 families. Fisherfolk of these villages described credit as their most urgent need (Anbarasan and Fernandez, 1986). The men needed credit for buying nets; the women for fish marketing. Consequently the project organized loans from a nationalised bank in Adirampattinam for both fisherwomen and fishermen. In addition, loans for fisherwomen were also organised by the Fisherwomen Extension Service of the Tamil Nadu Department of Fisheries, through a cooperative society. Later in 1982, two studies were carried out on the impact of the loans given to the fishermen and the fisherwomen. It was found that around 67% of the debts normally incurred by fishermen are for purchase of nets. The bank provided loans of Rs. 1000 each to 100 fishermen who belonged to nine groups, to be repaid in two years at 4% interest. Only 25% of the borrowers increased their fish catches and earnings; 55% secured a marginal increase while 25% recorded no increase at all. The group approach to credit did influence loan repayment. After 16 months of the stipulated 24-month repayment period, 48% of the repayments due had been made. Two agencies organised credit facilities for fisherwomen — the Working Women’s Forum (WWF) and the Fisherwomen’s
Extension Service (FWES). Under the WWF, loans were provided by the local Canara Bank. Each loanee received Rs. 100 for fish marketing, to be repaid in six monthly installments at an interest of 4 per cent. The FWES loans were provided by the Fisherwomen’s Cooperative Society; each loanee received Rs. 200 for fish marketing, to be repaid in 26 weekly installments at an interest of 15%. The credit programme for fisherwomen was meant to increase the profitability of petty marketing operations, generate investment capital for them through their own savings, and step up the volume of marketing. The study showed that the levels of credit provided to the target groups of fisherwomen were appropriate and that all borrowers found the loans advantageous since they did not have to pay exorbitant rates of interest.

Later on a study was conducted among the fisherfolk in Orissa with the objectives of assessing the earning pattern, spending, borrowing and saving pattern (Mammo, 1987). The study also probed into traditional saving methods and purpose of savings in small scale fishing community in the fishing villages of Udayapur and Gopalpur. The author observed two types of credit systems operate in fishing communities: the traditional and the institutional. Traditional sources comprise moneylenders, middlemen, fish traders etc who charge an interest rate between 40% and 50% per annum. The elasticity of the interest rate is determined by the urgency of the demand for loans, on the one hand, and the number of moneylenders in the community on the other. The traditional lending system, tailored to the community’s needs, is still the strongest in fisherfolk villages. Of the 80 households surveyed in each village, 47% and 54% have borrowed from banks and cooperatives, paying interest at the rate of 11-13% per annum. 61% to 68% of the households have borrowed for production-related activities. It was found that the money for consumption expenditure is borrowed from moneylenders, relatives and friends. Although the survey indicates that fisherfolk do want to save, their savings are mostly for short term needs and on a day-to-day basis. Group savings are more appropriate and helpful for lower income groups. Credit facilities and new income-generating activities boost incomes and motivate higher savings.
As part of the BOBP (Bay of Bengal Programme) supported credit project, carried out in four coastal districts of Orissa-Balasore, Cuttak, Puri and Ganjam, it was established that bank credit to artisanal marine fisherfolk can not only be viable but also fully recoverable (Tietze, 1987). Under the project during 1983-86, 29 branches of nine nationalized banks disbursed credit worth Rs. 6.5 million to 2,500 fisherfolk households. (These households represent 12 per cent of the state’s artisanal marine fisherfolk and account for more than 60 per cent of Orissa’s marine fish production). The loans were advanced without subsidy at 12.5 per cent interest, and were refinanced by NABARD. The Orissa credit project demonstrates that non-subsidized lending to marine fisher-folk in India can help banks and fisherfolk alike, if banking services are able to incorporate the principles of flexibility, timeliness, simplicity and borrower education/extension. Direct priority sector lending by commercial and regional rural bank branches, supported by extension services by the fisheries department, seems to offer the best scope to incorporate the principles mentioned above. The rate of loan repayment by fisherfolk was excellent (95 per cent). Other indicators of the effectiveness of the project were the short period between loan application and disbursement (three or four weeks) and productive utilization of loan assets (almost 100 per cent).

Study conducted by the Microfinance Consulting Group in the auspicious of FAO and the UNTRS (Arunachalam et al, 2008) in 10 districts across 3 states - Chennai, Chengai MGR, Pondicherry/Cuddalore, Nagapattinam, Tanjore, Ramnad, Tuticorin, Kanyakumari, Trivandrum and Kollam to analyse provision of financial services to low-income fisherfolk, especially, in the post tsunami context, with the objectives of understanding the extent to which men and women in fisheries are excluded from the mainstream financial system. The study identified their needs for financial services across pre-harvest, harvest and post harvest fisheries with a view to understand supply side perceptions and constraints. Of the 1000 individuals interviewed, less than 2% had an account with a bank or Post Office and even fewer had an insurance policy. That reflects that despite overall growth in the economy, this sector continues to be excluded by the financial sector. It was found that an institutional credit agency could hardly provide them...
with Rs. 50,000 as loan, while the absence of such mechanism directs them to informal credit system, which charges interest rates between 24 to 190 per cent. The study also revealed that it was difficult for them to mobilize money for life cycle events. Their savings pattern was also found erratic with limited number of savings account with an institutional mechanism. The rural markets continue to be operated by few traders. The market operations are not streamlined or automated and hence data is not easily available to capture. Only in those markets where there are intermediaries like SIFFS or Matsyafed are records maintained to track daily sales volumes by the fishermen. Variability in catch pattern affected fishers’ repayment ability, which was observed from SIFFS data; where inspite of repayment delinquencies observed for 3-4 months, many of the production loans closed by 18 months, almost before 50 per cent of loan term is over. The study identified that financial deepening is the need of the day. It was found that traditional microfinance interventions are unsuitable to harvesting activities, while it supports the needs of post harvest fishery activities. The study brought out the need for special financial products for fisherfolk and the requirement of alternative delivery mechanisms.

Analysing different types of assessments that attempts to throw light upon various aspects of financial inclusion, it was found that there is no dearth of studies in assessment of supply side of financial inclusion but limited attempts to study comprehensive demand side financial inclusion. Although there had been attempts to study access to savings, credit and other financial services, it fails to reflect the sectoral and regional imbalances and demand driven need for finances. In this context, present study attempts to assess the level of financial inclusion in one of the marginalized sectors in the economy, the marine fisheries sector, often quoted as example for lop sided development.

2.4 Nature and Causes of Financial Exclusion (The underlying variables)

The reasons for financial inclusion are many. This is promoted by a confluence of multiple barriers including constraints to access, physical and social infrastructure, understanding and knowledge, newer technology, support and
confidence among others (Subbarao, 2009). These barriers seem to be not constructed deliberately but have been the result of structure of financial service providers and socio economic milieu of those being excluded (poor). A significant proportion of people excluded from the formal financial system across countries find access to informal markets driven by a host of factors such as the stage of financial sector development, perceptions of dominant financial institutions regarding the business case for providing financial services for the excluded, financial policy and regulatory system and the institutional composition of the financial system (Fernando, 2007).

A study on financial inclusion in Great Britain identified that the elements of financial exclusion relate to lack of ownership, or lack of full transactional use of a bank account. This can be divided into two groups of interest: the unbanked (those without any form of transactional bank account) and the underbanked (those who have a bank account but do not use it regularly to manage their money), these two groups in combination may be termed as marginally banked (www.financialinclusion-taskforce.org.uk, 2008). Other factors having a bearing on financial inclusion includes proximity and access to services, user fee of ATMs, banking habits among the population, payment options to marginally banked households, security concerns, access to advice, credit/borrowings and savings. European commission found that supply side factors that demote financial inclusion include refusal from banks to open bank accounts for certain groups of people with poor credit history and unstable patterns of employment who fail in the credit scoring. On demand side people are deterred from accessing and using transaction banking for a range of psychological and cultural reasons like ‘cash only generation’ (elderly people)(European Commission, 2008). Fernando (2007) identified that the root cause of supply-side constraints is the conventional view of potential market consisting of poor and low-income people. Two interrelated ideas dominate the conventional view. First is that given low income levels and lagging social development, there is little profit potential in the low end of the financial markets; hence, the conclusion that market-based solutions cannot lead to improved financial services for low-income people and that the private sector has
no significant role in this market segment. Second is that because this market consists of low-income people, it must be served through government programs and programs of charitable institutions including social mission-oriented non-government organizations. The incompatibility of services offered by the suppliers with the product service requirements of the poor has aggravated the accessed problem.

Financial exclusion is an issue in the developed countries as well, although the proportion of population excluded is much smaller. A comprehensive study by the Financial Services Authority (FSA), UK found that 7 per cent of the households lack access to any financial products at all [FSA 2000]. A further 20 per cent are on the margins of financial services. In addition to exclusion caused by physical distance, five other forms of exclusion were identified by this study, viz, access exclusion, condition exclusion, price exclusion, marketing exclusion and self-exclusion.

<table>
<thead>
<tr>
<th>Form of Exclusion</th>
<th>Source of Access Restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access exclusion</td>
<td>Process of risk assessment</td>
</tr>
<tr>
<td>Condition exclusion</td>
<td>Conditions attached to financial products which are inappropriate for the needs of some people</td>
</tr>
<tr>
<td>Price exclusion</td>
<td>Pricing of financial products that make them unaffordable to some</td>
</tr>
<tr>
<td>Marketing exclusion</td>
<td>Targeted marketing and sales</td>
</tr>
<tr>
<td>Self-exclusion</td>
<td>Anticipation by some of refusal of application</td>
</tr>
</tbody>
</table>


There are a variety of factors imposing financial exclusion. For example in remote, hilly and sparsely populated areas with poor infrastructure, physical access itself acts as a deterrent. From the demand side, lack of awareness, low incomes/assets, social exclusion, illiteracy act as barriers. From the demand side, there are number of reasons for the rural poor remaining excluded from the formal banking sector, such as: (a) high transaction costs at the client level due to expenses such as travel costs, wage losses, incidental
expenses, (b) documentation, (c) lack of awareness, (d) lack of social capital, (e) non availability of ideal products, (f) very small volumes / size of transactions which are not encouraged by formal banking institutions, (g) hassles related to documentation and procedures in the formal system, (h) easy availability of timely and doorstep services from money lenders/informal sources and (i) prior experience of rejection by/indifference of the formal banking system (RBI, 2005).

Analysis of type of financial inclusion existing within the poor gives insights into the underlying roots causing exclusion. Financial inclusion exists in many ways like gender exclusion, geographical exclusion, exclusion of the landless etc. While exclusion has many reasons of its existence, a rural resident is subjected to exclusion depending on the possession of land and not personal exclusion (Chaudhari, P C, 2007). Anjanikumar et al, 2007, in their study applied the multinomial logit model to identify the factors which determine the choice of credit outlet using the data from NSSO, Debt and Investment Survey, 48th round and 59th round. The effect of age on probability of borrowing was significant and positive from institutional sources and negative from non institutional sources. It was expected because with age, people mature and hence avoid going for borrowing from non-institutional sources. The effect of gender though was positive for both cases, it was more so for getting loans from institutional sources. The male headed households depicted higher possibilities of getting loans from the institutional sources. Larger farm size enhances the probability of getting the loan from a formal source with an added possibility of repayment of credit. It was also revealed that the people who belonged to the weaker section were found to be having lesser probability of access to institutional credit compared to the general castes. Educational level also had positive correlation with access to institutional sources of credit.

From the supply side, distance from branch, branch timings, cumbersome documentation and procedures, unsuitable products, language, staff attitudes are common reasons for exclusion. All these result in higher transaction cost apart from procedural hassles. On the other hand, the ease of availability of informal credit sources makes it popular even when it is costlier. The requirements of
independent documentary proof of identity and address can be a very important barrier in having a bank account especially for migrants and slum dwellers. (Thorat 2007). The exclusion of large numbers of the rural population from the formal banking sector may be for several reasons from the supply side as identified by the Khan Committee; (a) persons are unbankable in the evaluation/perception of bankers, (b) the loan amount is too small to invite attention of the bankers, (c) the person is bankable on a credit appraisal approach but distances are too long for servicing and supporting the accounts and expanding branch network is not feasible and viable, (d) high transaction costs particularly in dealing with a large number of small accounts, (e) lack of collateral security, (f) inability to evaluate and monitor cash flow cycles and repayment capacities due to information asymmetry, lack of data base and absence of credit history of people with small means, (g) human resources related constraints both in terms of inadequacy of manpower and lack of proper orientation/expertise, (h) adverse security situation prevailing in some parts of rural India, (i) lack of banking habits and credit culture, (j) information-shadow geographical areas, and (k) inadequacy of extension services which is crucial to improve the production efficiency of the farmers leading to better loan repayments(RBI, 2005).

Sector specific imbalances are common in institutional financing and often agriculture bears the grunt in terms of uncertainty associated with earning pattern. The case of fishery is much more pathetic, being perceived as an extremely risky sector among bankers/suppliers/insurance companies. There is lack of sufficient specialized staff with requisite fisheries background in these suppliers and this makes the task of investment even more difficult (Arunachalam et al, 2008). In a study to assess the status of financial inclusion in coastal small scale fisheries sector in South Asian countries including India, Bangladesh and Sri Lanka with special focus on women, the reasons for financial exclusion has been probed. One of the reasons behind the low status of fishing communities is the caste system and the exploitation by middlemen and merchants. Middlemen have the control over credit and fish marketing which drains away the surplus generated and often make them indebted. A combination of variability in catch, technology
upgrades, over capitalization, rising costs, aggressive fishing, overcrowding etc has made economics of fishing and fishing related occupations uncertain. Moreover the distinctive aspect of fisheries credit is that incomes vary on a daily, seasonal and regional basis (in addition to the type of fisheries). There are also closed seasons where income from fishing is zero. This has increasingly forced fisherfolk to depend on loans to finance their expenses in addition to serving as coping mechanism. The key expenditures include (i) capital expenditure towards purchase of boats, launches, nets, engines etc. (ii) running expenses which include boat, net and engine repairs, ice, fuel and goods, etc. and (iii) other expenditure involving medical, emergency and other expenditure for family including education. (Karmakar, et al, 2009). Fishermen are having diverse credit needs owing to above said problems and the banks are reluctant to cater to these increasing credit needs because they do not have any collateral security. As a result they land in the debt trap of the informal credit system comprising moneylenders, financiers, chitfunds and borrowings from friends and relatives.

The reasons for non preference of financing fisheries sector by institutional agencies include (Arunachalam et al, 2008)

a) Variability: variability in catch across fishers/geographies and cyclical income for fishermen was a major issue mentioned by bankers.

b) Inability to Demonstrate Savings: The fishermen are unable to generate cash savings. Traditionally they have been conditioned to spend all their earnings and rely on borrowings for any emergencies or additional expenditure.

c) Seasonality: The fish stock moves from one place to another based on seasons. Hence

d) the catch is dependent on the seasons. Generally a good season in one place is for 6 to 7 months and the remaining months are lean season. Thus, the cash flow varies on this basis. Also, overall value of the catch is dependent on the type of fish catch.
e) **Perishability**: The fish catch is a highly perishable commodity. Very strong output linkages and storage facilities are a must for getting good price of the catch, as it is a highly perishable commodity. (e) **General Risk**: Fishing is generally a high-risk business. The life and the assets are at high risk during fishing.

f) **Fairly High Depreciation**: Fairly high rate of depreciation applies to fishing equipments. Boats and other equipment depreciate quite fast and they need to be replaced within 3 – 5 years or 7 years at the maximum.

g) **High Investment Business**: As the cost of fishing equipments is very high, it is also prohibitively costly to buy these equipments. The small fishermen generally work in groups where one person owns the equipments and remaining invest through labor. As per informal estimates per boat there are three to four small fishermen dependent on it. Ratio of owners to coolies is 1:4 or so and so, it is high investment with diminishing returns today due to over crowding and unsustainable practices.

h) **Migration**: There has been a tendency for small fishermen to migrate to other areas in search of the better fish catch for longer periods of time.

i) **Continuous Technological Changes**: The bigger fishermen (using trawlers) continuously invest in technological upgradation (GPS, improved nets and improved storage mechanisms) and hence get a better catch as compared to small fisherman using traditional methods and equipments. They generally go for deep-sea fishing by leveraging their technological strength and hence reducing the variability/ seasonality associated with the business. In some ways, the presence of these trawlers causes numerous hardships for the low income fisherfolk.

j) **Exclusive Livelihood**: Most of the fishermen exclusively depend on fishing for their livelihoods. They generally do not have other supporting livelihood activities to fall back on during lean season or during any major calamity. This makes them more of a credit risk as also a very vulnerable group.
k) **Environmental Risk**: Due to continuous degradation of environment, the fish catch is reducing along the coastline. This is evident from the increasing distance from the coast that the fishermen need to travel to catch fish. This increases the risk and also the overall expenses. Management of open access resources require careful attention; and

l) **High Input Cost**: Fishing today has become cost intensive – output per unit of investment is rather low and same output can be got with lesser investment. However, subsidies by Govts is slowly increasing the investment in fishing – for example, subsidies for engines serve to incentivise fishers to go for high investment engines. Corrupt practices are also created by the subsidy component as in Small Scale Enterprises (SSE) sector – e.g., showing of some one else's engine for getting subsidy and also the same aspect in registration of boats, etc. The increasingly intensive nature of fishing is also making it less attractive economically.

Several studies analysing the factors behind financial exclusion, particularly credit exclusion were being reviewed above. While credit supply is considered to be most significant in determining financial inclusion, the study has accorded due weightage to access to formal credit supply. Studies in fisheries sector has also concentrated on indebtedness aspect alone leaving behind the question of access to savings and other financial services. The present study would serve to bridge this gap of knowledge by presenting a comprehensive picture of financial inclusion encompassing savings, credit, transaction banking and other financial services.

### 2.5 Informal credit – Boon or Bane

Whether the informal credit is a boon or bane is still a debatable topic as institutional credit supply in rural areas are often insufficient to promote cent per cent financial inclusion. Inspite of the overall performance of banks, the credit flow to rural, particularly agricultural sector is dismal resulting in financial exclusion of the masses. These sectors are governed by the informal credit markets. Dependence on moneylender supplies the rural residents at least to have access
to finance even at higher cost. It can be said that the moneylenders have dynamically outmaneuvered formal financial system in their reach to poor by their adaptive management skills and resilient social networks. They have been interpreted as structurally supporting capitalism because they provide marginalised people who are beyond the scope of banks with purchasing power for the commodity markets based upon credit (Schrader, 1994). However this leads to a phenomenal debt trap leaving the poor borrowers ‘ever in debt’ with an incessant process of debt servicing.

Majority of the available literature focuses on the share of informal lending in rural finances, the causes and problems associated with it while a few approaches move in a different angle focusing on efficacy of informal financing. The debt profile of the rural households in India reveals that informal sector forms the major source of credit to poor households [Vallabh and Chathrath, 2006]. Due to several problems involved in sourcing loan from formal financial institutions, rural households depend upon moneylenders, traders, landlords to finance their capital requirements. However, it has not been recognized that moneylenders have adopted management techniques for survival amidst increasing competition from formal agencies. The comparative advantage of non formal agencies in terms of lower transaction costs, locational convenience, minimal procedures and immediate cash disbursement attracts the poor. However the interest rate charged on such borrowings are high; the average interest rate charged by non institutional agencies being 36% per annum in 1991-92 and 42 % in 2002-03, roughly triple the interest charged by formal lenders (Anjanikumar et al, 2007).

One of the problems that has been a concern promoting uneven development is the aversion of the institutional financing agencies to financing agriculture. Gavan and Dixon, 1975 notes the importance of moneylenders especially where the risk of crop failure is high; most farmers, especially small ones, still rely heavily on local moneylenders, who charge very high rates. Basu, 1997 found that the risk of the lender is high being offered with the standing crop as the mortgage by poor farmers. Similar view has been expressed by Gavan and Dixon, 1975.
The case is not much different in the case of fisheries sector. The coastal residents are considered as an ‘outlier’ in the development process due to the socio economic backwardness. It was revealed that in the absence of institutional credit, the fish worker’s only recourse is mainly the informal credit system (Arunachalam et al, 2008) owing to highly variable (income providing) livelihood like capture fisheries. Viability of fish vending and marketing is affected by the risk of perishability, erratic supply of fish stock, lack of appropriate storage facilities and several other aspects including borrowings for emergencies at high cost and the like. Data across all states indicate that small-scale fish workers cannot access formal institutional credit except through intermediary peoples organisations (SIFFS), State cooperatives (MATYSAFED), NGOs, MFIs (Dhan, ICNW, Sneha, Shanti Dhan, IASC etc) and SHGs. The lone exception seems to be gold loans for which the fishing community accesses banks/NBFCs quite easily and directly. People rely on money lenders, financiers, chit funds, borrowings from friends and relatives for raising funds for life cycle needs, housing, education of children, setbacks and emergencies, etc. In many cases, even for production purposes, they have to rely on informal money markets including trader, merchant and money lenders. And for the poorest among these, even that appears to be seemingly difficult.

The study on deluge of debt and financial needs of the poor households in the coastal settlements of Kerala (Suran and Narayana, 2009) analysing the income and expenditure and borrowing patterns of selected 13 families in Neendakara fishing village in Kollam district in Kerala also reports similar findings. The study found that more than 50% of the poor households in the socially excluded hamlet are not yet connected with the formal institutionalised system for their financial needs. The poor frequently borrow small amounts from money lenders, friends and relatives even though about 46% of the households had access to SHG [Self Help Groups] or bank linkages. In the sample households, the maximum amounts of over 72% of such loans were less than Rs 500. Debt or borrowed funds constituted about 47% of the resource inflow for the sampled households. The share of food in the expenditure basket of the poor was very
high, regardless of the occupation and the source of livelihood of the household. The paper suggests the need for a relook at the design of financial products that banks offer to these underserved, vulnerable clients. More research in the area is recommended with a clear client consultation process before designing financial products for the poor.

However an interesting school of thought developed in this connection is the formal-informal financing institution linkages that formidably conceives the idea of nexus between the bank and moneylender, where the formal financial service has not reached or is unviable. In short, it is not possible to eliminate the role of moneylenders in serving the unbanked or underbanked poor, in light of the inability of the financial system to expand its accessibility to the poor. Studies have reported the weakness of moneylenders, that when the borrowers (small cultivators) differ in their likelihood of default, the moneylenders are asymmetrically informed about the client specific degree of risk. The policy of providing cheap credit through the formal sector can generate adverse 'composition effects' which worsen the terms of credit and the availability of loans in the informal sector. Reportedly an informal nexus already exists between the formal and informal credit suppliers. The market for informal credit is created by the delay in disbursement of formal credit. The delay is controlled by the official of the formal credit agency, and he is bribed by the farmer to reduce the delay. The official and the moneylender play a non-cooperative game in choosing the bribing rate and the informal interest rate, respectively. The informal sector interest rate and the effective formal sector interest rate (incorporating the bribe) are equal in equilibrium (Chaudhari and Gupta, 1996). An innovative redesign of financial system that legitimately works for the poor is therefore called for. In order to make the money work for the poor a comprehensive financial system based on the bank-moneylender linkages is required. Without a full integration of traditional and contemporary financial innovations any attempt to expand the formal financial system in India is likely to be of limited utility to the poor (Crosson, 1975, Bell, 1990, Garg and Pandey, 2009). Andersen and Moller, 2006 studied the strategic interaction between informal and formal lenders in undeveloped credit markets. In
a model with adverse selection, loan seniority, market power, and differences in the cost of lending, it is shown that under general conditions a co-funding equilibrium will be a Nash outcome. Authors demonstrate that a collateral requirement in connection with formal loans always generates a new co-funding equilibrium in which both lenders earn higher profits. It is a common observation in many developing countries that enterprises are active borrowers in both formal and informal credit markets (Jain, 1999). Authors propose a model in which the formal sector's superior ability in deposit mobilization is traded off against the informational advantage that lenders in the informal sector enjoy. The formal sector can screen borrowers by providing only partial financing for projects, thereby forcing borrowers to resort to the informal sector for the remainder of the loan. Authors use the model to predict how the market structure responds to changes in the environment, and authors consider the policy implications of various forms of government intervention. The metaphor of symbiotic mutualism describes the depiction of the relationship between consumers and moneylenders put forward by the moneylending industry (Leyshon et al, 2006). This is created by a nexus created by the moneylender’s agent who is responsible for collection of the weekly dues. Because of traditional relationships of trust, it is almost impossible to replace the moneylender, but possible to re-define the relationship by providing an atmosphere for formal competition (Sriram, 2002).

Whether the moneylender turns out to be a significant element of rural financial system is clear from afore mentioned studies. Trying to abolish the informal finances is actually not possible, because of inadequacies of alternative lending agencies. Fisheries sector is no exception with informal financing being considered as shock absorbers particularly facilitating income smoothening. The present study attempts to understand the role of SHGs in displacing the informal lenders in rural financial set up.

2.6 Microfinance and Financial Inclusion

Despite the inability of the formal financial system to provide financial services to the poor, microfinance revolution has helped poor to unfold the “under
served" status, contributing to economic and social empowerment of poor particularly women (Yaron, 1994; Christen et al, 1995). Micro finance represents something more than micro credit. It is a financial service of small quantity provided by financial institutions to the poor. These financial services may include savings, credit, insurance, leasing, money transfer, equity transaction etc that is any type of financial service provided to customers to meet their normal financial needs, life cycle and economic opportunity and emergency with the only qualification that (i) the transaction value is small (ii) the customers are poor (Dasgupta, 2005). Micro credit thus becomes distinct from other regular credit where not only the credit amount is small and the clientele is poor, but also the credit is provide with collateral substitute instead of traditional collateral and non financial services for increasing the productivity of credit.

RBI, 2005 (Khan Committee) suggested that micro finance is expected to be substantially beneficial to both the demand and supply sides. The rural customers shall benefit by increased access to composite financial services in a relatively hassle free manner, inclusion of those in remote and resource scarce regions/areas into formal system, significant reduction in borrower level transaction costs in view of doorstep/near doorstep availability of services, and better understanding of their needs by empathetic functionaries of outreach entities engaged by banks. The banks shall benefit by a substantially increased client base in rural areas large numbers of which are upwardly mobile. The increased outreach will also help banks to include a large number of excluded farmers and others in the unorganised sector into the banking fold. Better identification of clients and the possible diversification of activities shall spread risks. These benefits can be achieved at much lower costs than that is feasible under the conventional systems and procedures. The arrangements will also provide an opportunity for a large number of socially proactive organizations and individuals to work in tandem with resource rich financial sector. This is likely to lead to a financial inclusion oriented growth model that aims at achieving socioeconomic empowerment of the less advantaged sections which will also provide an ideal platform for the microfinance institutions to grow at a faster pace.
Several demonstrated studies have upheld the success stories of micro lending, including impact assessments from cross country experiences and accepted models like ‘Grameen Bank’ model of Bangladesh. The debate whether the poor can save or not has become obsolete. In the new micro-financial service area, the large scale success of self help group (SHG) methodology has proved the ability of poor to save. Accordingly there are significant opportunities to broaden and deepen the range of financial services (credit, savings, insurance and money transfer) (Kapoor, 2007). The importance of financial services, especially savings allow rural people to reallocate expenditure across time has been conceptualized by Rutherford (2000) using three different approaches namely ‘saving up’, saving down’ and ‘saving through’. Tripathi and Sharma, 2007 evaluated the impact of micro credit through SHG Bank Linkage on the financial behaviour of the rural poor in Raibareli district of Uttarpradesh. The study showed that there is improvement in saving and credit usage by SHG members. A gradual shift was observed with respect usage of loans, ie shift from consumption to production loans. Interest burden of the borrowers were considerably reduced with a notable increase in the income and asset base of SHG members. A study was carried out among 240 respondents in four villages in Davangere district of Karnataka State to assess the relative impact of SHG bank linkage programme on financial inclusion [Rangappa et.al, 2008]. The samples included respondents from landless labourers, marginal farmers, small, medium and large farmers. Households having association with SHG and ones without any association were assessed simultaneously for serving as a comparative platform. Financial inclusion index, which measures the degree of financial inclusion, was calculated by giving appropriate weights to the selected financial services. Results of this study clearly show that the SHG-Bank linkage programme has increased the flow of institutional credit to landless and marginal farm households and discouraged non-institutional borrowing through thrift creation. Based on the index value, households were classified into the households with low, medium and high degree of financial inclusion. Percentage of household which reached the medium and high degree of financial inclusion, increased with the size of the land holding. The percentage of households, which reached the higher degree of financial inclusion, is relatively
more among SHG member households compared to non-member households. The chi-square ($\chi^2$) results lead to the conclusion that the SHG-Bank linkage programme increased the degree of financial inclusion among landless, marginal and small farm size category.

SHG bank linkage promotes financial inclusion and resultant lesser dependence on the moneylenders. This has been promoted by the banks since their priority sector targets would be served by less riskier loans (as the SHG linked loans are considered more risk free due to borrower's prompt repayment). The main advantage to the banks of their links with the SHGs is the externalisation of a part of the work items of the credit cycle, viz, assessment of credit needs, appraisal, disbursal supervision and repayment, reduction in the formal paper work involved and a consequent reduction in the transaction costs (Rangarajan, 1996). Banks need to think in terms of designing products in such a manner that they are able to cater to the needs of the bottom of the pyramid customers by introducing flexibility in working hours, documentation, mode of interaction and transactions. They need to explore ways to utilize local knowledge and information for effective loan monitoring and risk mitigation (Nagayya and Rao, 2009). A study among SGSY beneficiaries revealed that the groups were advised to establish link with the local banks which benefits them to have access to the formal banking system, to safe keep savings and to assure credit support in long run (Narayanaswamy et al, 2007). Vallabh and Chathrath, 2006 opined that appointing MFIs as ‘banking correspondents’ could help in reducing the costs, that it is possible to delegate some of the routine function of the bank’s to MFIs. The Self Help Groups-bank linkage has several benefits like lower transaction costs, negligible NPA’s and generation of goodwill among the rural populace.

Credit programs that target poor women are likely to produce substantial improvements in women's social and economic status (Das and Nanda, 2008). A study assessing the economic impact of SHG in the district of North 24 Parganas of West Bengal observed that income generated through group activities has improved the average income of group members than that of non members (Banerjee, 2009). Amin et al, 1998 examined the hypothesis that participation in
credit related activities by NGO credit members leads to greater empowerment of credit members compared to non members. The study found that NGO credit members had significantly higher scores on all three indices of female empowerment: inter-spouse consultation, autonomy, and authority. This was reiterated in the observations of Nirmala et al, 2004 in their study of poverty alleviation in Pondicherry through SHG who found that SHGs benefited the participants with increased social participation and organized action. A study conducted by Karmakar et al, 2009 in the small scale fisheries sector in South Asian countries observed that they have been exploited by the middlemen and merchants which often drain away the surplus generated. Microfinance programmes initiated by SIFFS integrating supply of finance and other technological inputs was found as replicable model.

Basu and Srivasthava, 2004 examined the efficacy of SHG Bank linkage, facilitated by linkage with commercial banks, NGO’s and informal local groups, found that its remarkable growth in effectively targeting poorer segments to reduce vulnerability is attributed to the good policy and skillful and committed leadership in conjunction with a facilitating government policy and legal framework. Authors strongly recommended microfinance as an alternate strategy for scaling up of access to finance to poor ensuring sustainability.

While the microfinance success stories have been emulated across the globe, the actual impact of microfinance on the poor and the vulnerable has been studied by experts in the field. Amin et al, 2003 found that while microcredit is successful at reaching the poor, it is less successful at reaching the group most prone to destitution, the vulnerable poor. Coleman, 2006, evaluated the outreach and impact of two microfinance programs in Thailand, controlling for endogenous self-selection and program placement. Results indicate that the wealthier villagers are significantly more likely to participate than the poor and they often become program committee members and borrow substantially more than rank-and-file members. But it has also been observed that the focus has been on delivering credit with least importance to other financial services sub serving the term micro finance to narrower micro credit (Agarwal, 2008).
Studies on microfinance in general have embarked upon impact assessments measuring economic and social empowerment. While these studies have concentrated on overall improvements in beneficiaries' socio economic milieu, there are rarely few which speaks about the financial services utilisation in detail. The present study is such an attempt that looks into the contribution of microfinance in facilitating financial inclusion.

2.7 References


[38] Leeladhara, V. (2005): Commemorative lecture at the Fedbank Hormis Memorial Foundation at Ernakulam on December 2, 2005


…..OCR…..