Chapter 1

Introduction
INTRODUCTION

1.1 Statement of the Problem:

India’s economy has posted a stellar economic performance in recent years, with high growth, moderate inflation and the absence of major turbulence. This suggests that the overall macroeconomic policy framework has delivered good outcomes despite concerns about its durability and effectiveness. Indeed, this success has fostered an ambitious average growth target of 9 per cent per annum for the five-year period from 2007 until 2012. This rapid sustained growth is expected to be supported by a rising investment rate and greater integration with the world economy.

Financial sector policies in India have long been driven by the objective of increasing financial inclusion, but the goal of universal inclusion is still a distant dream. The network of cooperative banks to provide credit to agriculture, the nationalization of banks in 1969, the creation of an elaborate framework of priority sector lending with mandated targets were all elements of a state-led approach to meet the credit needs of large sections of the Indian population who had no access to institutional finance. The strategy for expanding the reach of the financial system relied primarily on expanding branching, setting up special purpose government sponsored institutions (such as regional rural banks (RRBs) and cooperatives) and setting targets for credit to broad categories of the excluded. Its success has been mixed, and has been showing diminishing returns.

India’s poor, many of who work as agricultural and unskilled/semi-skilled wage labourers, micro-entrepreneurs and low-salaried worker, are largely excluded from the formal financial system. Over 40 per cent of India’s working population earn but have no savings. Even accounting for those with financial savings, too large a proportion of the poor lie outside the formal banking system. For example, only 34.3 per cent of the lowest income quartile has savings, and only 17.7 per cent have a bank account. By contrast, in the highest income quartile, 92.4 per cent have savings and 86.0 per cent have bank accounts. Similarly, 29.8 per cent of the lowest income quartile had taken a loan in the last two years, but only 2.9 per cent had loans from banks (about one tenth of all loans), while 16.3 per cent of the highest income quartile had loans and 7.5 per cent had loans from banks (about half of all loans).
The rich-poor divide has replaced the conventional rural-urban divide in access to financial services, as measured by the distribution of savings accounts. It is true that headline statistics on access to banks seem to convey that there is a rural-urban divide in access to banking services. The population served per bank branch in rural India is approximately 18,000 while in urban India is 5,000 (World Bank-NCAER Rural Financial Access Survey, 2003). But 80 per cent of those without savings reside in the rural areas. For those in higher income brackets, access to banks in rural areas is not vastly different from access in urban areas. Banks are approaching near 100 per cent coverage of individuals with incomes above Rs. 2 lakh, irrespective of geographical location. In urban India, 34 per cent of workers in the lowest income quartile have savings, and of whom only 60 per cent have bank savings account, while in the highest income quartile, 92 per cent have financial savings and of whom 96 per cent have bank savings account. A similar trend is evident for rural India where 83 per cent of rural workers with annual incomes above the national average (Rs. 71,000 for the Survey) have bank accounts. Even inter-state differences in banking coverage can largely be explained by large differences in incomes and savings among states. Though we cannot rule out the possibility of other sources of causality, income seems to be a big factor explaining access to financial services.

Poverty in India is one of the persisting problems since long time. Governments have been working hard to eradicate poverty from the country. A variety of socio-economic and welfare strategic programmes like Integrated Rural Development Programme (IRDP), District Rural Development Agency (DRDA), and Self-Employment Schemes etc.; have been launched to address the problem of poverty. These programmes have succeeded in providing desired result in some extent. Thus, it has been realised that unequal growth and financial exclusion are major causes for this menace. This in turned paved away to the concept of microfinance and financial inclusion that has been emerging in India since late 1980s. This evolution has been providing to be result-oriented and effective (Teki and Misra, 2012).

Poverty is multifaceted phenomenon, described as a situation where people are deprived of basic means such as income generating activities, adequate food, clothing,
housing, health care, sanitary facilities, access to formal credit, opportunity for education etc. Causes of poverty vary from country to country. Presently about one and half billion people live on less than $1.5 a day, a majority being from third world countries. India itself (1999-2000) accounts for 260.3 million poor people (UNDP, 2004)\(^3\). India's 34.7 per cent population income is below poverty line ($1.5 a day). As per national assessment, 28.6 per cent population is living below poverty line (UNDP, 2001)\(^4\).

Inclusive growth is crucial for long term economic development of the country, the economic growth that equitably would facilitate sustainable economic development. Within the portfolio of inclusive growth, financial inclusion is more important as financial services are integral part of the growth and development of society and economy as a whole. Financial exclusion, which is defined as a process by which specific segments of the population or a group of individuals is denied/deprived the access to basic formal financial system and financial services. Financial exclusion has gained importance during early 1990s in Europe where the geographers found that some definite pockets and regions of a particular country were behind the others in utilising financial services. It was also found that these areas/regions were poorer compared to regions which utilised more of financial services. Financial exclusion may not mean a social exclusion in India as it does in the developed countries, but it is a biggest issue that can be addressed. The large presence of informal credit could avoid social exclusion but the legal validity of such financial services pose an obstacle for creating a modern globalising economy. Financial exclusion reduces the growth and development of society as well as economy. Financial inclusion has been defined as the "provision of affordable financial services" (RBI, 2006a)\(^5\) to those who have been left unattended or under-attended by formal agencies of the financial system. These financial services include "payments and remittance facilities, savings, loans and insurance services". Microfinance has been looked upon as an important means of financial inclusion in India (RBI, 2006b)\(^6\). Indian concept of microfinance encourages access of SHGs to banks both as means of savings and providers of loan services.

Financial inclusion has moved up the global reform agenda and become a topic of great interest for policy makers, regulators, researchers etc. The increased emphasis of financial inclusion reflects a growing realization of its potentially
formative power to accelerate development gains. Inclusive financial systems ide individuals and firms with greater access to resources to meet their financial s, such as saving for retirement, investment in education, capitalizing on business rtunities. Real world financial systems are far from inclusive. Indeed, half of the d’s adult population lacks a bank account, while the rest remain unbanked, sing they do not have an account with a formal financial institution. There are rent types of barriers for access to banking services for example 20 per cent of abanked report distance as a key reason they do not have an account. The poor, en, youth and rural residents tend to face greater barriers to access. Financial sion and poverty reduction. Considerably evidence indicates that the poor benefit nously from basic payments, savings and insurance services. Many of the d’s poor would benefit from financial services but cannot access them due to ct failures or inadequate public policies (World Bank (GFDR) 2014)⁷.

The Reserve Bank of India (RBI) has emphasised access to banking services ll sections of the society as a large group of population has been excluded from ovrage of the formal banking sector. Census data revealed that in 2001, theotion of rural households availing banking facilities was 30.1 per cent, while for n households; it was around 49.5 per cent. The extent of exclusion was higher for ic population groups and regions. The NSSO (59th Round, 2003) data revealed 45.9 million farmer households in the country and 51.4 per cent of the total of million households do not access credit, either from institutional and non-stitutional sources. Further, despite the vast network of bank branches, only 27 per of total households were indebted to formal sources (of which one-third also ow from informal sources). Farm households not accessing credit from formal es, as a proportion to total farm households, was very high at 95.91 per cent, 6 per cent and 77.59 per cent in the north-eastern, eastern and central regions ctively (NSSO, 2003)⁸.

There has been expansion, greater competition and diversification of rship of banks leading to both enhanced efficiency and systematic resilience in nking sector. However, there are genuine concerns in regard to the banking tices that tend to exclude rather than attract vast sections of population, especially ioners, self-employed and those working in unorganised sector. While mercial considerations are no doubt important, the banks have been conferred
with several rights, especially of seeking public deposits on a highly leveraged basis, and consequently they should be obliged to provide banking services to all sections of the society, on equitable basis (Reddy, 2005)\(^9\). Thus, in recent years Indian banking sector is grappling with the issue of financial inclusion.

The issue of financial inclusion is not a new thing. It was pictured and implanted in Indian credit policies in the earlier decades also; though in a disguised form and without the same nomenclature (Rao, 2007)\(^10\). Financial inclusion was one of the implicit objectives of ‘Social Banking Policies’ made appreciable achievement in shifting the commercial banks focus from ‘class banking’ to ‘mass banking’. But the achievement of social banking is considered to be very poor in covering ‘poorest of the poor’ particularly among the weaker sections of the society. In the beginning of the 1990s a large portion of the vulnerable sections of the society remain outside the fold of the formal banking system.

Indian financial sector observed two major changes in the beginning of 1990s relating to financial inclusion. Firstly, implementation of market-oriented financial sector reforms. Secondly introduction of Self-help Groups-bank linkage programme. These shift influence of the financial inclusion in an opposite direction. Because the focus in the period of reforms was on enhancing the efficiency and profitability of banking system and not to provide facilities to the poor. Many of the regulation that were applied on banking system during the policy of social banking were relaxed in order to allow a market based operation of the banking system. Exclusion of the poor of availing institutional borrowing, apart from undermining economic growth, could engender social tensions. Empirical evidence shows that inclusive financial system significantly raises growth, alleviate poverty and expand economic opportunity (K.B Rangappa, 2011)\(^11\).

In the beginning of 1990s NABARD felt the need for an alternative delivery mechanism to full fill the requirements of the poor and vulnerable section of society. As, a result, it has launched Self-help Groups -Bank Linkage Programme in February 1992. In India as also in other countries, SHGs have been recognised by policy makers as an effective medium for accomplishing the distributive objectives of monetary policy (Shankaran, 2005)\(^12\). SHGs are small informal association created for the purpose of enabling members to reap economic benefit out of mutual help, solidarity and joint responsibility. These small homogeneous groups involved in
savings and credit activities are capable of taking care of the risks through peer monitoring. SHGs considered being an agent to bridge the gap between banks and the weaker sections and unbanked people. The programme empowered the weaker section to approach the banking institutions for financial services. Banking institution also considered this programme as an effective conduit to cover the poor.

Economic theory approves the direct relationship between investment and economic growth to the rate of saving. It implied that financial exclusion of a vast majority represents a missed opportunity of an enormous potential for economic growth. Poverty and access to finance are highly interrelated terms; financial inclusion of the poor can ultimately result in reduction of poverty and leads to the economic growth. Inclusive growth means growth with equal opportunities which emphasises on creating opportunities and making opportunities accessible to all sections of the society. Growth is inclusive when it allows all members of the society to participate in and contribute to the growth process on an equal basis regardless of their individual circumstances. Developing countries all over the world has been constantly emphasizing reduction of poverty is the basic agenda of Millenium Development Goals (MDGs). Formal financial system and community based organizations are incidental in eradicating poverty while poising as the three pillars in achieving social transformation (Thorat, 2006). Financial system can play a role in reinforcing many of the objectives of MDGs involving savings, livelihood and economic infrastructure apart from providing an efficient payment system. Financial exclusion epithets limited accessibility of individuals to formal financial services. It is estimated that more than three billion people are financially excluded around the world. India has the second largest financially excluded population after China. In India, 135 million people were financially excluded (in terms of ownership of an account) which accounted for 66 per cent of the population (Sinha and Subrahmanium, 2007).

Formal financial services in most of the developing countries serve only a minority, often not more than 20-30 per cent of the population. Financial inclusion denotes delivery of financial services at an affordable cost to vast sections of disadvantaged and low income groups (GOI, 2008). An inclusive financial sector provides effective, ongoing access to all sections of the population and all scales of enterprise. It has the potential to unleash a virtuous cycle, enabling poor households to
contribute in economic growth of the country while drawing benefits from it. Bank accounts facilitate better savings and money management in addition to facilitating protection from inflation, access to transaction/transmission facilities like remittances. Saving and insurance help reduce risk and vulnerability and prevent a slide into stressful coping strategies such as sale of livestock or other assets (Arora and Leach, 2005).  

There is significant disparity in the distribution of commercial bank branches in rural and urban centres and between regions. Financial illiteracy and lack of knowledge of financial products have grappled the poor that they do not even dare to approach any financial institution. In provision of credit to rural poor, informal agencies are more dominant and charging very high rate of interest. Bank remains unapproachable and credit terms are often not suitable to borrowers. Even those who have gained access, owing to recent developments in financial services for the low income people are underserved. Access to affordable financial services, especially savings, credit and insurance opens up livelihood opportunities by empowering the poor. In fact such empowerment aids social and political stability (Thorat, 2007). One common measure of financial inclusion, the percentage of adult population having bank account. Number of bank branches in rural areas has shrunk even as urban branches proliferate, and the government is not doing their work up to the mark for financial deepening and economic inclusion (Punnathara, 2007). While 50 per cent of all commercial banks branches were located in rural areas in June 2000, and the share decline to 40 per cent in March 2009 means that rural branch expansion has been far behind in comparison with the growth in the urban areas.

Gaps prevailed in the availability of banking services in rural areas have accentuated. Around 18.4 per cent of the rural population having savings/deposit accounts and even a lower percentage of 17.2 of rural households having loan accounts with banking network of scheduled commercial banks. Though cooperatives is said to be one of the most suited organisation to serve rural India, low coverage of deposit and credit services and concentration of few states and structural and organisational problems hamper its popularity. Decline in productivity of rural branches of commercial banks, fragility of co-operative credit structure and weakness of RRBs witnessed since early 1990s have further accentuated the problem of inaccessibility of banking services for a large part of the rural population. Further
number of loan accounts of a small borrowers with credit limit range of less than 25,000 has decreased from 5.88 crore in 19991 to 3.69 crore in 2003 denoting the preference of the bankers towards the large loans (RBI, 2005)\textsuperscript{19}. However, it has been increasingly recognised that rural credit market has significant potential but it had been tapped and dominated by informal money lenders.

Financial literacy is critical for financial inclusion. Lack of knowledge and understanding of services and its attendant policy and processes among the poor population are important factors that impediment their financial inclusion. The vulnerable situation faced by the poor like irregular employment, unemployment, seasonality, illiteracy and growing trend of globalisation also throw challenges for financial inclusion of poor. Microfinance is emerging as a powerful tool for poverty eradication in the country. The term microfinance is of recent origin and is commonly used in addressing the issues related to poverty alleviation, financial support to micro entrepreneurs, gender development etc. The taskforce and supportive policy and regulatory framework for microfinance has defined as “provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi-urban or urban areas for enabling them to raise their income levels and improve living standards (H.R. Uma, 2011)\textsuperscript{20}.

1.2 Review of Literature:

(A) Related to Microfinance:

The basic idea of microfinance is to provide credit to the poor people who otherwise would not have access to credit services. Micro-credit programme extend small loans to very poor people for self-employment projects that generate income and allow them to take care for themselves and their families. This programme is working in many developing countries. There is no dearth of literature related to microfinance. In order to find the impact of microfinance programme, impact assessment studies have been done by many authors in different countries like Bangladesh, India, Pakistan, Nepal, Thailand, Ghana, Rwanda, Peru and many other countries of South Asia and Africa. The literature on microfinance offers a diversity of findings relating to the type and level of impact of the programme. There are various studies which confirm that microfinance programme has a significant positive impact in increasing employment and reducing poverty. A number of studies show
that the participant households enjoy higher standard of living as compared to the non-participants. The programme reduces consumption as well as income vulnerability among its beneficiaries. Some of the studies also confirm that the programme is helpful in attaining millennium development goals by reducing poverty, hunger, infectious diseases and through women empowerment. There are a number of studies which explain that participation in the programme has led to greater levels of women empowerment in terms of increase in knowledge, self-confidence, economic, social and political awareness, mobility, development of organisational skills etc.

However, some of the studies show that the programme is not reaching the bottom poor people and the group loans are utilised for non-income generating activities such as consumption and other emergency needs. The studies also show that the women participants have limited control over the use of group loans, therefore, the programme results in limited empowerment of women participants. Thus the literature on microfinance provides mixed results about the impact of microfinance programme on the programme participants. The review of impact assessment studies provides valuable insights into the benefits and drawbacks associated with microfinance programme. Some important studies which are relevant to the present study have been discussed below.

Bhaduri, (1977)21; Aleem, (1990)22 in their study argued that the poor people often lack the resources needed to invest their borrowings to the most productive use. In short, the poor borrow mostly to the finance consumption needs. In other words, poor people have low income and they are bound to meet basic necessity of life.

Hossain (1988)23 in his study made a comparison between the Grameen Bank members and eligible non-participants in Grameen Bank situated villages. It was found that participation in Grameen Bank’s microfinance programme had a positive impact on various economic activities of members and helped in alleviating poverty. The average household income of Grameen Bank members was 43 per cent higher than that of target non-participants, and 28 per cent higher than eligible non-participants. Grameen Bank members spent 8 per cent more per capita on food and 13 per cent more on clothing than target non-participants and 35 per cent more on food and 32 per cent on clothing than target households in comparison villages.
Hoff and Stiglitz (1990) identified direct and indirect mechanisms by which market failure in credit markets can be addressed. Direct mechanisms depend on lenders expending resources to service applicants and enforce loans, a good example being development financial institutions. Indirect mechanisms depend on designing contracts with borrowers so as to influence behaviour in credit markets, a good example of the above explanation is microfinance institution.

Adams and Von Pische (1992), the Ohio School viewed credit as playing a facilitating, not a leading role, in the process of economic development. They argued that informal financial institutions in developing countries such as money lenders, ROSCAs (Rotating Saving and Credit Associations) and occasional sources such as suppliers, traders, relatives and friends were likely to be more cost efficient than DFIs (Development Finance Institutions).

Yaron (1992) in his study found that microfinance is much more than microcredit, stating”. Provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi-urban and urban areas for enabling them to raise their income levels and improve living standards. The Self Help Group promoters emphasize that mobilizing saving is the first building block of financial services. Microfinance programmes have rapidly expanded in recent years.

Robinson (1995) in his study pointed out that during late 1980s and 1990s, there occurred what he termed a paradigm shift from government and donor funded subsidized credit to sustainable financial intermediation. A frequently cited example is that Bank of Rakyat Indonesia (BRI), a state owned rural bank in Indonesia, which moved away from providing subsidized credit and converted its micro-banking unit into a commercially sustainable unit offering credit and saving services.

Hulme and Moseley (1996) pointed out the lack of statistical evidence for many of the Ohio School’s argument particularly concerning the claim that informal sources of credit offer a cheaper and most efficient services than DFIs. More fundamentally, they questioned the Ohio School’s implicit assumption that informal financial markets in developing countries are characterised by perfect competition and that producer able to use credit productively are able to reap the advantages of such competition.

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ii A sustainable MFI is one which covers its costs and hence is not dependent on donor funds for its survival.
Mutua et al. (1996)\textsuperscript{29} studied three new kinds of institutions, BancoSol in Bolivia, the Kenya Rural enterprise Program in Kenya and Thailand's Bank Agriculture and Agricultural Co-operatives. They found that these institutions represented a paradigm shift in viewing the poor not as beneficiaries of subsidies, but as customers of financial institutions designed to address their demands for various financial products, particularly for credit. Moreover, they shifted the focus in rural credit from agriculture to 'non-farm enterprises' such as making handicrafts, raising livestock and running small stores.

Pitt and Khandker (1998)\textsuperscript{30} studied the impact of microfinance on poverty in Bangladesh. Data was collected through a survey in 1991-92 containing 1798 households (1538 participants and 260 non-participants) in three Bangladeshi programmes, i.e. Microfinance Programmes of the Grameen Bank, Bangladesh Rural Advancement Committee (BRAC) and of Bangladesh Rural Development Board (BRDB). For finding the impact borrowers were compared to the people in non-programme villages. Results showed that for every Taka (currency of Bangladesh) lent to a female member, the consumption increased by 18 Taka and for men this figure was 11 Taka. Further, the study showed that the poverty rate of BRAC members fell by around 15 per cent for moderate poor and 25 per cent for ultra-poor. Similar results were found for the other two programmes. This rate of poverty reduction appeared to decline with the duration of membership and with cumulative loan size. Thus, the reduction of level of poverty was variable and declined with the passage of time.

Sheokand (2000)\textsuperscript{31} discussed the evolution of Indian banking and its failure to provide credit facilities to poor people. NABARD started Self Help Group – bank linkage programme in 1992, which was considered as a landmark development in banking with the poor. It was observed that Regional Rural Banks’ security-oriented individual banking system was replaced by the delivery of credit to focused groups. According to him the government sponsored programmes had occupied much of the economic space but did not achieve the objective of alleviating poverty. Self Help Group- Bank Linkage Programme had been proved very successful for the socioeconomic empowerment of hard core poor, providing financial services to them and preparing them to take up economic activities for poverty alleviation. Although this programme was not a panacea for the problems of rural poverty, yet it had the
potential for becoming a permanent system of rural lending in the country with full participation from the formal banking system and without any interference from the government.

Gurumoorthy (2000)\textsuperscript{32} explained the Self Help Group (SHG) as a viable alternative to achieve the objectives of rural development and to get community participation in all rural development programmes. It was an organised set up to provide micro-credit to the rural women on the strength of the group savings without insisting on any collateral security for the purpose of encouraging them to enter into entrepreneurial activities and for making them enterprising women.

Rutherford (2000)\textsuperscript{33} and Armendáriz & Morduch (2005)\textsuperscript{34} explained the difference between microfinance and micro-credit. Micro-credit referred specifically to small loans given to the poor people but microfinance was a broader term embraced efforts to collect savings from low-income households, provide consumption loans and insurance along with micro-credit. It also helped in distributing and marketing clients' output. Microfinance embraced a range of financial services that seek to meet the needs of poor people, both protecting them from fluctuating incomes and other shocks and helping to promote their incomes and livelihood.

De Soto (2000)\textsuperscript{35} is of the view that even if banks want to fund the poor, they face the problem of asymmetric information when dealing with the market due to lack of credit histories, collateral and insurance. Even if the poor have built some assets, as land tenure and land titling deficiencies often prevent them from collateralising these assets.

Raghavendra (2001)\textsuperscript{36} evaluated the contribution made by microfinance programme initiated by Sahyadri Grameen Bank in Thyagarthi village in Shimoga district of Karnataka. The income generating economic activities and women’s empowerment in rural areas was studied. For the purpose of study, three SHGs were personally interviewed and data was collected for the years 1994-1995 to 1999-2000. Out of these three SHGs first group was run by a forward community, second was run by SC/ST and the third was run by a backward community. The analyses revealed a significant change among the group members in diversifying income generating economic activities. The researcher found that the microfinance programme was financially sustainable. The members reported that they did not borrow from
moneylenders anymore. It was found that the members of SHGs formed by forward community had created their own capital base. They were involved in diversifying farm-based activities into market-based activities. For the other two groups, resource constraint was found to be a detrimental factor to expand economic activities. The case study concluded that there was a great potential for implementing various programmes for the rural poor through SHGs.

Chen and Donald (2001)\(^{37}\) in their study compared the impact on the clients who borrowed for self-employment and the clients who only saved with Self-Employed Women Association (SEWA) Bank without borrowing to the non-clients of Ahmedabad and Gujarat states of India where SEWA was based. The study was conducted in two rounds, i.e. in the years 1997 and 1999. It was observed that repeated borrowing was especially important, compared to one time borrowing. Repeated borrowers had greater income spent on food, household improvements and consumer durables and more likely to had girls enrolled in primary schools. Income of participant was over 25 per cent greater than that of saver and 56 per cent higher than the non-participant income. Savers too enjoyed household income 24 per cent greater than that of non-participants. These findings indicated that microfinance was quite effective.

Nedumaran et al. (2001)\(^{38}\) conducted an empirical study on the impacts of SHGs in Tamil Nadu. Two districts of Tamil Nadu, namely, Erode and Tiruchirapalli were selected. One hundred and fifty members from 30 SHGs promoted by two NGOs -- MYRADA and LEAD were surveyed. Primary data was collected through personal interview method during March-April 2001. The study showed that the average amount of group loans availed was positively associated with the group age. The annual net family income of the members in post-SHG situation increased by 23 per cent over the pre-SHG situation. The study also indicated a considerable improvement in the social conditions of SHG participants after joining the group activities. The researchers also recommended the promotion of SHGs in rural areas, training to members and involvement of local NGOs in building SHGs for the overall improvement of the households.

Manimekalai and Rajeswari (2001)\(^{39}\) studied the socio-economic background of self-help group women in rural micro-enterprises in Tamil Nadu and examined the factors which had motivated the women to become SHG members and eventually as
entrepreneurs. The researchers analysed the nature of economic activities and the performance in terms of growth indicators such as investment turnover, employment, sources of finance, product marketing and other related aspects and identified the problems faced by SHG women in running the enterprises. For the purpose of the study, a sample of 150 SHG members was selected who were studied according to the nature of their activities from 5 blocks of Tiruchirapalli district of Tamil Nadu. These groups were formed and promoted by an NGO. The nature of micro-enterprises run by the groups included trade, agriculture, animal husbandry, processing of food, tailoring, gem cutting, catering, petty shop, bamboo based units and agro-based units etc. The primary data pertained to the year 1999-2000. The SHG women were employed both in agricultural and non-agricultural activities. The study found that women SHGs earned the highest profit from agriculture, followed by trade related activities and catering services. A majority of sample units did not market their products outside the districts but sold these directly to the customers. The income of the SHG women almost doubled after taking up micro-enterprises. Majority of the respondents faced serious problems like non availability of raw materials, lack of infrastructure facilities including marketing, lack of support from family members in running the enterprises etc. The provision of microfinance by the NGO to the women SHGs had helped the groups to achieve a measure of economic and social empowerment. It had developed a sense of leadership, organisational skill, management of various activities of a business, identifying raw materials, market and suitable diversification and modernisation.

Puhazhendi and Badatya (2002)⁴⁰, in a study commissioned by NABARD surveyed 115 SHG members from 60 SHGs in eastern India, concluded that institutional credit had deepened and widened among the rural poor, while there had been substantial reduction of loans from money-lenders and other informal sources. The findings of this study showed that 52 per cent of sample households registered 23 per cent rise in annual income and 30 per cent increase in asset ownership in post-SHG situation. About 72 per cent of the bank loan was used for income generating purpose and the remaining 28 per cent was for consumption and other social functions and contingency purposes. The estimated employment days per household worked out to 405 person days during post-SHG situation that had registered an increase of 34 per cent between pre- and post-SHG situations. Activity-wise, per cent increase was
higher for non-farm activities (121 per cent) followed by off-farm activities (21 per cent) and farm activities (19 per cent). The social empowerment of sample SHG members in terms of self-confidence, involvement in decision-making, better communication, etc. improved in a significant way. It was also found that members in the older groups of five years and above were more socio-economically benefited as compared to the members in newly formed groups.

Harper (2002)\textsuperscript{41} studied the differences, outreach and sustainability of the SHG banking system and Grameen banking system of providing microfinance. SHG bank linkage and Grameen banking systems dominated the microfinance markets in India and Bangladesh respectively. It was also found that both systems were best suited to their prevailing environments. SHG bank linkage system was more flexible, independence creating and imparted freedom of saving and borrowing according to the member's requirements, so was suitable in the Indian context. But Grameen banking system was more rigid, autonomous, over disciplined and dependence creating system which was suitable in Bangladesh where people were relatively more homogeneous, very poor and had less experience of democracy.

Aghion and Morduch (2005)\textsuperscript{42} in their study pointed out that the enterprises of the poor are typically under-capitalised. When capitalised they should be able to generate higher returns compared to enterprises that are already capitalised. This implies that they should attract more capital. However, when one compares enterprises promoted by the poor with other enterprises, a number of factor such as education and technology often work against the poor, reducing their rates of return. Hence in practice poor do not attract capital. They point out that a broader term of ‘microfinance’ came to be used interchangeably with microcredit. The recent literature however explicitly recognizes that the latter denotes provision of only credit while the former denotes provision of wider range of financial services including savings and insurance.

Kabeer and Noponen (2005)\textsuperscript{43} in their study set out the findings of a socioeconomic impact study of PRADAN's microfinance programme carried out in Jharkhand, one of the poorest states in India. The study was carried out in Godda, Dumka and Banka districts of Jharkhand. In order to study the impact of microfinance programme 400 SHG members were compared with 104 non-members in these three districts. The major objective of the study was to find out the impact of microfinance
on the capacity of the participants to meet basic needs, livelihood base, asset position, saving and debt position and women's choice and agency. The findings of the study showed that as far as basic needs were concerned, the members had reported a more favourable overall food situation in terms of adequacy and diversity of diet as compared to non-members. They had better access to clean drinking water, improved housing with more rooms and doors. Members were sending greater number of children to school along with greater gender equity. Members were engaged in own cultivation and livestock rearing and less dependent on unskilled wage labour activities. Members had higher levels of savings and lower incidence of indebtedness to high interest of money lenders as compared to non-members. As regards women's skills, knowledge and agency, members had acquired more practical skills and demonstrated greater awareness of government programme for the welfare of poor. However, there was less difference regarding participation in household decision-making. In both the groups, women made sole decisions in one-fifth of the households and a joint decision was made in about half of the households. Overall, the study showed that members were in a better position than non-members and the process of women empowerment had been initiated through the microfinance programme.

RBI (2005)\textsuperscript{44} (Khan Committee) suggested that microfinance 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.

Tracey et al. (2006) in their study examined the personal and economic empowerment of rural Indian women through self-help group participation. Data was collected from 100 rural women from the Udaipur district of the state of Rajasthan in India. These women were imparted a skill development training in stitching, embroidery, and patch work through a Sewa Mandir NGO working in Udaipur and Rajsamand districts of Rajasthan. The study was based on both the quantitative and qualitative data which was collected through questionnaires, informal interviews and discussions. The quantitative data found that working women reported enhanced meaningfulness in their daily lives, increased personal control over spending, enhanced social networks, reduced boredom, increased decision-making power in home and enhanced independence. The inclusion of women in income-generating activities gave support to their personal and economic empowerment.

Swain (2007) studied the impact of SHG bank linkage programmes on poverty, vulnerability and social development of the programme participants. For this purpose, the data was collected in two periods (July 2000 and end of 2003) from five states in India. These states were Orissa, Andhra Pradesh, Tamil Nadu, Uttar Pradesh and Maharashtra. Focus group discussion and interview methods were used. A total of 20 such focus group discussions were conducted; four in each of the five surveyed states. Each focus group discussion included 15-20 SHG participants each from different SHG. In order to find out the real impact of microfinance programme, the SHG respondents were compared with the respondents of a control group who were un-exposed to the concept of SHGs till the time of the survey. The comparison between the SHG participants and the control group showed drastic differences. The level of mobility, confidence, exposure and communication skill was better for the SHG participants. Majority (88 per cent) of SHG respondents reported an increase in self-confidence after joining the group as compared to only 34 per cent of control households. The SHG households showed a significant positive change in the level of confidence while expressing their opinions in meetings. About 87 per cent of the SHG respondents reported the ability to meet a financial crisis in the family. Almost 60 per cent of the SHG members and 43 per cent of the control group members reported that borrowing women themselves took the crucial decisions regarding the purchase of
raw material and product pricing. Almost 50 per cent of the SHG participants reported an increased level of respect from their spouses as compared to just 18 per cent of the control group respondents. When compared to the control group, the data also showed a greater involvement of SHG participants in decision-making regarding family planning, children's marriage, buying and selling of property and sending their daughters to school etc. However, a small increase of about 10 per cent in family violence was also noticed within the participant households.

Sarangi (2007)\(^{47}\) evaluated the impact of microfinance programme on rural poor households in some backward regions of Madhya Pradesh in India. For the purpose of study, Betul, a tribal region; and Sehore, a relatively prosperous region; were selected. The researcher examined three most popular group based microfinance programmes, i.e. government supported SGSY programme, NABARD's SHG bank linkage programme, and World Bank promoted Swashakti programme. One hundred eighty participants from two districts, and three programmes were selected through a multistage random sampling method. Non-participant households were selected with a ratio of 1:2 to participants in each village. In order to make comparisons, t-test, analysis of variance, and regression techniques were used. Impact assessment results showed a significant positive effect of programme participation on increase in the income of the households.

Roubini and Bilodeau (2008)\(^{48}\) pointed out that the finance matters for both economic growth and development. There is the substantial evidence that financial development which refers to effective financial intermediation and markets that provide deep and broad access to formal financial services to economic agents, promote growth.

Sriram (2010)\(^{49}\) mentioned three waves of microfinance development. The first wave is associated with the discovery of the Grameen Bank Model. In the second wave the first wave organisation achieved scale and transformed themselves into for profit entities. Finally in the third wave, mainstream financial institutions commenced microfinance activity.

(B) Related to Financial Inclusion:

Schumpeter (1942)\(^{50}\) suggested that the economy is benefited by the process of financial inclusion drive and emphasised on four aspects, which are:
• First, it could be an important tool to reduce income inequality in the economy. Low income individuals are often those not accessing financial services. Once access is provided, these individuals have greater potential to improve their income levels.

• Second, more financial resources become available for efficient intermediation and allocation.

• Third, greater financial stability may be expected if financial activity moves from unregulated to regulated institutions.

• Fourth, access to finance promotes more start-up enterprises, who often contribute to risk taking, employment and processes of creative destruction.

Leyshon and Thrift (1995)\textsuperscript{51} argued that the early definitions of financial exclusion viewed it in the larger context of social exclusion define financial exclusion processes as those which serve to prevent certain social groups and individuals from gaining access to the formal financial system. More recently, financial inclusion has been defined by the World Bank (2008), as the absence of price and non-price barriers in the use of financial services.

Rangarajan (1996)\textsuperscript{52} is of the opinion that SHGs are small informal associations created for the purpose of enabling members to reap economic benefit out of mutual help, solidarity and joint responsibility. These small and homogeneous groups involved in savings and credit activities are capable of taking care of the risks through peer monitoring. The main advantage to the banks of their links with the SHGs is the externalisation of the 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.

Leyshon et.al (1998)\textsuperscript{53} is of the view that the access to an organized financial system implies availability of standardized financial products from regulated institutions. Savings products, small value remittances, insurance products and purchases on credit make financial planning easier. Savings products enable consumption smoothing over time. Remittance products are safer than cash payments, not only to prevent theft, but also to document proof of payment. More importantly, credit histories are built which enable borrowing at more favorable terms in the future. With increasing automation, financial service providers rely on existing databases rather than personal interaction in order to make offers to customers. This puts
financially excluded individuals at a distinct disadvantage as they are unlikely to feature in such databases.

Goodwin et al. (2000)\textsuperscript{54} emphasized the role of level of employment of a country as another important factor of financial inclusion. Access to affordable financial services especially credit and insurance - enlarges livelihood opportunities and empowers the poor to take charge of their lives. Such empowerment aids social and political stability.

Beck et al. (2000)\textsuperscript{55} in their paper tried to evaluate empirically the relationship between level of financial intermediary development and economic growth. They observed a positive impact of financial intermediary development on the growth of total factor productivity which will lead to economic development.

A study using data on 109 developing and developed countries by Calderon and Liu (2003)\textsuperscript{56} showed that the direction of causality was generally from financial development to economic growth.

Honohan (2008)\textsuperscript{57} argued that financial inclusion or broad access to finance refers to the timely delivery of banking services to disadvantaged sections of society. Researches in the last decade lead us to believe that a well-functioning financial system is linked to faster and inclusive growth.

Similar results have been obtained by Burgess and Pande (2005)\textsuperscript{58} who studied the effect of the rural bank branch expansion which took place in India during the period 1977 to 1990, as a result of a specific rule. The rule was that a bank could open a branch in an area with other existing bank branches, only if it also opens branches in four other areas with no bank branches. It was found that there was a significant fall in rural poverty and increase in non-agricultural output.

Beck et al. (2005)\textsuperscript{59}, the institutional supply of credit to poor has been researched both at macro and micro levels. The macroeconomic perspective analyses country level experiences in routing finances to poor while the micro angle scrutinises institution level performance in credit delivery. Macroeconomic variables to capture geographic and demographic pattern of banking system includes number of branches and ATMs relative to population and area under 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
variation in 99 countries using correlation and regression. It was found that larger economies enjoy larger level of outreach due to scale economies in banking services and the availability of better communication and transportation facilities.

Arora and Leach (2005)\textsuperscript{60}, presented 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 discussion on financial inclusion in policy and academic circles tended to revolve around the extension of institutional credit at the expense of providing savings, in spite of evidence that poor people save (Basu,2005)\textsuperscript{61}, Dev,(2006)\textsuperscript{62}, Mohan,(2006)\textsuperscript{63}.

Basu (2006)\textsuperscript{64} argued that the expansion of commercial banking has also led to a more favourable financial environment for the poor in India. It was following these reforms that the “Self Help Groups (SHGs) - bank linkage” model grew to become a key part of finance for India’s poor. He has also explained that about 40 per cent of households have deposit account, 20 per cent have outstanding loans and only 15 per cent have any insurance in rural India.
Thorat (2006) in his study explained that, impeded and higher cost of access to adequate financial services like credit, insurances, and remittances to majority of population are major roadblocks for the growth of primary sectors like agriculture. Financial inclusion can create win-win environment for both customer and financial institution in an economy.

The UN Report (2006) entitled, “Building Inclusive Financial Sectors for Development” (referred to sometimes as the “Blue Book”) played a significant role in bringing international attention on this issue. The publication was a follow-up to the Monterrey Consensus in 2002, under which heads of State resolved to address the challenges of financing for development. The U.N. Report defines an inclusive financial system as one which provides credit to all “bankable” individuals and firms; insurance to all insurable individuals and firms; and savings and payment services for everyone. Financial inclusion does not imply that everyone will use all available financial services; rather everyone has the option to use them. An important distinction made in the U.N. Report is between “inclusive finance” and microfinance. While the former refers to a broader concept of a continuum of financial service providers, the latter represents only one type of financial sector organization. Building inclusive sectors hence includes, but is not limited to, strengthening microfinance. A continuum of financial services needs to be made accessible to individuals as they improve their standard of living.

Mohan, (2006) argued that the economy as a whole benefits through financial inclusion. First, it could be an important tool to reduce income inequality in the economy. Low income individuals are often those not accessing financial services. Once access is provided, these individuals have greater potential to improve their income levels. Second, more financial resources become available for efficient intermediation and allocation. Third, greater financial stability may be expected if financial activity moves from unregulated to regulated institutions. Fourth, access to finance promotes more start-up enterprises, who often contribute to risk taking, employment and processes of creative destruction.

Low and irregular income is often the primary reason that contributes to financial exclusion on both supply and demand sides. The reasoning is that it leads to lack of availability of suitable financial products, as well as lack of motivation to open accounts due to inability of the individuals to save. Studies in the UK context have
also found that the lowest income group is twice as likely to not be accessing financial services (Kempson, 2006)\textsuperscript{68}.

Beck and Delatorre (2006)\textsuperscript{69} argued that the breadth of financial inclusion in a region or a country is usually measured by the percentage of people in the region who have access to bank account.

Littlefield et.al (2006)\textsuperscript{70} argued that bank account enables poor households to perform important financial functions such as saving money safely outside the house, accessing credit, making loan or premium payments and transferring money within the country. Thus, although a bank account covers only one aspect of financial inclusion, it may determine access for many other financial services.

Moreover, economic growth is likely to be beneficial to the poorest segment of the population, as indicated by the results of a study by Beck, Demircu-Kunt and Levine (2007)\textsuperscript{71}. They use data from a sample of 72 developed and developing countries for the period 1960-2005 and find a positive relationship between financial depth as measured by the ratio of private sector credit to gross domestic product (GDP) and the change in the share of the lowest quintile in total national personal income.

The Indian banking sector today is grappling with the issue of financial inclusion. Financial Inclusion is defined as the process of ensuring access to timely and adequate credit and financial services by vulnerable groups at an affordable cost (Kamath, 2007)\textsuperscript{72}. Financial inclusion was envisaged and embedded in Indian credit policies in the earlier decades also, through in a disguised form and without the same nomenclature and emphasis. Increasing access to credit for the poor has always remained at the core of Indian Planning in fighting against the poverty. Starting in the late 1960s, India was home to one of the largest state intervention in the rural credit market (Khandelwal, 2007)\textsuperscript{73}.

Honohan (2008)\textsuperscript{74} uses aggregated data obtained from respective country regulators and survey data (in cases where available), to build a model. More precisely, using data on accounts in various financial institutions as a proportion of the population, and an average account size as a proportion of GDP per capita as regressors, he estimates a non-linear relationship between these variables and the actual share of households with a financial account obtained from the survey data.
This regression is then used to generate predicted values where survey data is not available. Based on this, he has developed a composite data set to measure financial services access for 160 countries, which is a "synthetic headline indicator" of access, measuring the percentage of adult population with access to an account with a financial intermediary. The results show a wide variation in financial access across countries, ranging from 100 per cent in Netherlands to five per cent in Tanzania and Nigeria. The measure for India is 48 per cent.

Sharma (2008) explained that financial inclusion ensures ease of availability, accessibility and usage of formal financial system to all members of the economy. Financial inclusion has been widely recognised as an important means to achieve inclusive growth in India.

Sanghwan (2008), studied the extent of the financial inclusion across various states. He also tried to examine the role of SHG bank linkage programme in achieving financial inclusion. The study suggested a significant role of SHG led programme in achieving financial inclusion. Beside this, it also tried to examine the role of other factors like banking density, financial literacy and per capita income in achieving financial inclusion.

Sahoo et.al (2008) had attempted to develop index of financial inclusion to examine the progress of financial inclusion and various determinants of financial inclusion using secondary data from various sources. In their study, they observed a positive impact of infrastructure development, education; self-help group formation on financial inclusion both from financial widening and deepening perspectives.

Committee on Financial Inclusion (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 of Financial Inclusion, revitalising the RRBs and Co-operatives, introducing MFI model (SHG-Bank Linkage) and Business Facilitator and Business Correspondent.

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iii Honohan’s dataset has a number of limitations. These include non-comparability of data from different countries with regard to the time period of collection and varying practices with regard to multiple account holding (some institutions consolidate them and some do not). Moreover, some surveys used the individual as the unit of study while others used the household.
Subbarao (2009)\textsuperscript{79} has explained that financial inclusion is important because it is considered as an important condition for sustaining growth. 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 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 government to make payment such as social security transfers and National Rural Employment Guarantee programme (NREGA) wages into bank accounts of beneficiaries.

Chairlone and Ghosh (2009)\textsuperscript{80} found that the ‘market discipline’ wrought in through broad-basing the equity base of state owned banks made them consciously focus on their bottom lines, contain delinquent loans, introduce better risk management practices and extend banking outreach through better adoption of information technology.

Jeannencney and Kpodar (2011)\textsuperscript{81} found that in case of developing countries direct effect of financial development on poverty reduction is stronger than its effect through accelerating growth, and the benefit of financial development for the poor is greater than the associated cost.

1.3. Objectives of the Study:

The purpose of the study is to explore the relative effectiveness of microfinance as source of financial inclusion and inclusive growth for the vulnerable section of the society such as poor, women, senior citizen, and ethnic minorities. There are two basic models such as profit and NGOs model, which may or may not charge interest on the loan in order to cover the cost of lending. Microfinance is unique in that, it addresses the issue of inequality, gender equity, health and, of course, financial inclusion of vulnerable section of the society.

Successive Indian governments have sought to achieve financial inclusion through two very prominent financial institutions viz, scheduled commercial banks (SCBs) and the rural co-operatives. The social responsibility fixed on these institutions notwithstanding, inclusion of the target section into their financial services has been very tardy and far from satisfactory. This has been due to a number of supply constraints, both from the supply and the demand side. In the light of the
above, in this study entitled “Financial Inclusion and Inclusive Growth through Microfinance in India- An Evaluation”, an attempt has been made to establish the link between the microfinance, financial inclusion and inclusive growth and their impact on the overall development of the country in general and poor section of the society in particular. There are following objectives of the study:

1. To explain the role and importance of microfinance in financial inclusion and inclusive growth.

2. To examine the role of banking system in extending banking services for financial inclusion.

3. To examine the trend and pattern of SHGs-bank linkage programme in India.


5. To suggest some policy implications on the design and modification of the SHGs-bank linkage programme.

1.4. Hypotheses:

- Banking sector does not play significant role in financial inclusion.
- SHGs-Bank Linkage Programme does not play significant role in financial inclusion.
- Microfinance does not reach to the poor.

1.5. Database and Methodology:

As the microfinance sector in India is still in infancy, the sources of statistics related to the sector are also scattered. The study is based on secondary data collected from various sources such as Status of Microfinance in India (NABARD), Sa-Dhan (Bharat Microfinance Report), Handbook of Statistics on Indian Economy (RBI), Banking and Statistical Report of Commercial Banks (RBI), Economic Survey of India (Planning Commission, Government of India), Report on Currency and Finance (RBI), Mix Market, Microfinance Gateway, Ministry of Rural Development (GOI), Microfinance India- State of The Sector Report published by Access Development Services, Various issues of State of the Microcredit Summit Campaign Report and many other publications by individual researchers and agencies.
Based on the availability of data, the appropriate and suitable statistical and econometric tools have been applied for analysing the data and getting the results to derive logical conclusion. Statistical tools such as mean, standard deviation, annual growth rate and compound annual growth rate (CAGR) have been used.

**Mean:**

\[ \mu = \frac{\Sigma X_i}{N} \]

Where, \( X \) is the variable concerned

\( N \) is the number of observation

**Standard Deviation:**

\[ \sigma = \sqrt{\frac{\Sigma (X - \mu)^2}{N}} \]

Where, \( X \) is concerned variable

\( \mu \) is mean of the variable

\( N \) is the number of observation

**Coefficient of Variation:**

\[ CV = \frac{\sigma}{\mu} \times 100 \]

Where, \( \sigma \) is the Standard Deviation

\( \mu \) is the mean of the variable

**Measure of Growth Rate:**

To observe the growth of tax and public expenditure we have used simple growth rate and compound growth rate measures. Simple growth rate can be computed by using the following formula:

\[ G = \frac{Y_t - Y_{t-1}}{Y_{t-1}} \times 100 \]

Where \( Y \) = the variables, whose growth rate is measured

\( G \) = growth rate

\( T \) = time period
Compound Annual Growth Rate (CAGR):

In order to study the year-wise growth in the variables percentage growth rates and compound annual growth rates (CAGR) have been calculated. It is a simple measure to find out the year-wise increase and decrease in the variables under study. The compound annual growth rate is a number that represents a steady level of growth from the initial value to an ending value as it determines the average of year to year growth rate for time series data. The percentage compound annual growth rate in a variable has been calculated by firstly regressing the natural logarithm of the variable on time which is called the semi-log model is used in the following form:

\[ Y_t = Y_0 (1+r)^t \]

Taking natural log of the above equation, we have

\[ \ln Y_t = \ln Y_0 + \ln (1+r) \]

Putting \( \ln Y_t = Y^* \), \( \ln Y_0 = a \) and \( \ln (1+r) = bt \) then the above equation can be written as:

\[ Y^* = a + bt \]

Where, \( Y \) is the variable in question

\( t \) is time variable

\( a \) is intercept

\( r \) is compound rate of growth

Compound growth rate (r) can be computed by estimating the above equation as:

\[ r = \{ \text{antilog (b)-1} \} * 100 \]

Coefficient of Correlation

In order to find out the association between two variables, we have calculated coefficient of correlation by the following formula:

\[ r = \frac{\sum xy}{N.\sigma_x.\sigma_y} \]

Where, \( r \) is correlation coefficient

\( x = (X - \bar{X}) \) and \( y = (Y - \bar{Y}) \)
\[ \sigma x = \text{standard deviation of series } x \]

\[ \sigma y = \text{standard deviation of series } y \]

\[ N = \text{number of paired observations.} \]

**Index of Financial Inclusion:**

Since inclusive financial system is judged from several dimensions, we use the multidimensional approach to construct the index of financial inclusion (IFI). The approach is based on the method suggested by Sarma (2008)\(^2\). UNDP has also used similar type of approach for computation for different type of indexes such as HDI, HPI and GDI etc. Index of Financial Inclusion is computed by first calculating a dimension index for each dimensions of financial inclusion. The dimension of index for ith dimension, \( d_i \), is computed by the help of following formula.

\[ D_i = \frac{A_i - m_i}{M_i - m_i} \]  \( (i) \)

Where

\[ A_i = \text{Actual value of dimension } i. \]

\[ m_i = \text{minimum value of dimension } i. \]

\[ M_i = \text{maximum value of dimension } i. \]

Formula (1) ensures that \( 0 \leq d_i \leq 1 \). Higher the value of \( d_i \), higher the state's achievement in dimension \( i \). If \( n \) dimension of financial inclusion are considered, then a state \( i \) will be represented by a point \( D_i = (D_1, D_2, \ldots, D_n) \) on the \( n \)-dimension Cartesian space.

In the \( n \)-dimension space, the point \( 0 = (0,0,\ldots,0) \) represents the point indicating the worst situation while the point \( 1 = (1,1,\ldots,1) \) represents the highest achievement in all dimensions. The index of financial inclusion, \( IF_i \), for the \( i \)-th state, then this is measured by the normalized inverse Eucliden distance of the point \( D_i \) from the ideal point \( 1 = (1,1,\ldots,1) \). The formula becomes,

\[ IF_i = 1 - \sqrt{((1 - D_1)^2 + (1 - D_2)^2 + (1 - D_3)^2)/3} \]
1. $0.67 < \text{IFI} < 1$ - high financial inclusion
2. $0.6 < \text{IFI} < 0.67$ - medium financial inclusion
3. $0 < \text{IFI} < 0.6$ - low financial inclusion

- The proposed IFI takes values between 0 and 1, zero indicating lowest financial inclusion (i.e. complete financial exclusion) and 1 indicating complete financial inclusion.

- **Banking penetration (Dimension 1)**

  This is one of the most important indicators of financial inclusion. Inclusive financial system should penetrate widely amongst its users. The size of the banked population, i.e; number of adult population having a bank account, then the value of this measure would be equal to 1. Because of the non-availability of data on banked population, we use number of bank accounts as a proportion of the total population as an indicator of this dimension. However, we use both deposit account or credit account or loan account as the indicators of banking penetration.

- **Availability of banking services (Dimension 2)**

  In a well develop and Inclusive financial system, banking services should be easily available to its users. Availability of services can be indicated by the number of bank outlets (per 1000 population) and /or by the number of ATM per 1000 people, or the number of bank employees per customer. In India, there is another concept introduced in banking the system which is known as Banking Correspondence (BC) model in order to provide the banking services to the people of the country. We use the number of bank branches per 1000 adult population and also number of branches per square km to measure the availability dimension.

- **Usage (Dimension 3)**

  This dimension emerges from the concept of “under banked” or “marginally banked” people, as observed by Kempson et al (2004). It observes that in some apparently very highly banked countries, a number of people with bank account are nonetheless making very little use of the services on offer”. Thus merely having a bank account does not ensure that the system is inclusive; it is also imperative that the banking services are adequately utilized. In order to incorporate the usage dimension in our index, we consider two basic services of the banking system- outstanding credit
and deposit. Accordingly, the volume of outstanding deposit and credit as proportion of the state domestic product (GSDP) has been used to measure this dimension.

For the analysis of agency-wise/state-wise/region-wise SHGs-bank linkage programme following three parameters have been used:

a. SHGs saving linked with commercial banks, cooperative banks and regional rural banks.
b. SHGs loan disbursed with commercial banks, cooperative banks and regional rural banks.
c. SHGs loan outstanding with commercial banks, cooperative banks and regional rural banks.

1.6. Scope and Importance of the Study:

It is generally argued that microfinance emerged as one of the most innovative tool for fighting poverty. Such enthusiasm behind microfinance is only due to its holistic objective of poverty reduction. But there is a belief in the academic circle that we still know little about the depth of outreach and the impact of microfinance on poverty. Answering these questions is critical for justifying large scale subsidies and investment of public funds. Answering these questions requires some rigorous quantitative method, as naïve approaches give biased results. Conclusions drawn on the basis of the result of such naïve approaches are generally misleading.

A growing body of evidence suggests that very poor households are excluded from accessing microfinance programmes (Hulme & Mosley, 1996)⁶⁴. It is generally believed that extremely poor people are dropping out of credit programmes after having failed to keep up with repayment instalments. Some critics also question the efficacy of microcredit in reaching extremely poor people. They argue that, while micro-credit has contributed positively to the wellbeing of poor people in general, it has failed to reach the poorest of the poor. Most microfinance institutions tend to serve not the poorest of the poor, but rather those near the poverty line. One of the prime reasons behind the failure of the various antipoverty programmes in India is mis-targeting. It has been found that large sections of the poor were not covered under these programmes. Integrated Rural Development Programme (IRDP), the biggest credit delivery programme in the world was also not an exception. So accessing the targeting efficiency of Microfinance Institutions (MFIs) is of extreme importance as
the whole mission of microfinance is directed towards the objective of providing financial services to the lower strata of the society and thereby reducing poverty.

India, in the era of globalization and privatization where market forces are left free to behave in accordance with the market conditions, is following a plan recognizing the role of government in economic development process as the 11th five year plan points out that it is a reflection of our society’s determination to improve the economic condition of our people. The 11th plan is targeting towards inclusive growth in the country primarily based on investment in infrastructure facilities whereas ‘inclusion’ will require fiscal intervention by the government. Plan is targeting towards inclusive growth in the country primarily based on investment in infrastructure facilities whereas ‘inclusion’ will require fiscal intervention by the government. As we know poor households face many constraints in trying to save, invest and protect their livelihoods. Therefore, poor needs an efficient mode of financial support. Microfinance emerged as one of the mode to finance the poorer section of the society to protect their livelihoods through engaging themselves as productive labour.

1.7 Limitations of the Study:

1. The study mainly deals with the Self-Help Groups model of micro-financing in the country.
2. The study is limited for the period 1992-93 to 2012-13, after the emergence of pilot project in the country.
3. For computing financial inclusion index across the states, data have been collected only from scheduled commercial banks issued by RBI in the report, Basic Statistical Returns on Commercial Banks Report (BSR).
4. The data on specific variable of Self-Help Groups-bank linkage was not available in the year 2006-07 and 2007-08 in north-eastern region of the country.

1.8. Scheme of the Study:

The present study has been divided into seven chapters which have been organized as follows:
Chapter first introduces the main theme of the study. It includes review of the relevant literature related to microfinance and financial inclusion, objectives of the study, database and methodology, scope and importance of the study and limitations of the study. It is an introductory chapter.

In chapter second, general description of microfinance has been discussed in detail. It throws light on the definition of microfinance, objectives and characteristics of microfinance, approaches and evolution of microfinance, rationale and growth of microfinance in the world and its role in poverty alleviation and rural development.

Chapter third gives emphasis on microfinance in India. In this chapter, emphasis has been given on the formal financial sector in India and its indicator, factors behind the failure of formal financial sector in serving the poor, evolution of microfinance in India, need for microfinance, microfinance and sustainable livelihoods, microfinance delivery models, prospects of microfinance, inclusive growth meaning and challenges, focus on women empowerment and gender dimension in economic development.

Chapter four mainly deals with the financial inclusion in India. In this chapter focus has been given to the definition of financial inclusion, a global perspective on financial inclusion, bank nationalisation phase and nationalisation and impetus to financial inclusion, extent of financial exclusion in India, north-eastern states and financial inclusion, financial inclusion through postal saving banks, barriers to financial inclusion, reasons for financial exclusion and its consequences, parameters of financial inclusion, role of banking sector in financial inclusion and measurement of index of financial inclusion across state in India by using three parameters, that is, penetration, availability and usage.

In chapter five state-wise assessment of Self-Help Groups –bank linkage programme has been discussed. In this chapter emphasis has also been given to the origin, evolution and characteristics of SHGs-bank linkage and its growth pattern in the country. Three parameters such as savings, loan disbursed and loan outstanding under commercial banks, cooperative banks and regional rural banks of SHGs-banking have been analysed. For state-wise/agency-wise analysis of SHGs-bank linkage programme, the above three parameters have been selected.
Chapter six deals with region-wise assessment of Self-Help Groups –bank linkage programme. Focus is also given on the outreach of SHGs-bank linkage programme in different regions of the country. Three parameters of SHGs-Banking have been analysed such as savings, loan disbursed and loan outstanding under commercial banks, cooperative banks and regional rural banks.

Chapter seven of the thesis provides summary and conclusion of the study and some specific suggestions regarding financial inclusion and inclusive growth through microfinance in India.
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38


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