MICRO-CREDIT AND REPAYMENT RATES: A CASE STUDY OF KUDUMBASHREE MICRO-ENTERPRISE PROGRAMME IN KERALA - 2006

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ABSTRACT

The attempts in India to promote microfinance since early 1990s in India was in the background of growing evidence of indebtedness among farmers and and credit starvation to the poor. With the withdrawal of state activism in credit markets in India since 1992, an increasing role was envisaged for private sector in credit dispensation to the poor in the form of microfinance under the umbrella of Bank-Self Help Group programme. Although its outreach has increased substantially, the predominant commercial model of microfinance has recently encountered hostility of poor borrowers because of their high lending rates and loan shark type behaviour.

An alternative to the commercial model of microfinance is the Kudumbashree program initiated in 1998 by the Government of Kerala, in India. Based on a primary survey of households under the Kudumbashree in four villages in Kerala in 2006, the study examines the dynamics of high repayment rates.

The study found that repayment rates are relatively lower in non-agricultural activities because of the marketing problems (resulting from the creation of non-tradables), while it is relatively successful in the agricultural sector. High repayment rates are found to be propelled by dynamic incentives like prospect of loan renewal. Finally, the study found that borrowers did considerable double-dipping (borrowing from other microfinance programs) and borrowed from non-institutional sources raising their indebtedness. The study found that micro-credit programmes are not a universal success in improving the livelihood of the poor especially in non-agricultural sectors. The study argues for an analytical framework which examines the interaction of labour, credit and product market to understand the livelihood of the poor.

Keywords: Microfinance; Group lending; Repayment rate.
JEL Classification: O16; O17; G21.

World-wide micro-credit programmes have evolved into microfinance programmes which include insurance and other services. The impact of micro-credit has been viewed from different perspectives. Traditionally, it has been studied from the point of view of the lender, focusing on factors determining the high repayment rates (Khandker, Khalily and Khan, 1995, Khalily et al., 2002). In Bangladesh, where the Grameen Bank was initially studied, most of the studies have evaluated the impact at the household level (Khandker, 1988; Zohir et al., 2001; Pitt and Khandker, 1998; Mustafa et al., 1996; Husain, 1998). It is now well known that micro-credit institutions worldwide have generated high repayment rates making lending to the poor profitable and a sustainable proposition for the lenders (Cull, Demigüc-Kunt and Murdoch, 2006). At the theoretical level, the explanations for high repayment rates have been peer monitoring, joint liability, the possibility of repeat lending (contingent renewal) etc (Murdoch ,1999; Ghatak and Guinnane ,1999; and Armendariz de Aghion and Murdoch, 2005).

In India, increasing credit access to the poor through financial inclusion is a crucial component of the Indian economic planning and fight against poverty. The nationalization of major banks in 1969 and mandated directed credit programme to the priority sector since the early 1970s was part of the push for financial deepening and inclusion. But the economic reforms since 1992 with emphasis on deregulation and efficiency had a profound impact on the financial landscape especially the access of credit to the poor. Studies have shown that access of rural households to institutional sources of finance has declined since 1992 and the share of debt of rural households especially from non-institutional sources has increased (Shetty, 2005; Swaminathan, 2007). In India, the promotion of the microfinance delivery through Bank-Self Help Group (SHG) model by the Reserve Bank of India and National Bank for Agriculture and Rural Development (NABARD) since 1992 is to replace the state activism of the 1970s and 1980s by private sector (microfinance) entities to promote financial inclusion. After a series of farmers' suicides in the country which are linked to rising indebtedness, all banks are being urged to adopt ‘financial inclusion’ as an operational policy[1].

[1] For an overview of the Indian literature, see Ghate (2007), Basu and Srivastava (2005), Nair, T.S (2001).

Although the outreach of microfinance in India has increased from a modest 33 thousand SHGs 1992 to 2.9 million SHGs by 2007, the biggest driver of this expansion – the commercial model (based on profits) received some setbacks in March 2006 with borrowers in the state of Andhra Pradesh (with the highest microfinance density in India) showing considerable hostility to these entities on the ground that they behave like loan sharks (Ghate, 2007 and Shylendra, 2006). It is in this background there is a search for alternative delivery models of microfinance. The Kudumbashree program in the state of Kerala, represent an alternative delivery to the commercial model of delivery and embraces a number of elements: micro-enterprises, insurance, education, old-age assistance, etc. Like microfinance programs worldwide, Kudumbashree is hailed as a success because of its high (94.5) repayment rates (Government of Kerala, 2005b).

In the literature on economic impact, there is increasing evidence that microfinance programmes has low-income impact but generate high repayment rate (Copestake, Bhalotra and Johnson, 2001; MkNelly and Dunford, 1998, 1999; Mosley, 2001; Sebstad and Chen, 1996; Todd, 2000). Further, recent research have provided evidences of microfinance leading to more debts and borrowers getting locked into a process of loan recycling (Todd, 1996; Murdoch, 1998, Rahman, 1999; Huq, 2001). In India, the expansion of microfinance on a large scale since 1992 has been accompanied by increasing evidence of indebtedness of farmers, which is a paradox. A study of the dynamics of repayment rates of micro-credit enterprises could provide insights into this paradox. Although there are some attempts to study the Kudumbashree programme (Anand, 2002, John & Chathukulam, 2002; Kadiyala, 2004; Pat, 2005, Devika and Thampi, 2007), they have not examined the dynamics of the high repayment rate of micro-credit programmes. The main aim of the present study is to contribute to this literature by examining the dynamics of the repayment rate of the Kudumbashree micro-credit program using a primary survey of borrowers in four villages (panchayats) in Kerala. Based on the empirical results, the study recommends an integrated analytical framework which incorporates linkages and dynamics of labour, credit and product markets to evaluate micro-credit programmes.

The present study contributes to the literature in many ways. First, Kerala is ahead of almost all Indian states in social indicators at low levels of economic growth[2]. But recently several factors have contributed to fueling much political and social tension in the state: large scale unemployment, mainly among the educated; deterioration in agriculture, especially the large drop in the total area under cultivation (including recently, the plantation sector); unfavorable credit scenario (low credit-deposit ratio); and the underdevelopment of the industry sector. As a result close to 2,000 farmers committed suicide in the state (Government of Kerala, 2006, Vaidyanathan, 2006; Jeromi, 2007). These factors have also put poverty into the focus of public policy debates and Kudumbashree could represent an alternative model of economic advancement. Secondly, it is increasingly recognized that women share a grater burden of poverty within the household. Kudumbashree being a women-centered micro-credit program, it is interesting to examine how such a program contributes to the removal of gender inequalities and empowerment of women. Lastly, Kerala being a state with relatively low credit-deposit ratio and the poor depending on non-institutional sources of finance, the impact of microfinance borrowing on the indebtedness of borrowers, especially the issue of loan recycling and the vulnerability of the poor, is an interesting area of investigation.

The study is organized as follows: Section II briefly reviews the theoretical literature on the subject. Section III examines briefly the evolution of microfinance program in India. Section IV examines the Kudumbashree program in Kerala. Section V empirically examine the dynamics of repayment rates of the micro-enterprise program of Kudumbashree based on the survey of households of four panchayats in Kerala: and Section VI summarises the conclusions from the study.

[2] Kerala had a relatively lower poverty ratio (9 percent) as compared with the other states, the national average ratio being of 26 percent in 2003 (Government of Kerala, 2005b). This was achieved without commensurate economic development and this experience referred to in the literature as the 'Kerala model of economic development' illustrates the role of public action in providing social goods and services even at low levels of economic growth. The sustainability of this model has been questioned by a number of researchers (See Kannan, 1990; George, 1993; Tharamangalam, 1998).

Section 1I:
Review of Literature – A Brief Review

In the theoretical literature, the asymmetric information framework provides the standard explanation of why poor are excluded from credit market: poor lack collateral and other visible assets and therefore are difficult to monitor which cause them to be more credit rationed or credit denied. Recent theoretical works have provided explanation of how such information asymmetries could be avoided in credit markets[3]. One such explanation is the micro-lending based on ‘group lending’. We review below some of the theoretical explanations for the success of group lending.

Stiglitz (1990), Varian (1990), and Becker (1991) provide explanations based on ‘*peer monitoring*’. Using results from contract theory, they argue that since loans are given to a ‘group’ rather than to an ‘individual’ (as in the traditional lending arrangement), group members have an incentive to monitor their peers. Since group members have better information compared to lenders, peer monitoring would be relatively cheaper compared to bank monitoring, leading to greater monitoring and greater rates of repayment.

Banerjee, Besley and Guinnane (1994), Besley and Coate (1995), Conning (1996), Madajewicz (1998), Stiglitz (1990), Armendariz de Aghion (1999) and Ghatak and Guinnane (1999) also argue that compared to other explanations, arguments based on peer monitoring are more successful in explaining the success of group lending schemes. They illustrate how imposing joint liability on borrowers can alleviate adverse and more hazard problems. However, the variables they emphasize in order to demonstrate peer monitoring are slightly different.

Ghatak (1999, 2000) and Tassel (1999) argue that group lending could lead to homogenous group formation. They affirm that joint liability and self-selection in credit could lead to positive assertive matching so that borrowers of the same type club together. Safe borrowers will form credit cooperatives and risky borrowers will be left aside.

[3] For a complete review of literature, see the following efforts which are devoted to this subject: Murdoch (1999), Ghatak and Guinnane (1999) and Armendariz de Aghion and Murdoch (2005).

Besley and Coate (1995) analyze a strategic repayment game with joint liability and demonstrate that successful group members may have an incentive to repay the loans of the less successful ones. They also highlight the effects of social collateral in enforcing prompt repayment.

Another explanation for the success of group lending is the '*contingent renewal explanation'*. Contingent renewal of loans is one kind of positive incentive to repay. It refers to the feature that in case of default by a group, no member of this group will receive future loans. In case of prompt repayment, there is repeat lending. As a result, the probability of moral hazard is reduced. This is achieved by introducing joint-liability contracts which transfers the risk from the lender to the borrower. Studies by Besley and Coate (1995), Khandker, Khalily and Khan (1995), Ray (1999) and Rai and Sjöström (2004) emphasize the 'domino effect' of the group being excluded from future loans (in the case of a member defaulting on loan) as a potential incentive mechanism to enforce repayment of the group. The contingent renewal implies that the selection of borrowers is credit history dependent.

In recent times, attempts have been made to answer the question whether group lending is a complete financial tool or whether there are possible alternatives or improvements to develop. Some of the new innovative ideas include smaller but more frequent repayment installments and replacing the joint-liability clause with requirement of public repayment[4].

The new microfinance literature highlights the gender by emphasizing the role of women in the microfinance revolution. Traditionally women have less access to credit. However, they are more likely to repay their debts than men. Women are more concerned with household improvement, children's education and their health than are the male family members. Some of the new lending schemes like higher loan amounts over time and easy installments are important tools to attract female borrowers.

[4] For a review of recent ideas, see Armendariz de Aghion and Murdoch (2005), chapter 5.

Section III
Progress of Microfinance Program in India.

India Financial Development: A Brief history.

The organized financial system in India consists of commercial and co-operative banks, capital market institutions, non-banks and a number of indigenous banking and financial institutions. The organized sector consists of commercial banks and co-operative banks which are organized on the 'unit' banking principle are mainly rural based. Besides, government-owned post offices mobilize deposits but they do not undertake any lending activity. The unorganized sector consists of indigenous bankers, moneylenders, chit funds. At the financial services side, institutions like Unit Trust of India (UTI), Life Insurance Corporation of India (LIC), General Insurance Corporation (GIC) were also created under public ownership.

Table 1: Purpose-Wise Distribution of Bank Credit by Scheduled Commercial Banks: 1968-2005

(Amount in Rs. Crore)

Sectors	March 1968		March 1991		March 2005	
	Amount	In%	Amount	In%	Amount	In%
1. Gross Bank Credit	3,064		1,24,202		11,52,468	
2. Food Procurement Credit	109		4,216		40,039	
3. Non-Food Gross Bank Credit	2,955	100.0	1,19,986	100.0	11,12,429	100.0
Of which to						
3.1. Priority Sectors	325	11.0	39,123	32.6	2,50,887	22.6
3.2 Industry (Medium and Large)	1,857	62.8	51,356	42.8	3,93,600	35.4
3.3. Wholesale Trade	432	14.7	11,493	9.6	73,518	6.6
3.4. Others	341	11.5	18,014	15.0	39,44,24	35.5
<u>Memorandum Item</u>						
(A) Industrial Credit (Small, Medium and Large)	2,068		59,093		4,46,825	
(B) Priority Sector as a Proportion of Net Bank Credit	14.0		38.0			37.0

Source: Reserve Bank of India, Banking Statistics (Various Issues).

Scheduled commercial banks constitute about 97 per cent of the total deposits of the banking system in March 1951. At the time of independence, nearly 93 per cent of debt of rural household's (which constitute of two-third of the population in India) was provided by the informal sector including money lenders. During the post-independence period, banks were primarily located in metropolitan and urban areas and catered to the needs of industrial sector. For example, agricultural sector which contributed nearly 56 per cent of national income received only 2 per cent of bank credit in 1951. Such asymmetries and increasing political climate for interventionist policies resulting in nationalization of major banks in 1969.

During the post-1969 period, the banking system experienced a phenomenal expansion of branches in semi-urban and rural areas of the country. The post-bank nationalization saw the emergence of 'social banking' and was essentially 'supply oriented' (Shetty, 1978). Through the branch licensing regulation, the Reserve Bank of India (RBI) put pressure on banks through branch licensing policy to open bank branches in semi-urban and rural areas[5]. Thus the population per bank office which was around 64 thousand in 1969 showed a dramatic decline and was around 14,000 by 1991. The dramatic expansion of bank branches in rural and semi-urban areas was made possible by This substantially boosted savings in the form of financial assets (especially currency and bank deposits as proportion of savings) from 5 per cent in 1969 to 15 per cent in 1991. During the social phase of bank interest rates on deposits and loans were administered with priority sector including informal sector getting a lower interest rate prescription. Banks were required to lend 40 per cent of their credit to 'priority sectors' (agriculture, small-scale industry, retail trade etc). The lending to private corporate sector were greatly restricted using the inventory and receivable norms prescribed under the Credit Authorisation Scheme administered by the Reserve Bank of India (the central bank as well as its financial regulator). Banks were compensated for the below the market lending rates on priority loans through a cob-web of compensatory finances including refinances and payments of interest on bank's cash reserve holdings with the central bank. During the social phase of banking, monetary policy was increasingly conducted

[5] The 'branch licensing' policy implemented by RBI which granted licenses for opening of new branches mainly in rural and semi-urban areas.

through the increasing use of cash reserve ratio and statutory liquidity ratio[6]. By March 1991, statutory pre-emptions itself absorbed nearly four-fifth of deposits of scheduled commercial banks (Table 2). During the social phase of banking, credit-deposit ratio of banks decelerated substantially : it fell from 77.5 per cent in 1969 to 61.9 per cent mainly reflecting the increase in statutory pre-emptions (CRR and SLR) as well as through inventory and receivable norms prescribed for different industries.

Table 2: Major Indicators of Scheduled Commercial Banks in India : 1969-2005.

Year	Cash-Deposit Ratio	Investment – Deposit Ratio	Credit Deposit Ratio	Investment plus Credit-Deposit Ratio	Priority Sector Credit to Deposit Ratio
1969	8	29	77.5		14
1972	7	31	72.0		22
1980	12	35	66.1		37
1990	16	37	60.7		41
1991	18	38	61.9		38
1992	18	38	57.7		37
1995	16	39	55.6	65.3	35
2000	10	37	56.0	63.6	36
2001	8	37	56.7	64.3	35
2002	7	39	58.4	65.6	35
2003	6	41	59.2	66.8	35
2004	6	44	58.2	66.5	37
2005	7	42	66.0	73.4	37

Source: Reserve Bank of India, Banking Statistics and Trend and Progress of Banking in India (Various Issues)

On the institutional front, a number of development institutions at the federal level like Industrial Development Bank of India (IDBI), Export-Import Bank of India (EXIM Bank) and National Housing Bank (NHB) were created with the purpose of lending to industrial sector, export and housing respectively. Besides a host of state-level financial institutions were also created.

[6] Cash reserve ratio is a reserve requirements; the minimum is 3 per cent and maximum limit is 15 per cent. The statutory liquidity ratio (SLR) stipulates that banks invest at least a minimum of 25 per cent of its net demand and time liabilities in 'liquid' assets. Liquid assets were defined as government treasury bills and bonds . At the time of the balance of payment crisis in June 1991, statutory pre-emptions occupied nearly 53.5 per cent of net demand and time liabilities of scheduled commercial banks in India. The level of statutory pre-emptions has been reduced over a period of time from 53.5 per cent in 1991-92 to 29.5 per cent in 2003-04

Economic Reform and Financial Exclusion

The social banking phase was broken by the economic crisis in India in June 1991 when the country faced severe balance of payments problem resulting in the country seeking a loan from International Monetary Fund (IMF) which in turn triggered a host of reforms in fiscal, monetary, real and financial sector areas. The financial sector reforms introduced in the country in 1992 based on the recommendations of the Committee on Financial Sector Reforms (popularly known as Narasimham Commmittee) Report (1991) substantially changed the financial landscape in India. During this phase, the administrative interest rate structure was dismantled and banks were given greater freedom in taking decisions on their balance sheets and promoting efficiency. Besides a number of prudential measures including the introduction of capital adequacy, income recognition and asset classification based on international norms were introduced as part of the financial sector reforms in India.

Chart 1: Share of Small Borrowal Accounts in Total Credit Accounts and outsanding bank credit in India :1975-2005

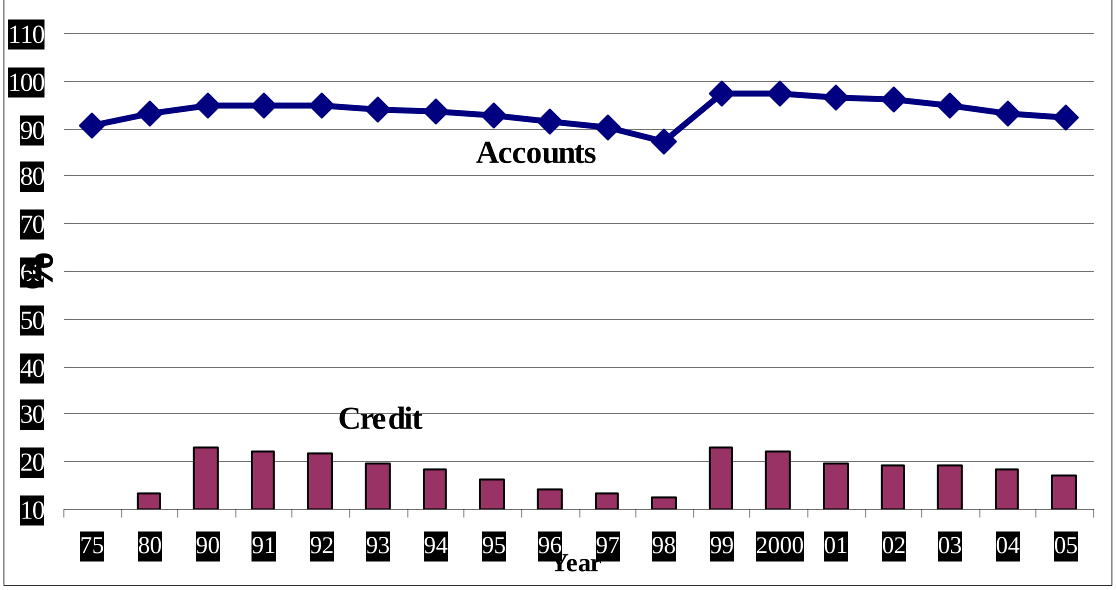
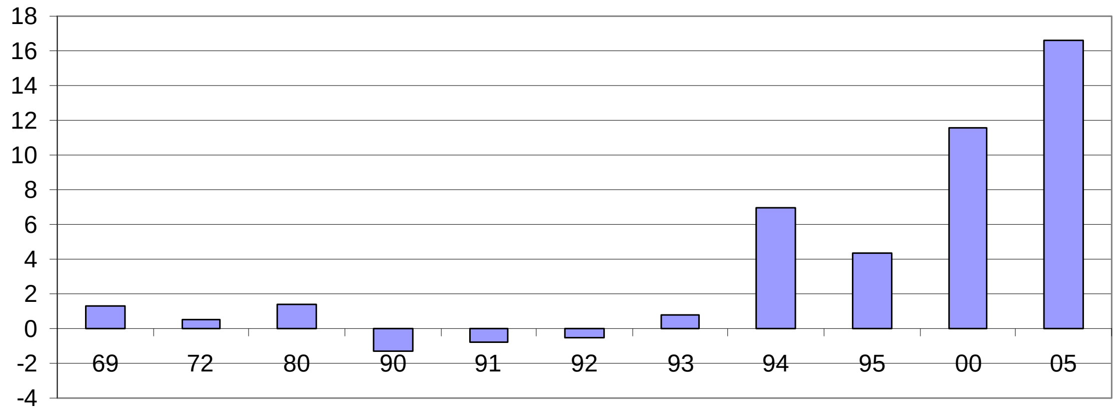


Chart 2: Excess(+) Holding of Investment by Scheduled Commercial Banks in Approved Governemnt Securities in India: 1969-2005



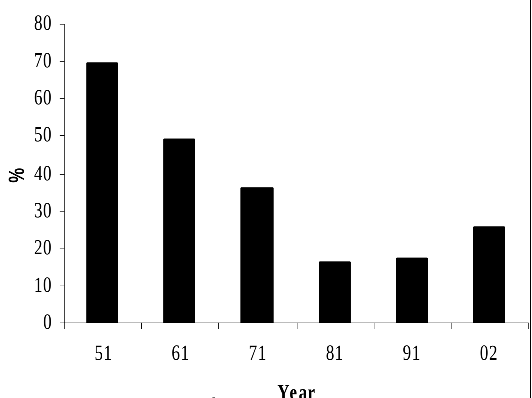
The capital accord regime associated with financial sector reforms altered substantially the behaviour of banks[7]. Firstly, given the 100 per cent risk-weights for loans, made loans as an 'inferior' asset in the portfolio of banks. Banks instead preferred the low risk weighted assets like investment in government securities to expand their balance sheets. This resulted in substantial decline in credit-deposit ratio of banks in India - from 61.9 per cent in 1991 to 56 per cent in 2000[8] (see Table 2). An analysis of banks excess investments in government bonds (defined as actual to mandatory investment requirement) was considerably high during the reform period accounting for as high as 18 per cent of deposits in 1995-96 (Chart 2). The excess investment in government bonds (called SLR investments) by banks was clearly at the expense of bank credit. Secondly, the high non-performing assets of banks especially from priority sector (estimated at 50 per cent of priority sector credit), provided banks to cut-back on lending to the poor. This is evident from huge decline in small-borrowal accounts since the economic reforms. . On the eve of financial sector reforms, small borrowal accounts on an averaged around

[7] To promote financial stability, one of the important instruments advocated by Narasimham Committee Report was the internationally accepted capital adequacy norm. Banks were advised to meet the capital adequacy of 8 per cent of their risk-weighted assets by 1995. On the monetary side, the RBI scaled down the statutory pre-emptions in the form of cash reserve ratio and statutory liquidity ratio mainly with the idea of providing additional liquidity to banks for their lending

[8] . The official explanation provided by RBI was that the credit market was 'sluggish' and one has to look for a more broadened definition of credit which include banks investments in money and capital market instruments like Certificate of Deposits , Commercial Paper etc. But the beneficiaries of such investments was the well-established corporates rather than small borrowers and cannot be construed as a rise in the overall supply in the economy.

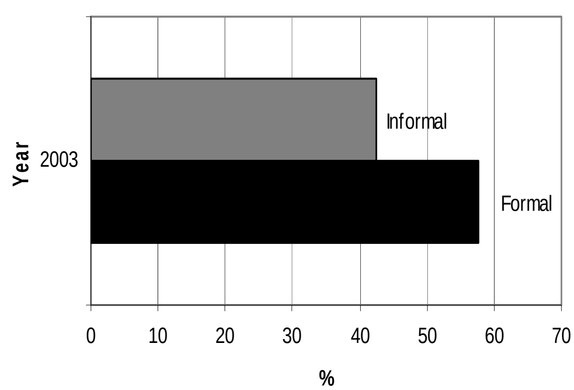
95 per cent of the borrowal accounts and around 23 per cent of outstanding bank credit. These proportions fell dramatically post-financial sector reform period : the share of small borrowal accounts in total borrowal accounts fell from 95 per cent in 1992 to as low as 90.1 per cent and that of credit outstanding from 22 per cent in 1992 to 12.5 per cent in 1998 (Chart 2). Thirdly, the flexibility provided to banks in meeting their priority sector targets also contributed to cut-backs in priority sector lending: banks were provided with a separate window to invest any shortfall in meeting priority sector targets (vis-à-vis) in a Rural Infrastructure Development Fund (RIDF) bond (since 1995-96) with a fixed return which was considerably higher than the priority sector loan return. The fourth major factor responsible for sluggish lending to priority sector was the withdrawal of credit guarantee on small loans by DICGIC since 1993. This reduced the incentive of banks to lend to the small-scale industries which are in banks eyes 'risky'. The cumulative effect of all these developments was the 'credit starvation' experienced in the Indian economy and in particular the poor (Shetty, S.L, 2005). A corroborative evidence of increasing vulnerability of the poor is the increasing share of moneylenders in borrowing of cultivator households (Chart 3a). Similarly, the share of informal sector (including moneylenders) in total debt of farming households was as high as 43 per cent in 2003 (Chart 3b).

Chart 3a: Share of Moneylenders in Borrowing of Cultivator Households in India:1951-2002



Souce: NSSO, CSO, India

Chart 3b: Share of Formal and Informal Sector in total debt of rural farming households in India:2003



During the social phase of banking (1969-1991), there were numerous attempts to address the market failure problem in the credit markets especially lending to the poor and their financial exclusion. The main foundation of the Indian Government's interventions in rural areas as part of its anti-poverty programs in the last four decades is the self-employment program in rural areas called the Integrated Rural Development Program (IRDP)[9] which concentrated on providing credit (and/or subsidy) to individuals for their self-employment activities. The program included a skill development component and also a provision for the promotion of marketing of products/services. The underlying assumption was that the lack of productive assets was responsible for the poor being unable to ameliorate their lot. The other anti-poverty program in India was the rural public works program called the National Food for Work Program. Over the years, there were enhanced outlays on these programs. The banking system was given targets to lend to the rural poor under priority sector credit target dispensation and sometimes promoted through high profile 'loan melas'. The expansion of banking system to the rural areas was promoted through the branch licensing system under which banks which new licenses were allowed only in semi-urban and rural areas. But this system often accentuated the moral hazard problems in the credit market in India resulting in poor repayments and the emergence of large non-performing assets (NPAs) in the portfolios of the banks(especially public sector banks), consequently affecting the financial viability and sustainability of the formal financial system. The second initiative was the expansion of co-operative banking system in India on a large scale in the rural areas. However, the major weakness of the credit union is the limited availability of local resources as well as substantial non-repayment of loans which constrained its lending ability. At the informal sector, there existed a number of insititutions similar to the Rotating Savings and Credit Association (ROSCA) like chit funds, nidhis etc. Under this informal scheme, a group of friends and acquaintances pool their resources to help each other in buying big-ticket items to meet consumption and small business needs. If a member fails to meet his or her obligations, then the rest of the group will likely bear the loss and the defaulting member could be expelled from the group. ROSCA has the advantage of helping low-income

[9] The IRDP program was launched in 1980.

participants but it is organized on the premise of savers eventually becoming borrowers.[10] Moreover, this type of arrangement is relatively rigid because of its very limited flexibility in loan size and timing.

After the introduction of the financial sector reforms in 1991 in India, as discussed in the preceding paragraphs, lending to the poor especially to the priority sector had suffered with banks reducing the small-loan accounts and showing less interest in lending under the programs. Instead, banks were enthusiastic of keeping the shortfall in priority sector lending in RIDF scheme. It is in this context that there is a growing interest in alternative credit delivery mechanisms like microfinance programs. In the delivery of small loans to the poor (micro-credit) there are five distinct approaches: In India the National Bank for Rural Development (NABARD) and the Reserve Bank of India (RBI) has actively promoted it by providing increasing funding to micro-finance institutions (MFIs)[11]. Under the NABARD's Self-Help Group (SHG) – Bank linkage model (which is different from the Grameen Bank model), SHGs bring together about 10-20 women who pool their savings for a few months, allocate them to members who need small amounts temporarily, thus making them eligible for a bank loan.

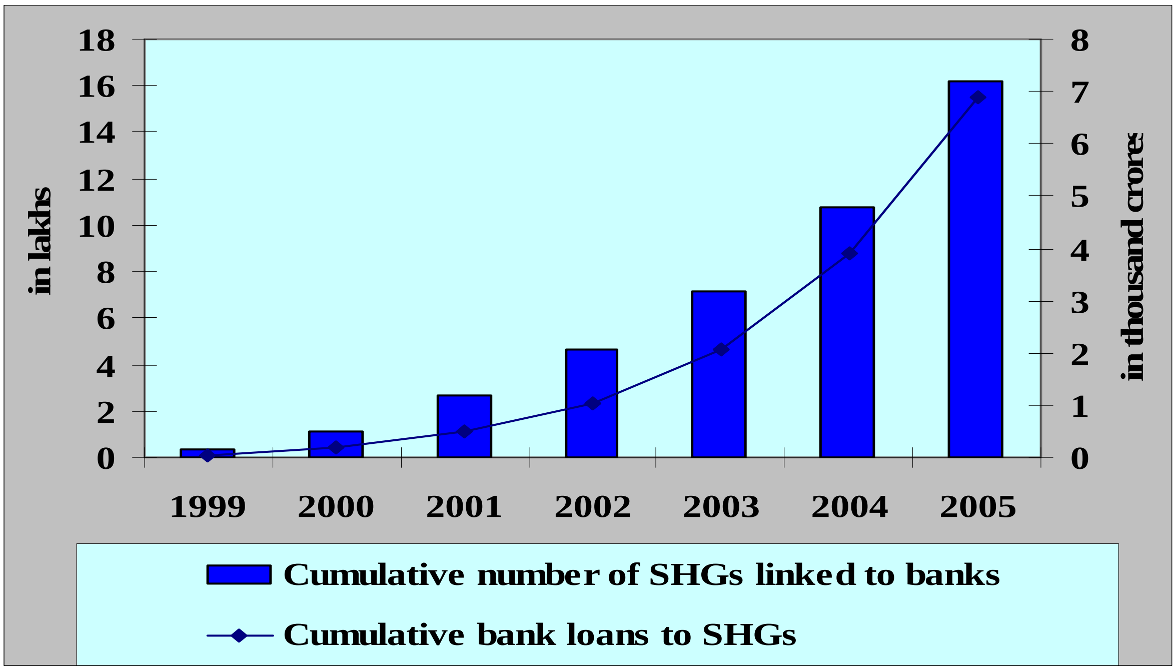
In India, micro-credit is provided through (a) Bank-led model (Bank-SHG linkage model) of delivery as well as through (b) Commercial model. The commercial model is based on funding of micro-finance institutions (MFIs) which comprise of non-governmental organizations (NGOs), non-banking financial institutions (NBFCs), charities and co-operatives (like SEWA in Gujarat). In the commercial model, there are two variants: (1) Bank-MFI model and (2) Partnership Model pioneered by ICICI bank[12].

The SHG-Bank linkage model was introduced in 1991-92 with a pilot project of linking 500 SHGs with banks which increased to more than 16 lakh by the end of March 2005. Cumulatively, these SHGs have accessed credit of Rs. 6,898 crore from banks

[10] This is only one type of ROSCA. For other types of ROSCA encountered around the world, see *The Poor and Their Money*, by Rutherford (2000).
[11] NABARD provides refinance to bank lending to MFIs and these are classified as priority sector lending . This method has been successful. Indeed, it is said about NABARD that it might be "the largest micro-credit program in the world with an outreach to nearly 24 million poor women" that have cumulatively received loans over Indian Rupees (Rs.) 68 billions from banks (Mahajan, 2005).
[12] For a discussion of partnership model, see Mor and Ananth, 2007.

during the period. About 2.4 crore poor households have gained access to the formal banking system through the programme. During the last six years the number of SHGs linked to banks has gone up from 32,995 during 1998-99 to 16,18,476 during 2004-05. (Chart 4).

Chart 4: Growth of the SHG-Bank linkage Programme in India: 1992-2005



Notwithstanding the remarkable progress, geographically there has been a skewed development of SHG-Bank linkage programme in India. It has been observed that the programme has been more successful in the Southern States, particularly Andhra Pradesh. This State alone accounted for 31 per cent of the total linkage at the end of March 2005, while the northern and north-eastern region together accounted for just 7.4 per cent of the total programme. In section IV, we discuss the Kudumbashree programme one of the alternatives to the commercial model.

Section IV
Kudumbashree Programme in Kerala

The Kudumbashree program in Kerala comes under the Bank-SHG model where the social intermediary is a state government entity (Kudumbashree). The Kudumbashree program is classified as a Neighborhood Group (NHG). The main difference between SHG and NHG is that SHGs are non-governmental, informal organizations promoted by voluntary agencies. NHGs are promoted by the government for the upliftment of the poor by bringing the activities of various departments into one umbrella. The Kudumbashree programme is co-sponsored by the Government of Kerala, local bodies and UNICEF. The origin of this program can be traced into the Urban Poverty Alleviation and Urban Basic Services Programs which were launched during the Seventh Five Year Plan by the Kerala Government that had a special emphasis on women and children. Kudumbashree is a women-centered initiative against poverty that has been in operation in the state of Kerala since 1998 in rural areas and since 2000 in urban areas. The community development societies (CDS) system acts as a sub-system of the local government (panchayat and municipalities) and takes decentralization of power further down to the grassroots level[13]. The program was initially implemented in 13 towns in the districts of Alleppey and Ernakulam, and later extended during the Eighth Five Year Plan to 16 more towns and then to the entire Malappuram district. The coverage of the program was extended to all gram panchayats in a phased manner in 2000-2001. The basic thrust of the program is women as they are more likely to be credit constrained, have restricted access to the wage labor market and have an inequitable share of power in household decision making.

Principal objectives of the Kudumbashree program are (i) facilitating self-identification of poor families through a poverty risk index, (ii) empowering the women of the poor strata to improve their individual and collective capabilities by organizing

[13] The government in India is organized in a three-tier structure: Central (federal), State (provincial) and local. The local government in India (the lower tier of the government) is divided as Corporation, Municipality and Panchayat. The classification of local government as Corporation, Municipality and Panchayat is based on population. Local governments with large population (mostly urban centers) are named as Corporation followed by Municipality and Panchayat.

themselves into NHGs, (iii) encouraging thrift and investment through credit by developing community development societies to work as informal banks of the poor, (iv) improving incomes of the poor through upgrades of vocational and managerial skills and the creation of opportunities for self-employment and wage employment, (v) ensuring access to basic amenities like safe drinking water, sanitary facilities, improved shelter and healthy living environment and (vii) promoting functional literacy among the poor and supporting continuing education. Thus, the program covers not only credit but also a number of non-credit services (like insurance, vocational training, literacy, leadership skills, social empowerment, etc.)[14].

One unique feature of the Kudumbashree program is the method used to identify the poor. In India, poverty estimates are based on consumption survey conducted by the National Sample Survey Organization (NSSO) every 5 years. These figures are available for the 1974 to 2000 period. Since the seminal work of Amartya Sen (1979, 1985, 1987), it is increasingly recognized that poverty is a multi-dimensional phenomenon. Kudumbashree uses this multi-dimensional concept to gauge poverty, rather than just judging via a shortfall in income or consumption of a family. This methodology was introduced in the early 1990s under the pilot of the Urban Basic Services Program in Alleppey town. The Alleppey methodology is believed to be superior to the conventional head count ratio as it captures the multi-dimensional characteristics of poverty (beyond the simple income poverty) and leads to the identification of the most vulnerable families.

To identify the poor, Kudumbashree carries out a baseline survey with the help of the local government. A household is considered poor if it possesses four or more of the nine non-monetary indicators, each reflecting a different kind of deprivation (See Annexure 1). The combination of any four risk factors provides 126 possible ways of finding a poor household. In the case of a ‘destitute family’, all the risk factors or at least eight out of nine are to be positive. The multi-index of poverty is based on the argument that poverty expresses itself in multi-dimensional outcomes. The outcome indicators relate to the various dimensions of poverty, viz., lack of food, clothing, housing, health,

[14] For more details, see www.kudumbashree.org.

education as well as psychosocial indicators. They argue that poverty is a complex set of instances of social exclusion that stretches out over numerous areas of individual and collective existence. Therefore, this results in the poor being separated from the generally accepted living patterns in society which make them unable to bridge this gap on their own. In the literature the debate regarding measurement of poverty has been based on resources (income) versus outcomes (living conditions).

The Kudumbashree program works under the traditional Bank-SHG model where the NGO who does the social intermediation happens to be the state government as shown in Chart 5. Kudumbashree units, like other micro-credit programs, start with mobilization of thrifts. Each household contributes a minimum of Rs. 10 per month, which form the basis of the savings pool of the NHG and these are normally deposited in a bank in the name of the NHG. The NHG volunteers for income generations collect thrift (small savings) from members every week. The thrift raised by the NHGs is given back to its members as loan for meeting consumption purposes as well as for meeting contingent needs such as medical treatment, birth delivery, death, education of children, marriage, repayment of old debt, etc. The repayment of the loans (principal and interests) along with regular thrifts enlarge the working fund of SHGs. Notwithstanding, the generated working fund may not be sufficient to meet all types of credit needs for all members. During this period, groups are expected to open a savings account with a financial intermediary in order to meet the growing demand for credit and especially to meet the needs of strengthening/diversification and starting of income generation activities (like micro-enterprises). NHGs act as an effective MFI and are the grassroots level unit of the poor women which promotes thrift among poor families.

Chart 5: Models of Delivery – Bank-NHG (Kudumbashree) model

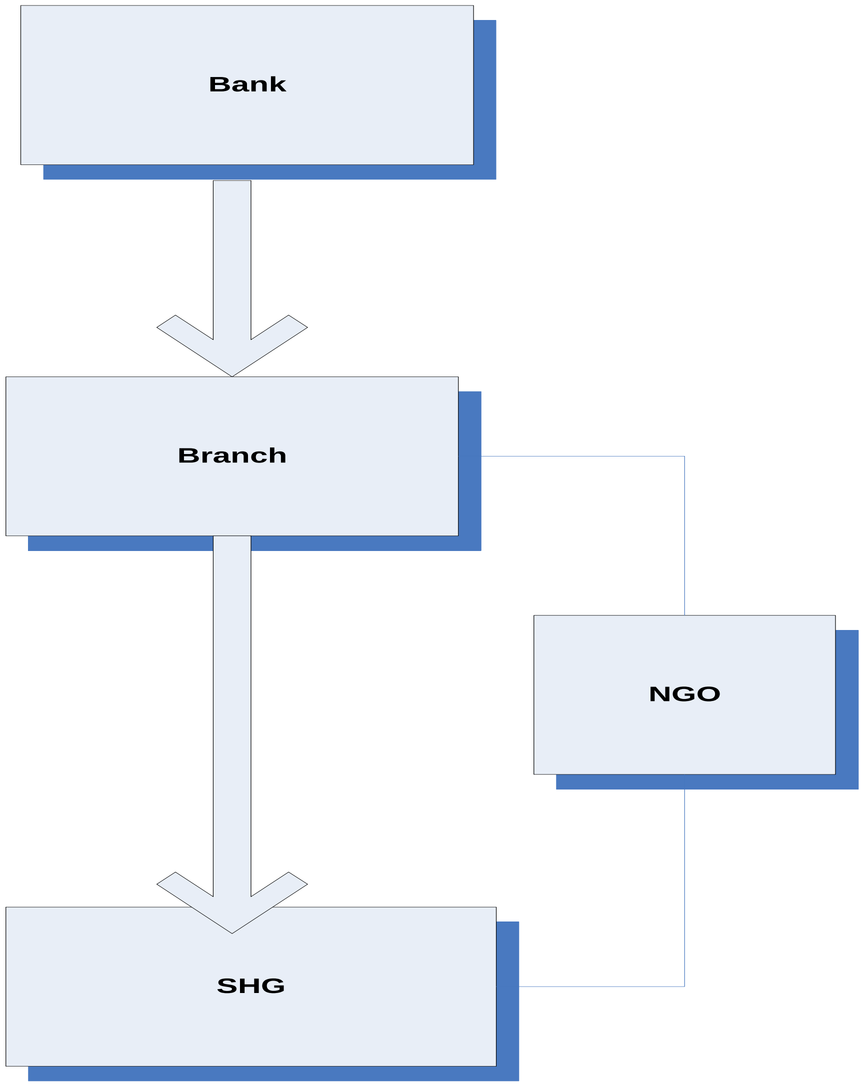


Table 3: Progress of Kudumbashree Program in Kerala: 1999-2006

	No. of NHGs	No. of ADS	No of Families Covered	Informal amount of Thrift (in million Rs.)	Amount of Loan (in million Rs.)	Velocity of Internal lending
1999-00	7,538	-	-	883.9	561.4	0.63
2002-03	113,675	13,423	2,210,033	1,634.9	1,695.9	1.04
2003-04	125,735	13,766	2,645,369	2,528.3	3,925.0	1.55
2004-05	147,989	13,262	2,923,425	5,330.1	13,078.7	2.45
2005-06	167,907	14,574	3,381,764	6,640.0	15,352.0	2.30

Source: Kudumbashree, *Annual Report* (Various issues).

Over the years, the number of NHGs created under the Kudumbashree program has raised from 7,538 in 1999-2000 to 167,907 by 2005-06 (Table 3). The amount of thrift collected from households has increased from Rs. 884 million to Rs. 6,640 million during the same period – a nearly eight-fold increase. The amount of loan given to households has increased of a nearly 27-fold during the same period (from Rs. 561 million in 1999-2000 to Rs. 15,352 million in 2005-06). The velocity of internal lending (credit to thrift ratio) has dramatically improved from 0.63 in 1999-2000 to 2.3 in 2005-06. Similarly, purpose-wise, the share of consumption which was as high as 98 percent in 1998 fell to 12 percent by 2004 – indicating a shift towards income-generation schemes or micro-enterprises (Varma, 2007[15]). The state government has claimed this program to be a huge success in terms of its coverage, repayment rates (95%) as well as its income and social impacts (Government of Kerala, 2005b). Other states have evinced interests in this program (like Rajasthan, Andhra Pradesh, Delhi) as a model of poverty alleviation and rural development. The success of this model along with the Micro-Credit Summit in New York in 1997 inspired the Kerala government to extend the program to the entire state, initially as SHGs and later under the special program "Kudumbashree" in 1998.

Another unique feature of Kudumbashree is the community participation in this anti-poverty program. The organization of the community is based on a three-tier structure. At the grassroots level, the poor are organized into NHGs that can rank up to 40 women members from different poor families, but generally count between 10 and 20 members. These households are usually from the same neighborhood. In the event of some NHGs having more than 20 households, either a new NHG is formed or some households are encouraged to join other NHGs. The poor do not form groups on their own accord; rather they are initiated and coordinated by outsiders (either an NGO or an elected official of the local self-government (at the panchayat level) and most often by Kudumbashree officials. Case in point, interviews revealed that many of the present day NHGs were found to be initially organized as SHGs (under the banner of private NGOs) which later converted to NHGs under Kudumbashree, presumably to take advantage of the subsidy provided by the Kudumbashree program.

[15] See Varma's article at http://www.financialexpress.com/fe_full_story.php?content_id=92310.

Once the NHG gets the approval of the bank, it is given a loan which can theoretically go up to eight times the thrift mobilized by the group. From our field experience, we found the loan to be about two to three times the thrift which the group is able to mobilize. We also found that banks lend at a rate of interest of 8 to 10 percent with a maturity of 3 years. However, the NHGs lend to their members adding a spread of 1.5 to 2 percent to their cost of funds from banks. The profits arising out of such mark-up lending is shared by members of the NHGs[16]. Bank lending to NHGs/SHGs are classified as priority sector lending and qualify for refinance from NABARD.

The Kudumbashree program has a subsidy element which is back-loaded in the repayment schedule in the sense that members of NHGs receive the subsidy only after the full repayment of bank loans sans the subsidy amount. This is presumably to prevent willful defaults at the initial stage. The subsidy is subject to a ceiling of Rs. 100,000 with a ceiling of Rs. 10,000 per person for each family. In the event of default of loan by the group (which could be triggered by default of one or more of members), the group stand to lose the subsidy. This induces the non-defaulting members of the group to make-up for the defaults of individual members. The eligibility criteria for enjoying subsidy are that NHGs should have undertaken the relevant training provided by Kudumbashree/government. In fact, the subsidy variable is very crucial in the dynamics of the repayment record as it will be discussed in the following chapters. SHGs linked with banks do not enjoy this facility (subsidy).

The group also lends from the resources (loans) from banks to its members and the interest rates are normally higher (10 to 60 percent). Loans are taken from banks in the group’s name but the assets bought (like agricultural animals) are shared individually and each member conducts his or her business individually. There are cases of loans serving a group activity as well, but they are a minority.

[16] Kudumbashree program has been criticized for charging a mark-up (profiteering). However, such profits are shared among members. Hence, the argument that it is like any other financial intermediary does not hold good.

In case a member defaults, she is often given some grace period to repay. The peer-pressure built by other group members is often so much that the defaulting member is often forced to borrow from other sources (like chit funds, moneylenders, other micro-credit units, etc.) to repay for the loan taken from the group.

The Bank-NHG-Borrower model of Kudumbashree is most cost effective for the ultimate borrowers. Most of the time, onlending is done without any margins being loaded to the lending rates by the NHG. Even in cases where the NHG charges -1 to 2 per cent margin , this money goes to the corpus fund of the NHG. In many NHGs, profits earned out of lending are distributed to the household members as dividends.

The Kudumbashree programme is built on the facilitation and volunteer work of (a) Kudumbashree officials and (b) volunteers working at NHG, ADS and CDS levels along with the support of local government officials. Although members of the Kudumbashree programme and local government is paid by the respective governments but not counted in the social intermediation cost. The work done at the three-tier structure of Kudumbashree programme contribute to the solidarity, cohesion, bonding of the households are basically unremunerated. In fact, at the local level, they perform many of the banking functions as well – upkeep of records at the bank branch level, customer support etc. In the following section, we examine the results of the survey data of Kudumbashree micro-enterprise programme.

Section V:
Dynamics of Repayment Rate – Empirical Analysis of Kudumbashree Programme

In this chapter, we present the empirical results of primary survey conducted on households under Kudumbashree programme in four villages (panchayat) in Kerala in June 2006. The focus of the empirical investigation is the factors driving the high repayment rate in micro-credit programmes like Kudumbashree.

Database

The study is based on both (a) secondary data (provided by the Kudumbashree organization) and (b) primary data based on a survey of NHGs in four panchayats.

(a) Secondary Data

The economic data about the four panchayats (Thazhava and Kuluthupuzha in Kollam district and Kumily and Peerumeedu in Idukki districts respectively) were provided by the panchayats as well as by the Kudumbashree organization.

Concerning the information on households under NHGs, the Kudumbashree organization maintains household level information at the ward, panchayat and at district levels. These data provide a host of information about the socio-economic characteristics – like age, education, level of poverty, size of the project, etc. – of the households under the program. Besides, Kudumbashree also conducts periodic (normally annual) evaluations (called bench-mark surveys) about changes in the socio-economic characteristics of these households. These data provided the initial database for our primary investigation.

(b) Primary Data

A survey of households NHGs under the Kudumbashree program was done in four different panchayats (Thazhava and Kuluthpuzha in Kollam district and Kumily and Peerumeedu in Idukki district) of Kerala in June 2006. All the four panchyats are predominantly rural and agriculture based for livelihood and broadly reflects the economic structure of Kerala economy. Even in the Kudumbashree programme, more three-fifths of their outreach is in rural areas. The basic data on households under NHGs under the micro-credit programme is maintained by the Kudumbashree organization(at the regional and district level). These data formed the base for our initial investigation. First, we stratified all households under NHGs under the different wards in a panchayat into those undertaking micro-enterprises and those undertaking other activities. Then, we selected 50 households each from each panchayat having micro-enterprises using a simple random number table. Thus, we covered 200 households from each four panchayats. This sample represents approximately around 10 per cent of the households under micro-enterprise programme. We collected the data through a structured questionnaire. While designing the questionnaire, we consulted the focus groups (Kudumbashree officials, NHGs, banks etc). Households were interviewed individually as well as in a group so as to cross-validate the data. The focus of the investigation is the dynamics of repayment rate and social impacts. In order to gauge their performance, we supplemented the data wherever possible from the surveys conducted by the Kudumbashree district offices. We chose these panchayats for the study as they (NHGs) had a fairly good record of existence (2 – 4 years) and because of the fact that they are in the south and central parts of Kerala which reflects the geographical diversity of the state. We did not choose any households from NHG from the northern part of Kerala as they were relatively new (of less than two years of existence).

Table 4 : Basic Parameters of the Sample

Sl no.	Parameters	Thazhava (Kollam)	Kuluthupuzha (Kollam)	Peerumeedue (Idukki)	Kumily (Idukki)
1	Total Area (Sq. Kms.)	23.58	424.06	114.75	795.28
2	Total Population	38,488	34,376	25768	34,558
	Male	18,347	16176	12837	17,377
	Female	20,141	18,200	12931	17,181
	Sex Ratio (Female to Male Ratio)	1097	1125	1017	988
3	Density of population per square kilometers	1,632	81	225	42
4	Literacy rate				
	Male	93.8	85.0	91	79.05
	Female	85.9	79.0	78	71.07
5	Total Number of Families	9,005	8193	6398	8060
	No of BPL Families	5,501	3686	3,198	4,251
	% of BPL Families	61	45	50	52
6	(a)No of families covered under Kudumbashree	5,515	2389	2242	6,820
	(b) % coverage	81	65	70	84
7	Amount of thrift (in million Rupees)	119.9	20.59	0.75	171.1
8	Amount of Loan (in million Rupees.)	350.5	23.12	0.43	379.2
9	Velocity of internal lending	2.92	1.12	0.57	2.22

Source: Kudumbashree and Lead Banks[17] of these districts.

[17] In India, a bank is assigned the status of lead bank in a district. The bank designated as the lead bank has the task of assuming leadership role rural lending programs in the district (called as Lead Bank program).

The basic economic and social parameters of the panchayats in the sample is given in Table 4. As is evident from Table 4, the economic and social characteristics of the four panchayats is quite varied. The density of population in Thazhava panchayat is quite high (1632) as compared with other panchayats. In most the panchayats the sex ratio is favourable to female (except Kumily) as is the general pattern in the state of Kerala. It may be recalled Kerala is one of the few states in India where women outnumber men.

The literacy rate (both female and male) in all the panchayats in the sample are high reflecting the literacy status of the state (Kerala). But the number of families below the poverty line (BPL) is relatively high in all panchyats (in the range of 45 to 61 per cent). The coverage of Kudumbashree programme of these BPL families is also relatively high (65 to 84 per cent). A crude indicator of the intensity of Bank-NHG-borrower relationship is the ratio of thrifts (savings) to bank loan: a ratio of one would indicate that for every one rupee saved by these groups, it gets an additional one rupee loan from the banking system. This ratio is relatively high except for Peerumeedu panchyat.

In all the panchyats the households under Kudumbashree programme were wage labourers and micro-enterprises was an income supplementing activity. The lack of adequate employment activity (in rural areas) is the primary reason for their poverty: most of them could hardly manage to get five days of wage labour in a month.

Methodology

The data is analyzed using descriptive statistics – measures of central tendency and measures of dispersion (like range, standard deviation, variance, etc.). In order to facilitate a more meaningful analysis, we supplemented the descriptive statistics with analytical data analysis.

Table: 5: Basic Descriptive Statistics of the Sample

Statistics	Total investment	Bank Borrowing	Borrowing from other sources	Average interest burden	Gross income	Net income
Minimum	16,000	6,400	0	960	10,000	-78,560
Maximum	31,000	12,400	2,60,000	94,560	4,00,000	3,27,040
Range	15,000	6,000	2,60,000	93,600	3,90,000	4,05,600
Mean	26,440	10,566	24,706	10,101	36,095	25,994
Median	30,000	12,000	6,000	3600	27,500	19,220
Mode	30,000	12,000	6,000	960	21,000	1,560
Standard Deviation	4798	1917	34,128	12193	34875	34558
Kurtosis	-1.26	-1.27	15.03	15.25	65.91	36.78
Skewness	-0.72	-0.71	2.97	2.97	7.04	4.67

Source: Sample Survey

Descriptive Statistics of the Sample

The median loan size of households in the sample is estimated at Rs.12,000 (Table 5).. This comes to around 40 per cent of the total investment in micro-enterprise. The median size of ‘borrowing from other sources’ (which include institutional and non-institutional sources) at Rs.6,000 is nearly one half of bank borrowing and comes to 20 per cent of the total investment. The median interest burden at Rs.3,600 per household comes to 20 per cent of the median total borrowing (banks plus other sources).

The median net income of households in the sample at Rs.19,220 is estimated to yield a rate of return (to total investment) of 64 per cent per annum. However the range in net income among households are quite varied. The least(minimum) was a negative of Rs. 78,560 and maximum of Rs.3,27,040 which shows that the net income among households in the sample varies quite widely. This is also evident from the high standard deviation for this variable in the sample.

Empirical Analysis
Repayment Rate and its Determinants

Repayment Rate: Sector-wise Performance

An analysis of the distribution of activities undertaken by households under NHGs under the Kudumbashree program reveals that 52 percent of the projects (micro-enterprises) were agricultural, 35 percent were industry related activities and 13 percent were related to the service sector (see Table 6). In the sample, the bulk of the agricultural activities relate to animal husbandry: goat rearing, cow rearing and rabbit rearing. Most of the manufacturing activities relate to food processing and service sector activities relate mostly to tutoring, music and tailoring.

Table 6: Average Repayment Rate of Households in Kudumbashree Programme According to Activity - 2006

Sector	No of Households	% to Total	Repayment Rate
Agricultural sector	102	51.75	93.9
Industrial sector	25	35.18	84.6
Service sector	73	13.07	89.9
Total	200	100	91.3

Source: Sample Survey

Micro-enterprises in the agricultural sector have a repayment rate of 94 percent while activities related to the industry and service sectors have a relatively low repayment rate of 84 percent and 90 percent respectively (Table 6). The higher repayment rate among agricultural micro-enterprises brings into focus the role of ‘marketing’ in the whole process. Agricultural products are generally tradable locally as they have ready market in rural communities. On the other hand, non-agricultural products are not readily tradable or marketable. They face competition from existing organized retail outlets. Therefore, for non-agricultural activities, groups’ repayment record is handicapped by marketing constrains. In other words, micro-enterprises do sometimes create considerable ‘non-tradables’. To make profits from these non-tradable goods or services is the major challenge faced by micro-credit enterprises. Hence a good understanding of the dynamics of micro-credit programmes requires an analysis of labour, credit and product markets in a unified framework.

Repayment Rate and Poverty

The Kudumbashree program considers households between four and five to be moderately poor while households having a score of six or higher were considered severely poor. The average poverty score of households in the sample was five. An analysis of the repayment record based on poverty score reveals interesting results. The severe poor (with poverty score of six and above) had a comparatively lower repayment rate (86.1 percent) as compared with the moderate poor (92.5 percent) (Table 7). This evidence shows that severity of poverty was not a significant factor explaining repayment behaviour of households under Kudumbashree programme.

Table 7: Average Repayment Rate of Households in Kudumbashree Programme According to Poverty Score - 2006

Poverty Score	Repayment rate	NHGs	
		Number	% to total
4 – 5	92.3	166	83
6 and above	86.1	34	17

Source: Sample Survey

Repayment Rate and Group Meetings

Another effect of the weekly meetings is that they act as a formal mechanism to document their group and social interactions. Group members formally interact with each other through these meetings. The agenda for each meeting includes discussions on thrift, amount of loan, norms for loan disbursal, etc., that are recorded. These documents act as evidences of their in-group solidarity and mutual insurance for lenders (banks).

Group meetings provide an opportunity to assess the repayment of its members. Individual defaults are easily identified and discussed collectively. One can identify two types of peer pressure working on individual defaulters – ex-ante and ex-post peer pressure. The ex-ante peer pressure reinforces an individual’s desire to repay her portion of the loan. Normally defaulting members are given a grace period and are encouraged to find alternative sources of funds. If the individual is not in a position to repay, the group can then exert ex-post pressure. The ex-post pressure can take a number of forms including village gossip, social boycott, seizure of assets, etc. The empirical evidence reported in Table 8 shows that repayment record of those households who attend group meetings regularly is better than those with irregular attendance.

Table 8: Average Repayment Rate of Households in Kudumbashree Programme According to their presence in Mandatory Meetings - 2006

Presence to the meetings	Repayment Rate (%)	NHGs	
		Number of NHGs	% to total
Regular attendance	92.8	115	57.5
Irregular attendance	89.3	85	42.5
Average and total	91.3	200	100

Source: Sample Survey

Pre-Repayment of the Loan

An analysis of the repayment record of borrowers under the Kudumbashree program in the sample reveal that about 30 percent of households under NHGs had pre-repayment, i.e. they were ahead of their repayment schedules. It is important to analyze the reasons for this pre-repayment. Although this is an intriguing financial behavior, it can easily be explained with the two positives incentives provided by Kudumbashree: (a) to secure future loans – the contingent renewal explanation and (b) pre-repayment enables the borrowing households to secure subsidies earlier[18].

The promise of securing a higher future loan acts as a powerful incentive to fully repay their loan. As evident from Table 3 the internal velocity of households' credit under Kudumbashree program was more than 2. This implies that they are able to secure loans more than their thrift from banks. In fact, some of the households in the sample were at their second loan from banks.

Competitive Microfinance

The issue of competitive microfinance is widely discussed in the literature and is of recent origin (Besley and Coate, 1995; Marquez, 2002; McIntosh, Janvry and Sadoulet, 2005, McIntosh & Wydick, 2005). Competitive microfinance occurs when multiple lenders exist and they are overlapping in their geographical area. In such a situation many borrowers may be taking loans from several lenders simultaneously or 'double dipping'. Double dipping is meant to smoothen the timing of the repayment of loans and to maintain cash flow. In the presence of double dipping, the ability of the

[18] It must be noted that subsidies are treated in the installment of the loan.

lenders to use dynamic incentives to secure repayment is limited (McIntosh, Janvry and Sadoulet, 2005, McIntosh & Wydick, 2005).

In our sample, NHGs members are often found to be members of other microfinance programs as well. In fact, 50 percent of households were found to also be members of other microfinance entities that are competing on the same geographical area[19]. Apart from other microfinance entities, many households were found to be borrowing from other non-bank entities that have higher interest rates (money lenders, chit funds, etc.) to repay their loans. This cross borrowing situation could lead to a high repayment of their borrowings with the Kudumbashree program. However, by availing cross financing, the financial indebtedness only worsens. The fact that many microfinance programs (especially agricultural based) generate surplus in net income underscores the utility of the program despite of some borrowers availing of cross financing and indulging in double dipping.

Section VI
Conclusion

The policy regime with respect to financial inclusion in India has undergone dramatic changes since 1950s. The nationalization of major banks in India in 1969 and the consequent social banking phase placed financial inclusion and economic development as the cornerstone of Indian economic planning. This regime was essentially supply-oriented and the focus was to link credit planning with national economic planning. The economic reforms since 1992 with emphasis on deregulation and efficiency had led severe credit starvation of the poor, rising indebtedness of farmers and farmer suicides.

The scaling up of microfinance on an accelerated platform since 1992 under Bank-SHG model was step to replace the state activism in the pre-1992 period with enhanced role for private sector in credit delivery for the poor. Although the outreach of Bank-SHG programme has increased substantially in the post-1992 period, it has

[19] Kudumbashree evolves in an environment where several microfinance programs are competing against each other. This competition situation is normally one that lowers the repayment rate as it is suspected to raise the level of indebtedness of the borrowers (Wright and Rippey (2003), Vogelgesang (2001) and McIntosh and Wydick (2005).

generated considerable issues in the course of its outreach. One of the issues is the large scale borrower revolt (especially in the state of Andhra Pradesh which has the highest microfinance penetration) on the ground of usurious interest rates charged by MFIs. An alternative model of delivery to the commercial model is the Kudumbashree program in Kerala.

The poverty eradication mission called Kudumbashree is a women-centered anti-poverty program initiated in 1998 by the Government of Kerala, in India. Based on a primary survey of two hundred households in four communities in Kerala, the study examines the dynamics of high repayment rate. The motivation for seeking micro-credit is the lack of adequate employment in the rural sector. The access to micro-credit is part of the endeavour of the household to supplement wage income. This income supplemental (micro-credit) activity is performed by members of the household individually or as a group(of households). Repayment rate is not a good indicator of performance of micro-credit activities as it conceals the dynamic interaction of labour, credit and product markets in a rural setting.

Micro-enterprises do create considerable non-tradables (output which cannot be marketed). This would have implication for repayment rate. Micro-enterprises which are agriculture based have high repayment record as opposed to non-agricultural micro-enterprises. Non-agricultural micro-enterprises have substantial marketing problems which lead to default, non-repayment or low repayment of loans.

Most of the households (around 50 percent) were found to have multiple memberships in other micro-credit organizations. This enables them to double dip and to smoothen the timing of the repayment. Thus, the availability of funds from other micro-credit organizations raises questions about whether micro-credit reduces the vulnerability of the poor. It is suffice to say that the availability of micro-credit widens the borrowing possibilities of the poor. In the absence of positive returns from micro-enterprises (as in the case of many non-agricultural activities), it could lead to more indebtedness among borrowers. Households were also found to borrow outside the micro-credit set up from informal sector (like moneylenders, local chit funds, etc.). Thus, the repayment record *per se* does not reveal the true picture of micro-enterprises.Micro-credit programs like Kudumbashree should not be solely judged in terms of repayment records, it should also be judged in terms of its social impacts which we are addressing in a separate paper.

Annexure 1: Nine Points Poverty Index

Rural		Urban	
1	Family with no land /less than 10 cents of land.	1	Families with no/limited (less than 5 cents) of land.
2	Family with no house/dilapidated house.	2	Family with no house/dilapidated house.
3	Family with no access to sanitary latrines.	3	No access to safe drinking water (within 150 meters).
4	No access to safe drinking water (within 300 meters).	4	No access to sanitary latrine.
5	Women headed household/presence of widow, divorcee/abandoned lady/unwed mother.	5	Family with no stable employment (less than 10 days in a month).
6	Family with no regularly employed person.	6	Family with women as the breadwinner and/or women who is widowed/divorced or family with unwed mother.
7	Family who has a physically challenged/mentally challenged/chronically ill member.	7	Family who is physically challenged/mentally challenged/other disabilities
8	Socially disadvantaged groups like Scheduled Caste/Scheduled Tribe.	8	Socially disadvantaged groups like Scheduled Caste/Scheduled Tribe.
9	Families with an illiterate adult member.	9	At least a member of the family is addict to alcohol or drug.*

* Since 2000, this criterion was replaced with “Family with no color T.V”.
Source: Government of Kerala, 2005c; Kudumbashree website.

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