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How Do Women in Mature SHGs Save and Invest Their Money?

Evidence from Self-Help Groups in India

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Abstract

The Self Help Group Bank Linkage Program (SBLP) is by far the dominant model of microfinance in India, in terms of both number of borrowers and loans outstanding. Over the last 5 years, the program has experienced exponential growth in terms of outreach and credit disbursement. There is, however, still a relative paucity of quality research on the SHG movement in India. This report seeks to fill this gap by looking at the credit behaviour of SHG members over time. We find that SHG members we surveyed use their loans for consumption purposes indicating the livelihood programs of SHG promoting NGOs may not be effective in inducing members to spend more of their loans on productive assets. At the same time, we find that members value the saving component of SHG membership. However, we also find that they continue to use alternative savings and credit options such as banks, chit funds in terms of savings and banks or moneylenders in terms of credit.

Contents

1 Introduction

The Self Help Group Bank Linkage Program (SBLP) is by far the dominant model of micro-finance in India, in terms of both number of borrowers and loans outstanding.[1] The National Bank of Agriculture and Rural Development (NABARD) estimates that as of March 2006 over 33 million women have been linked to banks for financial services through 2.2 million Self Help Groups (SHGs). Growth of the program has been spectacular over the past 5 years with the number of members linked to banks having increased nearly tenfold (the NABARD website claims a growth rate of over '400 women per hour'). Given the level of outreach, growth and the huge impact of the program on the members and their communities (both in terms of access to formal credit and the intangible impacts like empowerment), understanding how SHGs function, mature, and affect the lives of their members is of major importance to both researchers and policymakers. There is, however, still a relative paucity of quality research on the SHG movement in India.

This report seeks to help fill this gap by looking at the credit behaviour of SHG members over time. Using field studies and data obtained on mature SHGs in the South Indian states of Karnataka and Tamil Nadu we analyse how a set of SHG members utilize their loans and how this changes over time. It is important to note at the outset that our study is limited by several potential biases in the data and readers should not use these results to infer that SHG membership caused the behaviour we observe nor that these results are valid for all SHGs. The SHGs for which data was collected all are at least five years old or older, come from two specific districts in Tamil Nadu and Karnataka and were promoted by high quality NGOs. Loan usage behaviour for SHGs which do not meet these criteria may in fact be very different. The fact that a large portion of SHGs never reach five years of age strongly suggests that this may be so. Nevertheless, our results are useful for drawing a set of stylized facts about the loan usage behaviour of a specific set of SHG members. We hope that these results help other researchers gain a better understanding of what actual goes on in the field when it comes to SHGs and also point to potential subjects for future research, perhaps using randomized trials so that causal impact can more accurately be identified.

[1] Ghate (2006), p27

This report is organized as follows. Section Two introduces the characteristics of the Self Help Group model and provides some theoretical background on microfinance and SHGs in particular. Section Three briefly relates what research has been done on mature groups (five years or older) and explains our motivation for looking into loan uses and their changes over time. Section Four presents our data, and Section Five the human context of our study, giving general information on the Non-Governmental Organisations (NGOs) we have worked with, the groups and the members we have interviewed. Section Six analyses how women in the SHGs observed have used their loans and how this has changed over time. Finally, we offer some possible explanations as to why relatively few loans were taken out to create new businesses. Section Seven concludes.

2 The Self Help Group Model

While many models of joint liability lending could be broadly described as "self-help group lending," the term "self-help group" (SHG) has come to mean a specific type of joint liability microfinance group in India. In general, joint liability groups known as SHGs share the following characteristics: they consist of 10-20 (usually female) members; they require mandatory savings deposits from members and they meet at least on a monthly basis; loans are made to the SHG as a group which in turn decides internally how to split up the loan and what interest rate to charge its individual borrowers; and they are often set up and promoted by an agency independent of the institution which lends money to them.

The SHG model was pioneered by MYRADA over the 1980s which initially conceived of the groups as a means of improving the livelihoods of the Tibetan refugees it was working with. In 1992, NABARD, in close collaboration with MYRADA, established the SHG bank linkage programme in which banks were encouraged to lend directly to SHGs which had fulfilled certain criteria. Initially, banks were slow to take up the SHG bank linkage program but the growth in the number of SHGs over the past five years, spurred on by centrally mandated targets, has been phenomenal.

The bank linkage programme requires that SHGs operate according to certain standard processes in order to have the possibility of being granted a subsidized loan. A group starts as a traditional rotating savings and credit association (ROSCA) with members saving a regular amount each week or each month. They use these pooled resources to make small interest bearing loans to their members while gradually learning the essentials of financial intermediation including prioritisation of needs, setting terms and conditions, and record keeping. After a period of six months, if the group can show proof of mature financial behaviour through well kept account books to a bank they can access bank credit at rates lower than those offered by the informal sector and without any need for collateral. The regular savings are continued throughout the group's life leading to an increasing pool of savings in the group's name and therefore access to larger bank loans as the group matures.

The non-financial benefits of Self-Help Groups are numerous. Puhazhendi and Badatya (2000) among others report that SHG members experience an increase in self worth, communication skills, and desire to protest social evils as well as a decline in violence in their household.[2]

2.1 The Theory behind SHGs: What Makes Microcredit Work

The SHG model features the defining element of any traditional microfinance model, namely the group lending methodology which establishes joint liability of members. The whole group is responsible for the loan repayment: if one individual doesn't repay her loan, the financial institution stops lending to all the members. This enables high repayment rates [3] which make lending to the poor a potentially profitable activity for formal financial institutions, whilst creating a viable conduit for capital infusion from the formal sector to those in need of credit at interest rates lower (1.5-3% per month) than those usually offered by the informal sector. The reasons for the success of the joint liability model have been discussed and documented at length in the literature.[4] To summarize briefly, most arguments attribute the success of the joint liability model to the potential for group lending to overcome the information asymmetries which have traditionally made lending

[2]Gurski (2005), in a qualitative study of SHGs in Orissa, gives a detailed account of how group membership affects the womens' position in the household and their ability to deal with outsiders.

[3]Morduch (1997) p1571 estimates repayment rates at 95% "in almost all cases" for microfinance loans in general. A bank manager we met in Kancheepuram gives the exact same number for the groups he works with.

[4]See for example Ray, D. (1998) *Development Economics*, Princeton University Press, or Armendariz de Aghion and Morduch (2005)

to the poor difficult. Because members belong to the same community they can observe each other's types (i.e. their tendency to be either reckless or cautious in their investment behaviour) and safe debtors can group together, thereby overcoming the adverse selection problem which typically leads to only risky types being provided credit. The group responsibility for loan repayments also mitigates the ex ante moral hazard which exists when members with limited liability (no collateral) have an incentive to choose too risky projects because they won't bear the full cost of the failure – other members knowing their access to credit is at stake will scrutinize the feasibility of projects undertaken.[5] Finally strategic default on debts by hiding the real returns to investment (ex post moral hazard) is made difficult by the geographical and social proximity of members who can observe each other's financial situation and threaten both economic and social sanctions on would be free-riders.

SHGs combine another two features not necessarily present in all microfinance models but which help to explain their success. They function as savings cooperatives as well as means to credit, thus responding to a demand for savings amongst the poor which is apparent from their widespread use of gold as a savings mechanism but which is only imperfectly met by the informal saving means available [6] (chit funds, gold). We analyze this function of SHGs in more depth below. The second feature is that, in the overwhelming majority of cases, SHGs are composed entirely of women.[7] There is widespread evidence that female customers have higher repayment rates, making them more attractive for banks though the reasons for this are not completely understood (women may have fewer alternate credit options for example, and they may be more vulnerable to the shame of noncompliance).[8] Perhaps more importantly, lending to women is seen as the best way to reach the poorest (amongst which they are over-represented) and to make sure the money will be spent on crucial human investments in health and education.[9]

[5] Stiglitz (1990)

[6] On the subject of the demand for 'illiquid' saving among the poor see Sendhil Mullainathan (2006).

[7] See for example Kropp and Suran (2002), p13 .This is why most studies concentrate on groups with only female members. One of the groups which we saw in Chitradurga includes one male member who we did not interview, but all other groups were women only.

[8] See Khandker, Khalily and Kahn (1995) for empirical evidence on that subject.

[9] Bosshardt and Meier (1998) in a comparative study of men and women groups in MYRADA do not find significant evidence of differences in credit and savings behaviour between men and women. However they do find that women tend to allocate more of their group resources towards health and education than men.

3 Literature Review and Motivation for Study

Self Help Groups may be the dominant microfinance paradigm in India but research which focuses on that particular model is still scarce. The study *Self Help Groups in India: A Study of the Light and Shades* (Sinha et al 2006) was a major attempt to fill this gap and contains in depth information about the outreach of the model – characteristics of the members and information on those who did not join or were excluded – and its financial aspects. Two studies looked specifically at group dynamics. Luders and Osborne (1996) looked into the issue of SHG longevity and the causes of group failure, while APMAS (2003) examined the differences between older and younger groups and found a cyclical pattern in group performance with groups younger than 4 years or older than 7 years displaying better performance in saving and credit behaviour than the middle-aged groups. No research has been done so far on what loans are being used for, [10] or on the changes in the members' choice of credit resources allocation as groups mature. [11]

We believe this is an interesting topic to look into for two reasons. First, while it is widely accepted that access to more and cheaper credit is welfare improving for microfinance clients, this relies on the assumption that members use their loans for something which will improve their lives. Currently, there exists little data on what SHG loans are actually used for, but the impact of credit on the household's wellbeing may be very different depending on the loan usage. We might think, for example, that a production-oriented (or 'income generating') loan such as buying a cow or investing in a power loom has more potential for increasing significantly and permanently a household's income and hence its welfare than a loan which is used to finance a wedding. However this type of loan may be associated with risk levels which may even lead to a loss in income if the returns to investment are too low (see *Case study: The Failed Investment of Dhanabagyal* below), whereas loans which are used for consumption smoothing prevent households from falling into major financial hardship due to an occasional fall in income which could

[10] Gurski (2005) mentions the importance of consumption loans in the total of loans, before moving on to explain what kinds of income generating loans are being taken out. His is a qualitative study however, and does not contain any information on changes over time.

[11] This does not mean no one knows about possible trends, especially amongst the staff of NGOs who have been working with SHGs for a long time and whose first hand experience is extremely valuable. The MYRADA team in Bangalore has provided us with a lot of expertise on the subject. They have not however written anything that is available to the public on the subject.

otherwise have made them cut down on essential expenditures such as school related costs. Analysing what members choose to do with their loans is therefore important to our understanding of how accessing credit affects their overall welfare. Keeping the microfinance sector's preference for productive purpose in mind, it is also telling of the priorities and aspirations of group members and how they may differ from that of the SHG promoting agencies or international donors.

Second, looking at loan usage may allow us to discern similarities in how members' preferences for how loans are used change over time. There are several reasons why we may expect to see a general shift from consumption oriented to production oriented loans. The group's own savings increase with time and these can be used for consumption purposes leaving increasingly larger bank loans to be used for production purposes. It could also be that with time members become more confident about their repaying capacity, more at ease with the risk involved in taking out a large loan and more knowledgeable about the investment opportunities available to them (as the success of one member provides encouragement to others), leading them to be more willing to undertake production oriented loans which involve greater risk. Finally, initial investments in income-generating activities may increase the household's income, making the group's role as a consumption smoothing mechanism less important and liberating resources for more productive investments.

Case Study: The Failed Investment of Dhanabagyal

Dhanabagyal is 35 and a member of the Vitrivinayagar group in Thirupukulli village (Kancheepuram district). In Thirupukulli most women earn their living from agriculture and a majority of them work as coolies (daily labourers).The three SHGs in the village have organised a dairy cooperative through which they sell their milk at a fixed price to the government, which has enabled some members to get enough income from dairy to stop working in other people's fields. Dhanabagyal, like most members in her group, wanted to benefit from the dairy cooperative so she bought a cow (Rs 12,000) with one of the few loans she has taken from the group. She claims she did not know how to choose cows and hers never produced any milk. After two years of watching the cow just 'sitting there doing nothing' she sold it for a third of its original price. Her fellow group members are encouraging her to buy another cow (this time they promise they'll help with the choice) but she said she had a hard enough time paying back her previous loan that she doesn't want to risk it again. She seems convinced that introducing another cow in her house will bring her bad luck.

She does not expect much from her group – if it helps to keep her 8 years old daughter in school for a few more years she says it will be enough – and she refuses to attend trainings in embroidery or tailoring (two activities which are widespread in Kancheepuram) because no one does that in her village so she thinks she won't be able to.

4 Data

The data used for this report comes from Self-Help Groups (SHGs) in two rural areas in South India: 34 groups in the Chitradurga District of Karnataka and 35 groups in the Kancheepuram district of Tamil Nadu. The SHGs studied have been formed and are currently being supported by the Non-Governmental Organisations (NGOs) MYRADA and Hand in Hand for the Chitradurga groups and Kancheepuram groups, respectively. Three group members were interviewed from each selected SHG. Data was collected from three group members using a structured questionnaire. In addition, focus group discussions were conducted when additional group members from the SHGs were present. Finally, data on loans and member characteristics were gathered from internal records of each group.

4.1 Methodology

Two hundred and seven SHG group members from 69 different SHGs were interviewed in their respective villages. SHGs were randomly selected from among all SHGs located in either Kancheepuram or Chitradurga which were promoted by the NGOs participating in the study and which at the time of the study were five years old or older. While data on what proportion of all SHGs promoted by the NGOs reach five years of age was not available to the researchers, it is important to note that a substantial number of the SHGs promoted by the NGOs dissolve before reaching this age. For each SHG, three members were interviewed. One of those selected to be interviewed was always the group leader (known as "animators" for the Kancheepuram groups and "representatives" for the Chitradurga groups). In addition to the group leader, two other members were randomly selected for interviews from each group using lists of all current members of all the SHGs maintained by the NGO staff. Group members were told that the information collected would be used for research purposes only and that neither the bank nor the NGO would have access to individual data from our questionnaires. This was done to ensure members had no incentive to under-declare certain types of loan usage. [12]

In addition to the structured individual interviews, focus group discussions, in which a majority of group members participated, were conducted for 15 groups. During the focus groups all group members were asked to discuss group dynamics (with a specific focus on their loan allocation system) their history of bank linkage, their involvement in the community and their assessment of the main benefits from being in the group. We also asked each group a series of general questions on its saving and lending rules, the number of dropouts and its contributions to community initiatives.

Random selection was sometimes difficult to implement because some of the women we selected for interviews were not available even when we rescheduled group meetings for a later date. In these rare cases another member from the group who was present was randomly selected to be interviewed. This happened for only 5% of scheduled interviews.

[12] We felt this might be in issue in the case of Hand in Hand due to their support model in particular (see Appendix A *SHG Creation and Support: the Hand in Hand model*).

4.2 Loan Register Data

In addition to the data collected through individual interviews and focus group discussions we have used the information from the NGOs' admission and loan registers to complete our analysis. Admission registers are filled in by members as they join the group and contain basic demographic information like age, caste and educational background. Loan registers record all of the savings and loan transactions for each member in an SHG. Each time a member takes a loan, makes a repayment or contributes to the group savings, the transaction is recorded in the loan register. This includes loans that are taken from the group's common fund as well as loans received from the bank. The data that was extracted for analysis from the loan registers included loan amount, loan purpose, date of disbursement and loan term. The loan purpose and amount were the critical pieces of data in this analysis.

The Chitradurga SHGs were not encouraged to use their loans for any particular purpose by MYRADA. [13] As a result, we may assume that their loan registers accurately record what they use their loans for. Kancheepuram SHGs, on the other hand, are encouraged by Hand in Hand to use loans for productive investments as part of its "Jobs for Growth" scheme (see Appendix A *SHG Creation and Support: The Hand in Hand model*). This could have given the Hand in Hand SHG members an incentive to report their loan usage as productive even if they intended to use it for non-productive purposes. However, the data suggest that this incentive, if it exists, is very feeble. During our field work we asked women what they used their last loan for in order to check the reliability of the loans registers. The distribution of loan purposes obtained from the loan registers are not at all biased towards production oriented loans compared to the distribution we obtained from the field data (see table 1). [14] Since Hand in Hand's "Jobs for Growth" strategy is relatively new, efforts to encourage use of loans for productive purposes have been concentrated on younger groups. As all the groups we collected data on were together

[13] It is MYRADA's policy that the field staff communicates to SHG members that consumption and life events are perfectly acceptable purposes for taking a loan.

[14] The major difference between field and register data for Kancheepuram lies in the percentage of loans taken out for asset building. This is due to the fact that we have included housing loans which members obtained individually as a result of belonging to a Hand in Hand SHG in our field data, but these are not reported in the registers data. Once this difference is taken into account, the reported loan usage from our field work is very similar to that we find from the registers.

Table 1: Comparison of Field and Register Loan Usage Data

	Production Oriented Loans (Business & Agriculture)	**Business**	**Agriculture**	**Asset Building**	**Consumption**	**Health & Education**	**Savings**
All							
Registers	50.7	22.1	28.6	7.2	28.2	12.2	1.8
Field	40.7	17.8	22.9	14.4	25.3	17.2	1.6
Kancheepuram							
Registers	28.9	22.1	6.8	0.4	55.3	15.2	0.2
Field	28.7	16.8	11.9	16.8	34.7	18.1	2
Chitradurga							
Registers	59.6	22	37.6	10.1	16.9	10.9	2.4
Field	51.4	18.7	32.7	10.4	20.5	16.3	1.2

Note: Figures represent percentage of loans dedicated to each purpose listed.

for at least five years, they would have emancipated themselves from direct NGO supervision by the time the strategy was implemented. Another way of checking for reliability of the Kancheepuram loans data is to compare it with that from Chitradurga which, as discussed above, is unlikely to be biased (though loan purpose distributions may differ between both areas for a variety of other reasons). We find that members from Kancheepuram actually report taking more loans out for consumption purposes than those from Chitradurga (55.3% of all loans, against 22% for Chitradurga), and less for productive purposes (28.9% against 59.6%). On this basis, we have concluded that the loan usage data from the Kancheepuram groups is unlikely to be biased as well and so have included Kancheepuram loan registers data in our study.

5 Background: The NGOs, the Groups and the Members

5.1 The SHG Models of the NGOs Participating in the Study

The basic principles of group formation are common to most SHGs in India. However there is great variation in the practical implementation of these principles depending on the nature and objectives of the promoting agency (such as which villagers are targeted to become group members or how much the promoting agency interferes with group choices). We briefly describe the models used by the two NGOs with which we have worked, MYRADA in the Chitradurga district of Karnataka and Hand in Hand in the Kancheepuram district of Tamil Nadu, in appendices A and B.

5.2 The Groups

5.2.1 Group History

All of the SHGs in this study were at least five years old, with the exception of two groups. [15] The average group age in this study, is 7.4 years. However, the Chitradurga SHGs in the study are significantly older (10 years old on average, with one 20 year old group) than the groups in Kancheepuram (6 years old on average, with one 10 year old group).

Group histories are very varied. Two groups reported having had to split and distribute their savings two or three years after starting, before re-creating the group. In both cases the reason seems to be a need for immediate cash, but for one of the groups splitting up was also a way of getting rid of two members who were not getting along with the rest. Group experiences with bank linkage are also heterogeneous. Two groups in the Kancheepuram district had not yet received a bank loan (one because it has split and reformed, creating delays, the other one because the bank is too far away and NGO support is weak). The groups obtained their first bank loan in most cases between 1 and 3 years after the creation of the group. In general the first group loans were Rs 25,000-30,000, with one group reporting having had only Rs 5000 for its first loan. The largest loans obtained from the bank vary between Rs 25,000 and Rs 1.8 Lakhs.

The total amount of internal loans taken out by all members over the life of the group varies greatly from group to group. The smallest figure reported in our sample for this total was a mere Rs 47,000 while the largest was nearly Rs 16 Lakhs. The average was Rs 4.3 Lakhs – Rs 3.2 Lakhs for the Kancheepuram groups and Rs 5.8 for the Chitradurga groups. This difference can be partially explained by the greater average age of the Chitradurga groups. However, even after controlling for age the average total amount of loans taken out by all members is greater for Chitradurga groups than Kancheepuram ones.

[15] Two of the Myrada groups were identified as five years old during the random selection process, but were found to be only four years old during the interview process.

Case Study: SHG Group Entrepreneurship

The Sakthi Vinayagar group in Puliyanpakkam village (Kancheepuram district) is an example of a SHG collectively turning their geographical location – their village is situated near a big road – into a business opportunity. Three years ago this group of 13 women took out a Rs 1.5 Lakh loan from the bank to buy large amounts of vessels, kitchen utensils and chairs. They repaired a small hut next to the road and transformed it into a shop from which they rent out these utensils whenever there is a function. All the members work in the shop two days per month (except their oldest member who is not able to keep track of which customer has rented what), with the remaining work days in the month being allocated to the women who are the most in need. They have fixed their own wage at Rs 20 per day, which is the amount they get from a day's work as a coolie (daily labourer). The shop makes around Rs 2500 each month, with all profit going towards repaying the bank loan. If all goes well, in six months the loan will be repaid and they will begin dividing the profit roughly equally among all the members (they will give priority to members who experience life events like weddings or funerals as they think it is their role as a group to contribute to these expenses). Though they have not yet experienced an increase in income through the shop they are clearly very proud of their achievement. They say people from their village see them as more important now that clients from other villages come to their shop and they know a lot more people. Young mothers and older members all appreciate being able to work so close to home as some of them would otherwise have to travel for hours to get jobs as coolies.

5.2.2 Group Membership

Group membership is fairly stable: in 45% of the groups no members had left and in the majority of cases (74%) when members did leave it was because they got married or migrated. The remaining dropouts were members who had lost interest in the group or more often were unable to repay their debts or contribute to savings and so opted to leave. It was a policy of both Hand in Hand and Myrada SHGs that women could leave the group with their savings plus interest after paying any outstanding debts. This suggests that there is an element of self selection among group members even after the group is created, with individuals with low repaying capacity dropping out of the group at an early stage.

5.2.3 Group Rules Regarding Savings and Interest

Both the MYRADA and Hand in Hand SHGs are free to determine their two key financial variables – interest rates on loans and minimum savings requirements. The promoting NGOs do however provide general guidelines based on historical evidence of successful groups. The groups we have seen save on average Rs 58 as a minimum per member per month. However, while this minimum is also the actual savings collected for the Kancheepuram groups, many members in the Chitradurga groups save more than the minimum required amounts. The Chitradurga groups save Rs 10 per week in 79% of the groups, Rs 20 otherwise) and the Kancheepuram groups save Rs 50 per month in 80% of cases. Very few groups reported having increased their minimum savings levels, and we find no evidence that older groups have a higher minimum savings requirement.

Interest rates on internal loans to group members vary between 12% and 36% per year, with an average of 22.3%. This is always set to be at least as high as the interest rate charged by the bank (9.6% to 12% per year) and is generally set higher to enable the groups to increase their own savings. One group in Kancheepuram reported charging a higher interest rate on loans from their own savings than on loans from the bank. Around a fourth of the groups in Kancheepuram reported having changed the interest rate on both loans from the groups' savings and from the bank. Quite often when they accessed bank credit they increased their interest rate to exceed that of the bank. In other groups some influential members have demanded and obtained a decrease in interest rates for all members.

5.2.4 Community Development

We find that groups invest some money in their communities, but that it takes time for them to do so. It took groups between 3 to 7 years before they made a contribution to some sort of community development initiative, with 8 groups in Kancheepuram having made no contribution at all (all of them said they would contribute if asked but were apparently unwilling to take the initiative). The most common contributions are the giving of cash or kind to local schools and local festivals. Some groups provided labour to various social initiatives such as helping to build a community centre. Most groups have contributed to some kind of relief fund to help victims of the tsunami or the earthquake in Gujarat, hence extending their financial contribution beyond the limits of their community. Possibly because they are on average older, the Chitradurga groups seem more active in community development, especially in terms of amounts invested. Groups were asked what the largest amount which they invested in their community was. The average largest contribution was Rs 415 for the Kancheepuram groups (ranging between Rs 100 and 2,000) compared to Rs 2,200 for the Chitradurga groups, with one Chitradurga group having contributed as much as Rs 10,000 towards building a water tank for its village.

Case Study: Shehanaz Bi, From SHG Leader to Gram Panchayat Member

Shehanaz Bi is a member of the Ram Rahim SHG in Hiryur village (Chitradurga district). She is 33 years old and has four children. Her husband has a bed-making business and she manages a small agricultural plot and also raises goats. While Shehanaz Bi joined the SHG as a fairly quiet and uninvolved community member, she blossomed into a bold leader who eventually was elected to the local Gram Panchayat, where she stayed in elected office for five years.

Being an SHG member gave Shehanaz the opportunity to further explore her community and understand the issues facing her local community members. When one of the Gram Panchayat seats opened up and required that a woman fill the position, Shehanaz's husband and her SHG members encouraged her to run for office. She began campaigning by going door to door, and explaining that she would fight for housing grants, drainage and proper roads. The SHG members in her group and within the community supported her campaign. She won the election; she was the youngest member to run.

In her five years in office, she successfully lobbied for government grants to build homes (eight were awarded her village), weekly road cleaning, four water tanks that pump fresh water into the villages and drainage for waste water.

Shehanaz said that because of her involvement in the SHG, she felt empowered and confident that she would be able to affect change in her community.

A note: Unlike other members in her own SHG, who expressed that they did not feel the need to educate their women children, Shehanaz Bi, wants all of her children to complete school and go to college. Her oldest daughter is in vocational training for computers.

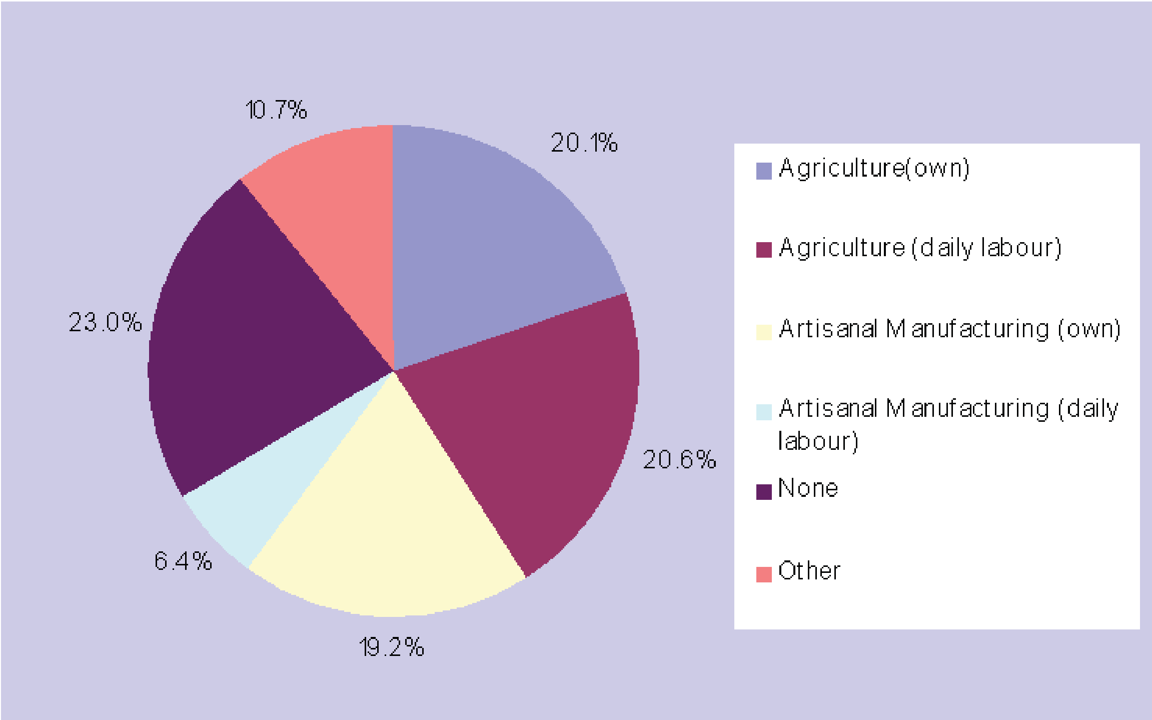
5.3 The Members

This section describes the characteristics of the members individually interviewed during field work.

5.3.1 Occupation

The groups we have visited were all situated in rural villages and 40% of the members work in agriculture. Nearly half of the women and their families depend on wages from

Figure 1: Main Occupations of Members Interviewed



daily labour as their primary source of income. All of the members working in agriculture report having irregular income: daily labourers because work isn't always available and crop-growers because of the weather. Livestock herders typically have a more stable income from milk but this too is subject to variations depending on the health of the animal. Another 26% of members work in manufacturing – most of those in an activity related to cloth making (weaving, threading, tailoring). A large majority of members in the Chitradurga SHGs rely on agriculture or daily labour for their main source of income.

Artisanal manufacturing is especially common among the Kancheepuram group members as the Kancheepuram area is famous for its production of silk. Out of those group members working in artisanal manufacturing, 75% are self employed with the remaining 25% working as daily labourers in someone else's home. Overall these members have a more regular source of income than those working in agriculture. However, for some cloth making activities it is essential that the cloth dries in the sun for a few hours before work can be pursued, which means that during monsoon months income can be very irregular. 23% of members reported having no source of income because they are looking after young children or are too sick or old to do any work. The remaining members work as petty shop owners, factory workers or teachers.

Overall more than a quarter (28%) of our field sample is composed of daily labourers, whether in agriculture or in manufacturing. It is important to stress that these women typically do not have a regular source of income on which they can rely, a problem aggravated if their husbands also work in daily labour or if they are the sole breadwinners in the household. Because these women alternate between periods of unemployment and employment, the role of the group as a consumption smoothing mechanism is of even greater importance to them as they have told us repeatedly during the interviews.

5.3.2 Education

The average level of education (measured in years of schooling) among SHG members is fairly low. Approximately 35% of the women in the study are illiterate and around 60% of women have not studied beyond the 6th standard, which means that many women did not attend school after 11 years of age.

5.3.3 Training

Recognizing the limitations of traditional schooling opportunities for their members, both MYRADA and Hand in Hand offer training to their members. The majority of women who utilize the training are literate. Overall, 44% of members interviewed had attended training offered by the NGO, but only 31% of those members were illiterate. Many women indicated that they were not attending any training courses because they were not confident that they would perform well in a training environment, especially because many women have not had any formal schooling. There is a strong demand for more business oriented training: nearly all members who expressed a desire for a specific type of training indicated that they wanted to learn a trade, generally some small scale home industry which can be started without significant startup costs (suggestions included incense making, noodle making, and running a petty shop). Another desire expressed by the women, especially the older ones, was for the NGOs to provide training for their children. [16]

5.3.4 Savings Behaviour

One of the potential benefits of SHG membership is that it allows members to put aside some money regularly in a form which is fairly illiquid (money generally cannot be taken out from group savings without leaving the group). Traditional means of savings such as gold are easily transformed into cash which means that these types of savings are vulnerable to pressure from friends or family. We find that 68% of the members interviewed have no formal way of saving aside from saving in the group (informal ways of saving include savings in gold which 60% of women use, and savings in chit funds which 13% use; the remaining 32% saved in a bank or a postal account). For these women the group is therefore the only way to build up a"safety fund" which can be dipped into only in case of emergency. Indeed, being able to save regularly is one of the things members have told us they value most from being in the group. Those interviewed said it makes them feel more secure to have these savings, and that they take pride in the sums they have collectively managed to put aside. [17] We find ample qualitative evidence that the women value the relative illiquidity of group savings and appreciate the fact that these funds are stored in the bank.

That encouraging thrift is one of the major advantages of group membership is even more apparent in Chitradurga, where 20% of members save more than the required amount (up to four times the required amount). MYRADA has recently begun to encourage additional savings by suggesting to groups that they consider allowing members to access their savings at any time if the rest of the group agrees.

6 Loan Usage

This section describes how the groups allocate loans internally, how members use their loans, and how loan usage evolves over time. Most results are derived from the loan

[16] MYRADA does extend training to SHG members and their families. Several daughters and sons of SHG members have benefited from different types of training including tailoring and auto driving.

[17] Gurski (2005)'s qualitative study on SHGs in Orissa also finds that the most important motivation for joining a SHG is savings. Members indicated that membership in a SHG provided encouragement for them to save and that without this encouragement they would most likely not have had the resolve to save on their own.

registers, but field data were also used for more detailed analysis.

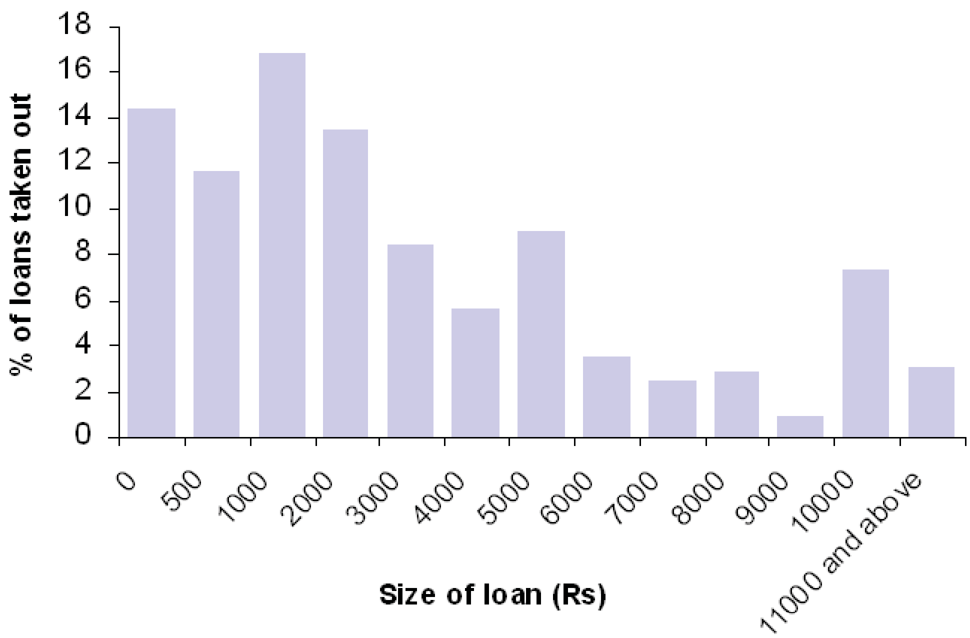
6.1 Loan Allocation

All groups interviewed say they allocate loans amongst themselves equally. Making sure no member feels she is getting fewer loans than the others is a key concern for all groups. A number of groups in Kancheepuram mentioned that loans are allocated according to members' serial numbers. However this rule of 'equal allocation' is often relaxed for a variety of reasons. Some members may want smaller loans than others while some may be refused large loans because the group feels they don't have the capacity to repay. (From our focus groups it seems this rarely happens. The women know that others are aware of their repaying capacity so they only apply for sums which others will find reasonable.) In addition, groups report taking into account the extent to which members need the loans when making loan decisions, which means factors such as the member's household circumstances and what she plans to do with her loan all matter for loan allocation. Groups typically do not differentiate between consumption or 'productive' loans, but rather give priority to loans satisfying an immediate need over others. [18] Groups also tend to differentiate between loans which are disbursed from bank funds and loans which draw on their own savings: the latter are allocated in a more flexible way to members who need them. This is particularly true in Kancheepuram where groups are required to inform the bank what they are going to use their loans for, though in practice they often deviate from the announced projects. In Chitradurga, many of the groups work with banks which have very strong relationships with MYRADA and the local SHG groups and therefore are comfortable disbursing funds for both productive and non-productive purposes.

While equity in loan allocation is most often regarded as a positive attribute, it may have negative consequences as well. Dividing loans up equally may make it hard for members to take out big loans if amounts are automatically 'capped' to avoid too unequal distributions. Indeed, we find that the loan size distribution is skewed towards the lowest

[18] To probe this issue further, in Kancheepuram we asked our focus groups which of two loans they would give preference to: a loan for a wedding or one for a small business. The answer was always the loan for the wedding, because "weddings cannot be postponed but business can".

Figure 2: Distribution of Sizes of Loans Taken Out



amounts: though the average loan size is Rs 4120[19], half the loans taken out are under Rs 2200, 75% under Rs 5200, and only 3% over Rs 15000 (see Graph Two). This relatively small size of loan may constrain what members decide to do with them, as we shall discuss later.

In the absence of any constraints on credit allocation inside the group we would expect to see members who are literate and numerate (who, on average, should have more business opportunities and thus higher credit absorption capacity) and/or with a higher capacity to repay to be taking out bigger loans. We find no evidence of this in our field data: regressions of the total amount of loans taken out or the amount of the most recent loan on dummies for literacy and income (with group fixed effects and controlling for the number of adults and children in the household) do not reveal a significant correlation between either education or income and the size of loans taken out. [20] This could mean

[19]This average hides great heterogeneity over time: on average loans taken out during the first year were Rs 2200, loans taken out after the 6th year Rs 5000, and the average last loan taken out from our field data is Rs 8800.

[20]A regression of total loan amounts on education levels, household income and the number of adults and children in the family does yield coefficients for literacy and income which are significant at the 10% level. However the model's explanatory power (R2) is low –23% – and jumps to 73% if we include group dummies, in which case the coefficients loose their significance. None of the coefficients are significant if we regress amounts

that literate and wealthier members in fact have no reason to take out bigger loans or, alternatively, that because of the constraint of homogenous loan allocation inside the group these members are not able to take out significantly bigger loans.

Another way of looking at this question is by examining the characteristics (collected in our field data) of members who did take out bigger loans, for example the 25 members whose last loan was larger than Rs 15,000. We find that these members do not differ from others on any of the attributes recorded in the survey. In Kancheepuram we have also checked for systematic differences in access to credit and loan usage between group leaders and ordinary members. We find no such differences. In fact, group leaders took on average slightly smaller (last) loans than other members .

Finally the fact that loans for immediate needs seem to take precedence indicates a bias in the allocation system towards consumption loans, and suggests groups may well serve as a type of insurance mechanism to which members can turn to when confronted with an idiosyncratic shock.

6.2 Loan Usage: The Basic Picture

Table 1 presents the distribution of loan purposes by number of loans taken out from both the registers data and the field data. [21] Because some groups recorded up to 40 small size loans per member while some groups recorded only 2 or 3 large loans per member, it is more useful to look at the distribution by amount of loans taken out, which we present in Graphs 3, 4 and 5. Both business and agriculture loans are much larger on average than other loans (more than twice as large as consumption or savings loans), with asset building and livestock loans around the average (see Table 2).

These differences in average loan sizes explain the differences in distribution between loan numbers and loan amounts.

As the graphs below show, more than 60% of all loan money (and half of all loans) went toward business or agriculture. Income generating activities therefore make up the majority of loan usage. The next most frequent loan purpose is consumption, which

of last loans taken out, regardless of whether group dummies are included.

[21] Field data only refers to the last loan taken out by the members we interviewed, a much smaller sample. Our analysis refers to the registers data unless specified otherwise.

Table 2: Average Loan Size by Purpose

	Asset Building	Agriculture	Consumption	Health & Education	Livestock	Business	Savings	All
Avg Loan Size (rs)	4838	5207	2293	2467	4725	6051	2508	4120

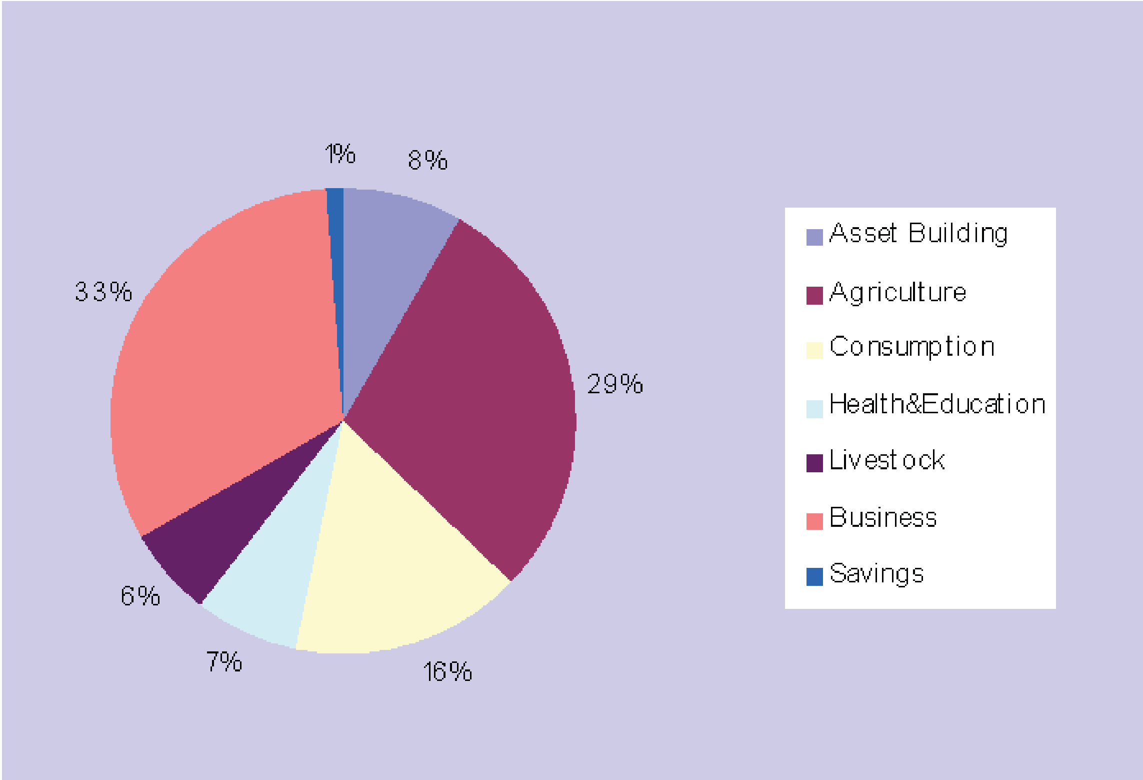
Note: Figures represent percentage of loans dedicated to each purpose listed.

makes up 16% of all loan money and nearly a third of all loans. Asset building, health and education and livestock count for roughly the same share (between 6 and 8.5% of total loan money), with savings at a low 1%.

These general statistics hide important differences between the areas studied though (see Graphs 4 and 5 below). The share of loans going to agriculture and livestock is much higher in Chitradurga while the share of loans going to business is larger in Kancheepuram, reflecting the fact that one area is highly specialised in agriculture and one is divided between artisanal manufacturing and agriculture. Asset building loans count for a much higher share of loan amounts in Chitradurga but this does not necessarily reflect different preferences as most Kancheepuram members have access to individual housing loans through their group, which do not appear in the registers but are in our field data. The numbers from the field data are similar for both areas, and we find that three fourths of loans considered as asset building in Chitradurga are indeed for expenses which would have been covered by housing loans in Kancheepuram. There remain two differences which cannot be easily explained by characteristics of the areas themselves: Kancheepuram groups take a lot more loans out for consumption and a little more for health and education. These differences remain if we look at field data in which asset building loans are not underrepresented for Kancheepuram (see Table 1). One possible explanation which we will return to is the difference of age between the two sets of groups.

In the analysis below, we look at how loan usage evolves over time for the groups interviewed. Three things must be kept in mind when interpreting the results of this analysis. First, our sample consists only of successful groups, which in all cases but two have obtained bank loans and (by definition) have not dissolved. Our conclusions therefore apply only to members who belong to well functioning mature groups. Secondly, though we can expect trends to reflect actual changes in the women's choices of resource

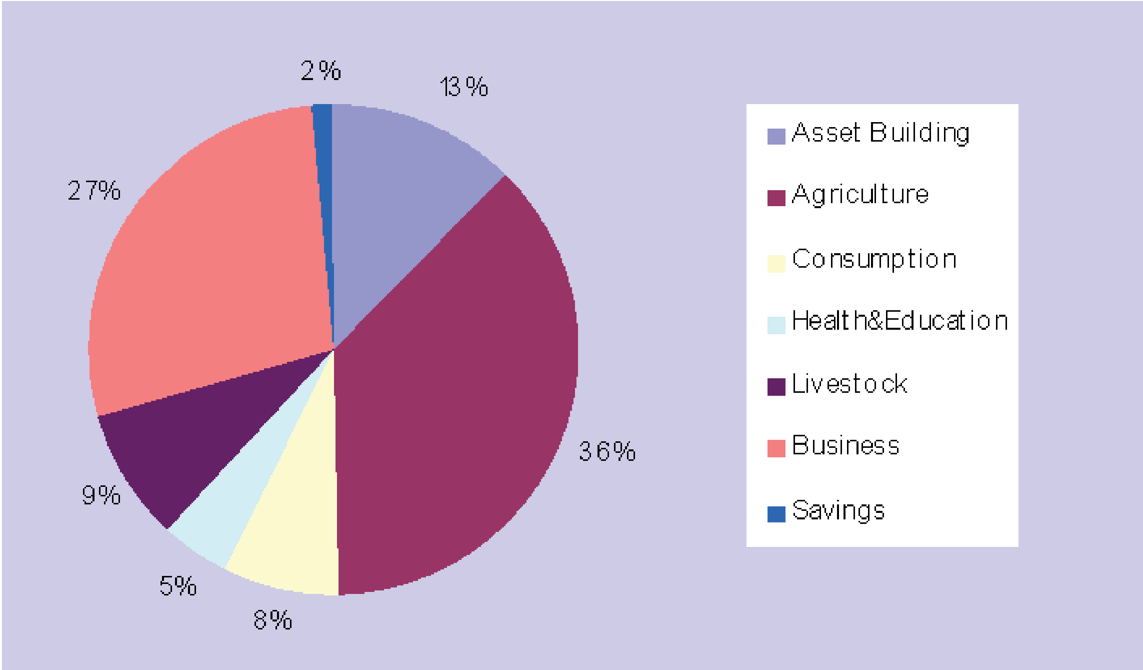
Figure 3: Proportion of Total Loan Amount used for each Purpose (all members)



allocations, they may also be influenced by the fact that the women who took the last loans out are, on average, 7.4 years older than when they took their first loans out. This ageing of the sample could in itself be causing changes in loan usage. [22] Finally the differences between areas could be causing patterns: the Chitradurga groups are generally older, and they represent a larger proportion of the loans taken out for the last few years. Increases or decreases over time may therefore be due to the structure of the sample considered and not to a change in the credit behaviour of members. For this reason we have also reported the changes over time for each area separately (see Graphs 5, 6 and 7). We see for example that the large increase in the share of asset building loans between the first and last years is explained mostly by the fact that a majority of these loans were taken out by Chitradurga members. The increase is a lot less important if we look at these members only, and there is a decrease for Kancheepuram members. The

[22] An increase in loans taken out for health or wedding purposes could have been a consequence of the ageing of the sample, but we do not find evidence of either of those trends.

Figure 4: Proportion of Total Loan Amount used for each Purpose (Chitradurga members)

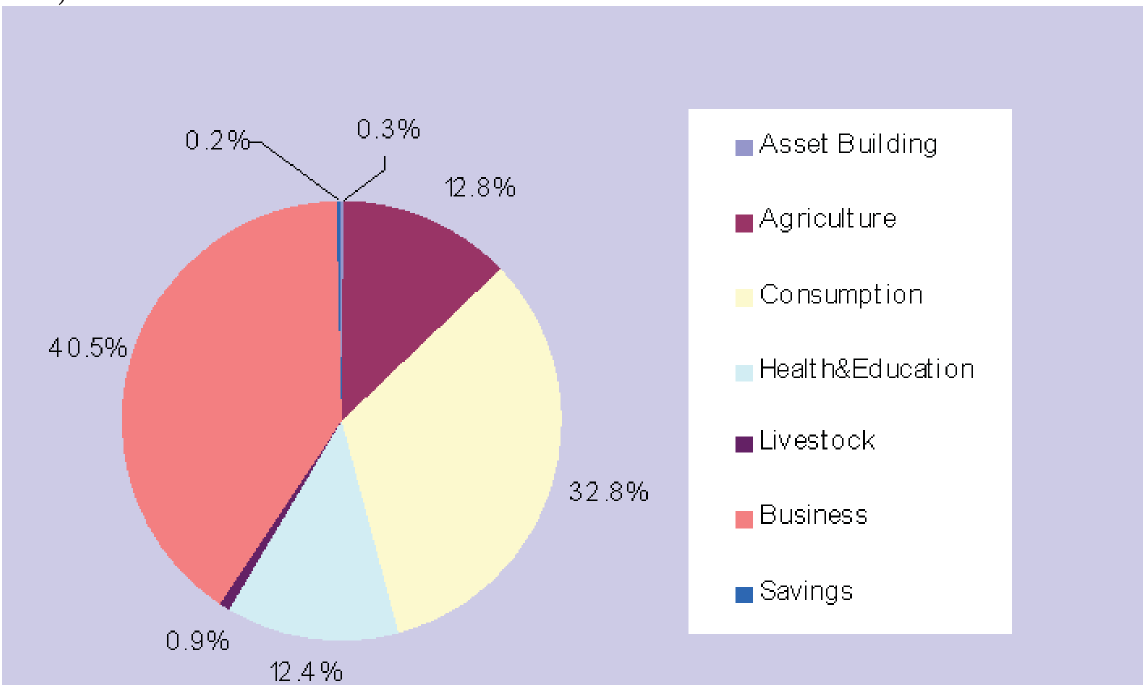


following sections look at the different types of loan usage in turn, examining whether a significant pattern over time can be distinguished and explaining in more detail changes in the distribution.

6.3 A Clear Increase in the Share of Loans Taken Out for Asset Building, but Only in One Region

One of the major problems the poor face in trying to gain access to credit is their lack of collateral, or assets which can act as a security to the loan. Therefore, group members may seek to use loans from the SHG to build up assets which could eventually be used as collateral and allow easier access to credit. However, we find little evidence of members using their loans to buy land – the one thing which banks typically accept as collateral: only 5 members (out of the nearly 7000 individuals in the registers data) have used loan money to buy land. These members took out large loans (Rs 12,400 on average) which suggests that a strategy of building up collateral through land purchases using SHG loans may be too expensive for most members. There is also a large number

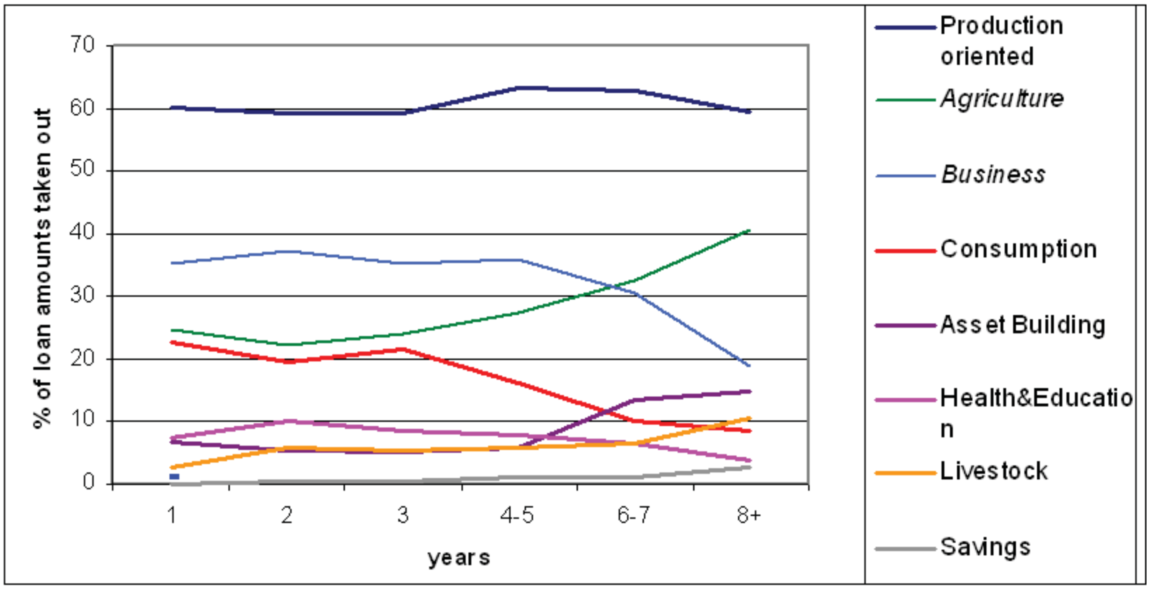
Figure 5: Proportion of Total Loan Amount used for each Purpose (Kancheepuram members)



of individuals who have inherited land from their family or more often their husband's family. In Chitradurga, there are more cases of land ownership than land purchase.

However, evidence from the Chitradurga area indicates these members tend to increase their levels of investment in other types of assets over time (see Graph Seven). There is an increase (though not steady over time) in the strictly defined asset building category, whose share goes from 11.3% for the loans taken out in the first year to 15.4% for the loans taken out after the 7th year. There is a similar non-steady increase for loans taken out to buy livestock, and a steady increase in the share of loans taken out to add to savings, though this share remains low: they make up 0.2% of loans in the first year, then increase quasi-monotonically to 2.9% in the last years (these last two categories can be considered as assets insofar as they are ways of holding wealth over time). This is consistent with Berg et al (1998)'s study on MYRADA's SHGs in Holalkere (part of the Chitradurga district) which finds that members' savings outside the group increase over time. Our results suggest that this increase in savings is at least partially financed through loans which the members have access to due to their initial savings.

Figure 6: Evolution of Loan Usage over Time (all members)



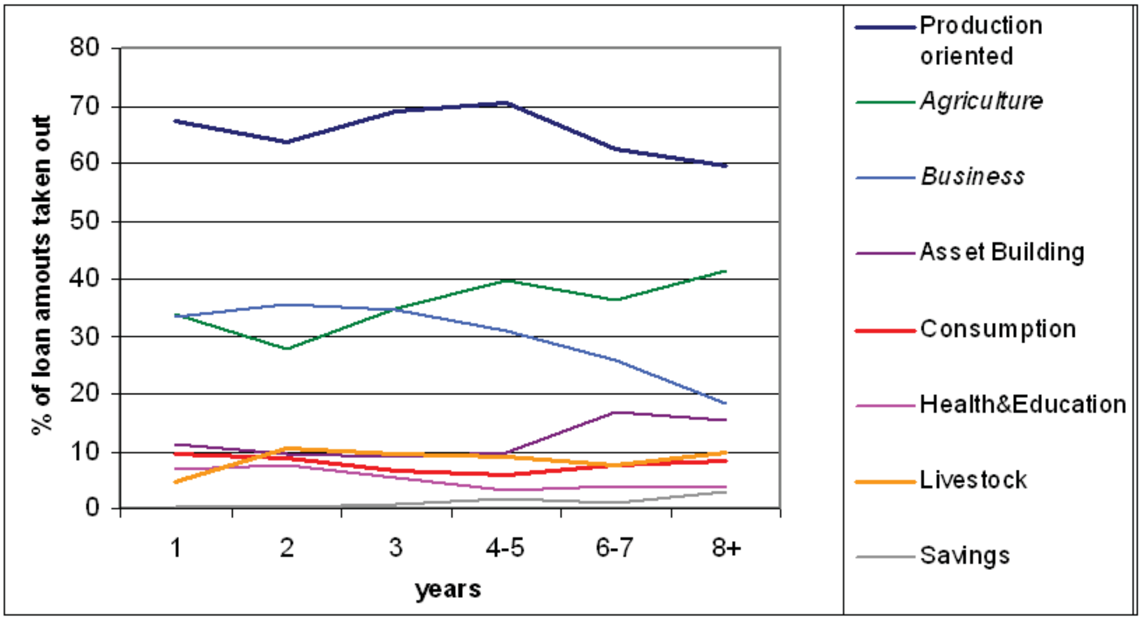
We have discussed above how the fact that groups enforce savings is welfare improving; our analysis above may underestimate the benefit to members of the savings function of SHGs as they also provide some members with a platform from which to save outside the group.

There is no such trend showing an increase in investments in assets for the Kancheepuram area – but this may be due to the fact that loans taken out for housing do not appear in the registers data. Overall, our results offer some limited evidence that group loans provide a way for members to invest in durable assets over time.

6.4 The Group as a Consumption Smoothing Mechanism

Responses from focus group discussions provided support for the hypothesis that groups were widely used by members as a consumption smoothing mechanism – a pool of savings they can dip into in case of need, made larger by the addition of credit from the bank. This is particularly welfare improving for the women who have irregular income, the vast majority of the members. The knowledge that the group is there to fill in gaps in household expenditure is the benefit from the group which they most readily acknowledge: when we asked the women in Kancheepuram whether their income had increased since

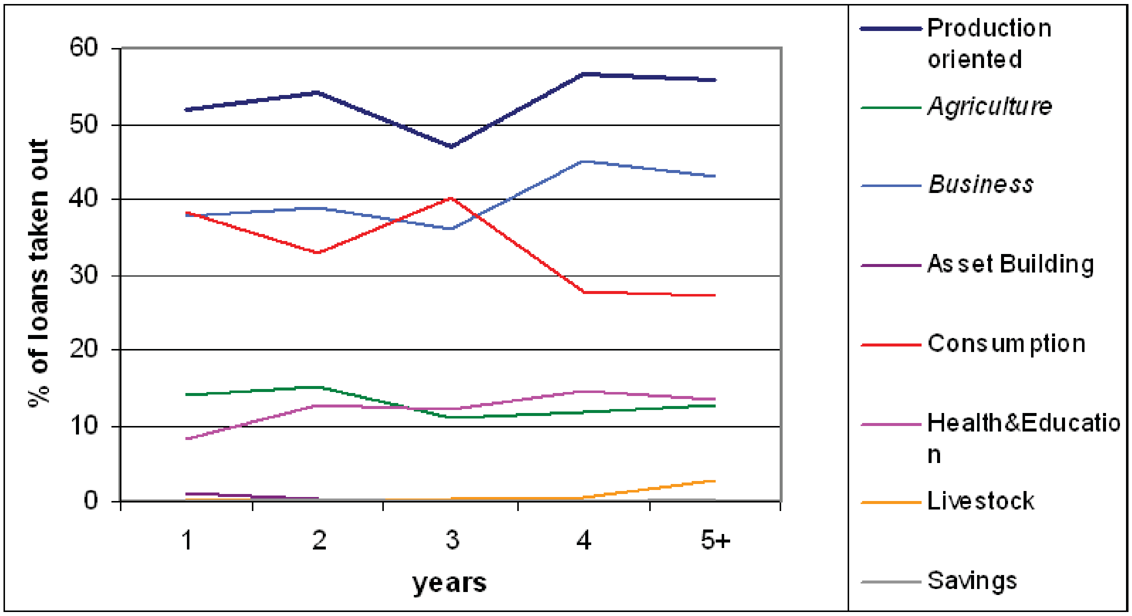
Figure 7: Evolution of Loan Usage over Time (Chitradurga members)



joining the group, only 38% of them said it had but every single member mentioned that her life was easier now that she could get money from her group when pressed financially without having to pay large interest rates.

The fact that group members tend to work in similar occupations (a common occupation is often the basis on which a group is formed) can be a hindrance to consumption smoothing as it leads to high covariation in income among group members. For example, agricultural workers and some artisans have very little source of income during the rainy season, but because this is experienced by all members the group cannot provide them with funds during these times (see *Case Study: Thilagam and Getting Rid of the Middleman* below).

Figure 8: Evolution of Loan Usage over Time (Kancheepuram members)



Case Study: Thilagam and Getting Rid of the Middleman

Thilagam is a member of the Sakthi Amman group (Kancheepuram district). She is a weaver and works from her house with her two eldest daughters. Both of Thilagam's daughters had to leave school before reaching the 5th standard because they had to support the family financially. With a loan from her group Thilagam has been able to buy a box for her weaving machine with which allows her to operate the machine with the help of one less person. This, and the fact that her daughters earn an income, mean that her three youngest children do not have to work and can instead attend school. One has reached the 11th standard and is thinking of applying to a university.

Thilagam knows perfectly well what she would like to do with a bigger loan from her group, and feels confident that she could repay it: she wants to buy her raw material for weaving herself without having to go through the cloth middleman. The one off investment is high (she claims it would cost her Rs 50,000) but the returns would be high as well because she could then sell her saris on the market at much higher prices than those offered by her middleman.

Because she cannot get more than Rs 12,000 from her group she remains dependent on the middleman for supplies, orders and loans during the rainy season during which she cannot weave. As her fellow group members are faced with the same situation they cannot rely on the SHG to provide them with funds during these times.

Though the loan registers do not give us much detail as to what loans taken out for 'consumption' are really used for [23] , our field data provides us with more detail concerning the purpose of the last loan taken out by the member. We find that out of the loans taken out for consumption purposes (excluding education and health), two thirds were taken out for a life event such as a wedding or a child's function, such as a coming of age ceremony. This demonstrates the importance for SHG members to have access to credit for major life events, especially those that contribute to maintaining social networks in their community. Although these loans may not appear to be productive or welfare improving, they contribute to maintaining community ties and social solidarity and hence an environment in which the women feel financially and socially secure.

We find ample evidence that SHGs serve as emergency funds for unexpected urgent household expenditures, bringing to members the protection against risk which comes with increased savings. The fact that loan allocation has to be decided by the whole group and that as a general rule members have to have repaid outstanding loans before taking a new one out means that it could in theory be difficult for members to obtain money immediately in case of an emergency. However, this is not what the women have told us. In Kancheepuram we asked members if they had faced an emergency since joining the group, understood as an unexpected and urgent need for cash which their income could not meet, and whether or not the group had provided them with a loan. Out of the members who had faced an emergency (40% of all members), generally an accident or a funeral, 80% had obtained a loan from the group, usually from the group's own savings. When the group couldn't provide funds individual members often stepped in to lend money at no interest. It seems that on many occasions the rule of paying outstanding loans before getting a new one was waived when there was an emergency.

The overall trend for consumption loans is that their share of total loans falls as the groups get older, more so for Kancheepuram groups where their overall share is larger (it falls from 38.3% of loan amounts taken out in the first year to 27.3% of loans taken out after the 5th year). This could be the result of two different and reinforcing trends: other loan usages becoming more attractive, and members needing fewer funds for consump-

[23] The number of loans reported as taken out for a wedding in particular is under 1%. Based on our experience in the field this figure is well below the actual percentage of loans taken out for weddings which suggests that loans taken out for life events were often labelled under the generic term 'consumption'.

tion smoothing. In Chitradurga we see that members invest more in savings over time (though this only concerns a small minority of members). Berg et al (1998) have found that savings outside the group increase so it may be that older members have built up other resources which they can dip into when there is an emergency – especially those who have been able to purchase life or health insurance. Women have also told us that as they get to know and trust each other well through the group, they start lending to each other more often at no interest, thus providing members with another source of small loans which can be used for consumption purposes.

Investments in income generating activities (whose share increases slightly over time, see section below) also hopefully translate into an increase in income – though only a minority of Kancheepuram members acknowledge this – which may mean the women experience less financial difficulties as their groups get older and require the assistance of the group to cover household expenses less often.

Case Study: Janakamma, Putting Literary Skills to the Service of the Community

Janakamma is a member of Sharada group in HD Pura village (Chitradurga district). She is 35 and has four children. Her primary source of income comes from a petty shop which she began and is able to support with her group loans. In addition she works for her local federation in the market outlet near her home. Because she has studied up till the 10th standard and several SHGs in HD Pura are fully illiterate she has been hired by other groups to write their books and help them keep good standards in information recording and accounts keeping.

She feels very strongly that her literacy skills have helped her to expand her livelihood opportunities (she is one of the most well off members we have interviewed in Chitradurga) and hopes that she will be able to give her children additional opportunities, as she wishes she had gone further in her studies. Her mother was present during the interview and she explained to us that though schooling was not an option for women in her generation, and her husband himself had had minimal education, they had been very supportive of their children's education because they were aware of the economic benefits that come from it.

6.5 Health and Education Loans

Health loans are in most cases taken out for health emergencies to cover expenditures which would have had to have been covered with or without the help of the group – they constitute the majority of the emergency loans which we have just discussed. Field data gives us a bit more insight into the use of group loans for health purposes. Nearly a third of the members interviewed who had had health costs over the previous year had been able to take out a loan to help meet these costs. It is interesting to note that amongst the subsample of members who have insurance (46% of the members interviewed), the proportion of women who took a loan out to cover health expenses in the previous year falls to only 17%. [24] While SHG members did occasionally take loans for health expenses, more often, members looked to family or friends for support. This is especially true of women in Chitradurga district. When asked why they did not take out a loan, they mentioned that it was more difficult to get an immediate loan from their SHG or other formal credit lending institutions, whereas requests to family or friends can be made at any time.

It is difficult to estimate whether education loans are also expenses which would have been met anyways or investments in human capital which are facilitated by increased access to credit. Higher education expenses however probably fit in the second category. From our field work we find that 34% of the women who had had school (or school related) expenses over the last year took out a loan from their group for that purpose. Out of the 20 members in Kancheepuram that we met who had sent or were sending their children to an institute of higher education, 13 had taken loans for school fees. We also find that loans for education are taken out more by women who themselves have attended school. out of the women who had had school expenditure over the last year and were themselves literate nearly 36% had taken out a loan to help cover the costs, against only 16% for the women who had experienced these costs but had not attended school themselves (the size of the school related expenditures are similar for both categories of women).

Though higher education expenses are typically too high for a group loan to cover, and

[24] This includes SHG members in Kancheepuram who own any type of insurance. Our information on what kind of insurance they have acquired is very inadequate because quite often the women themselves do not know. A lot of them said insurance was something they left completely in their husband's hands, even when they were the ones managing most of the household's credit and savings thanks to the group.

the main reason for the women to take their children out of school are financial problems too serious for the group to help with (typically we find children are forced to work if their father dies or becomes disabled), it seems groups do serve as a source for investing in education.

The overall trend in health and education loans is that their share of overall loans is declining over time for Chitradurga groups but increasing for Kancheepuram groups. This is likely due to the greater average age of the Chitradurga members, many of whose children were already married.

6.6 Production Oriented Loans

We now turn to the analysis of production oriented loans, in which we include loans taken out for business and for agriculture. There is no real trend in the evolution over time of the share of these loans in the total amounts of loans taken out, but this is mostly due to a decrease in loans taken out for business among Chitradurga members after the 4th year. There is a slight increase over time in the share of business loans for the Kancheepuram groups and of agricultural loans in Chitradurga[25], providing us with some evidence of members switching from consumption oriented loans towards loans for the main production activity in both areas.

A more detailed analysis from the field data reveals that these production oriented loans are generally taken out by women to invest in existing productive activities rather than start new ones. In Kancheepuram we found that less than 15% of the members interviewed had actually started a new income generating activity with a loan from the group [26] (we included in this category the members who have invested in an activity they did not take part in before – buying a cow for example counts only if no-one in the household had cows before). Similarly, field data from both areas studied shows that daily labourers invest less in income generating activities than others. (46.6% of the last loans taken out by the members interviewed were for agriculture, including livestock, or

[25]Neither of these increases constitutes a real trend however, because the increase isn't steady over time, especially in Chitradurga. Aloysius Fernandez from MYRADA finds a slight decrease in the share of agricultural loans for the whole of the MYRADA groups, which leads us to treat our own contrary findings on a smaller sample with caution.

[26]For an example of a woman who did invest in a new business, and is planning to start another one, see *Case Study: the success story of Supraja*.

business. This number falls to 33% for the subsample of daily labourers.) Aside from the fact that it seems difficult for these women to switch from being daily labourers to owning their own means of production, this indicates that they invest less than others in income generating activities which could increase their household's income not coming from daily labour wages (such as livestock, or investing in a husband's or a child's business). Group loans apparently serve as sources of income generating activities mostly for members who already have some of these sources before joining the group. This is particularly interesting given the number of government organisations concentrating their efforts on micro-enterprise promotion (this is one of NABARD's aims for example). Indeed, the NGO we were working with in Kancheepuram had a strategy of helping to start up small businesses.

Case Study: The Success Story of Supraja

Supraja is 29 and the group animator of the Nagathamman group in Muthiyalpettai village (Kancheepuram district). She moved from Andhra Pradesh to Tamil Nadu 6 years ago to get married, and joined the group one year after her arrival. After a few years she was chosen by the group to be their animator despite the fact that she was a newcomer and couldn't speak much Tamil because she is the only member to have finished high school.

She learned tailoring with Hand in Hand and bought a tailoring machine with one of her first loans from the group. She has chosen to send her two young children to the local private school and pay the relatively high fees (Rs 2000 per year for both children) because she wants them to do well and go to university, something which her parents didn't want her to do. She knows the income she and her husband currently earn (Rs2500 per month) will not be enough to finance a good education, so she has a new business plan: she wants to start a rabbit farm in a year or two with other women from her group. She is learning rabbit breeding with Hand in Hand and looking into marketing opportunities with her cluster coordinator. She is still not sure how much she needs to invest and how long it will take her to repay but she has heard of another SHG woman who started a rabbit farm in a nearby village and is planning to go visit her.

There are several possible explanations for the low rate of new businesses being financed by group loans. One of the widely reported advantages from group membership is the possibility of borrowing money at much lower interest rates than those available from the informal sector – moneylenders, chit funds, and mandis – or without having to go through a middleman. We find that moneylenders' interest rates have fallen in some villages since the groups were created (though this is far from a general trend), and that members' dependence on informal forms of credit has lessened: 52.5% of them said their household used to borrow from local lenders at interest rates higher than those offered by the group compared to 39.2% who still did so at the time of the interview. Interestingly, more members report borrowing money from sources other than the group since joining the group than before (71.5% against 66.7%). This could be a sign of increased financial initiative (some women said they did not look after their household's finances at all before the group), but also a reflection of the fact that a lot of members joined the group just after getting married and therefore were in no position to borrow before then. The members interviewed are borrowing more often from outside the group, but less often from moneylenders, so they are increasingly turning to the formal sector for credit: only 13% borrowed individually from the bank before the group (mostly in the form of agricultural loans), compared to 21% at the time of the interview.

There is therefore evidence of a clear improvement in the members' access to credit. Nevertheless, even in the mature groups interviewed more than a third of the members still borrow from other sources at higher interest rates than those of the group (moneylenders' interest rates are anywhere between 30% and 200% per year), or which stop them from getting a good price for their products (see Case Study: Thilagam and Getting Rid of the Middleman). This is consistent with the fact that many members had fairly detailed business plans to talk to us about when we asked them about their future plans, but said they could not put these plans into practice with group loans because there was not enough credit available. When asked "would you like to have access to bigger loans and do you feel confident you would be able to repay them", 67.3% of the women (this question was only asked in Kancheepuram) said yes, and most of them were able to give us an account of what they would use the loan for – in the majority of cases it was for a business (see *Case Study: Lakshmi, Her Business Plans and Her Credit Constraints* below).

Case Study: Lakshmi, Her Business Plans and Her Credit Constraints

Lakshmi along with her husband and 16 year old daughter make threads for saris and longis. However, because they do not have their own house or their own threading machine, they must work as daily labourers in others' houses for around Rs 15 (30 for her husband) per day. Lakshmi belives that if she had her own threading machine and a room to use it in her household's income could double, and indeed women in her SHG (Sakthi group, in Vadakku Street, Kancheepuram district) with their own machines are making at least twice her wages. However she thinks she needs to invest Rs 20,000 to get the machine and buy the initial raw materials. This is four times the amount of the loan she typically is able to get from her SHG, and money lender interest rates are prohibitive (120% per year in this area). She merely laughs when we ask why she does not ask for an individual loan from the bank, pointing out that she does not even have her own house. She has been able to repair the house she is renting and pay the doctor's fees for her husband with her group loans, and she thinks that's already a great improvement in her welfare.

Group members are therefore still credit constrained in so far as there is a demand for more credit at the groups' current interest rates than what the groups can supply. Because production oriented loans are on average twice as large as consumption ones, and because consumption loans (more urgent) seem to take precedence both in the individuals' own choices and in the loan allocation system, it is likely that potential investments in production related activities are the ones which do not materialize due to these credit constraints. Appendix C, *Investment Opportunities in Kancheepuram, Tamil Nadu* details some of the investment opportunities available to the women we interviewed in this area.

In addition to the relatively large size of the investments required to start a business, (given that the average loan size Rs 4,120 and keeping in mind the fact that half of the loans are less than Rs 2,200), other constraints such as lack of training or lack of appropriate infrastructure (such as roads for shops) are preventing women with business plans from implementing them. The fact that as groups get older and average loan size gets bigger more members take out loans for income generating activities in Kancheepuram also points in the direction of the need for larger loans for the women to be able to invest in business opportunities. This rapid analysis of the business constraints and opportunities the group members are facing is very much exploratory. We think however that investigating the obstacles faced by members seeking to invest in new businesses could be a fruitful path for future research.

7 Conclusion

We find that a majority of loans taken out are used for income generating purposes, and therefore that Self Help Groups do provide their members with the means to increase their welfare in the long run. However, we find that few members have been able to use group loans to start a new income generating activity. From our experience in the field we offer some explanation based on the persistence of credit constraints and the fact that loans may be insufficiently large to cover the necessary initial investments. Looking into the non financial factors which constrain business potential strikes us as a fruitful path for further research.

Our data provides us with some evidence of members switching from consumption oriented towards production oriented loans over time, but mostly when the share of consumption loans was high to start with. We have looked into how groups may help during emergencies, and find that they indeed serve as basic insurance for members confronted to idiosyncratic shocks.

Finally one interesting trend is the increase in loans taken out for asset building over time, in particular loans used to save money outside the group – this trend is small-scale and concerns only one of the areas which we have studied, but it will be interesting to see if it appears in future research on other mature groups.

Overall our study of loan usage and its evolution over time for Self Help Groups in the Chitradurga and Kancheepuram districts does not yield any surprising result concerning changes in the group members' choices in resource allocation: the distribution of loan purpose remains fairly stable over time, and whatever trends we do find are not necessarily present in both areas studied which leads us to be wary of hasty conclusions. This relative stability does provide us with important information on Self Help Groups: they work as means towards investment in income generating activities or human capital as well as mechanisms for consumption smoothing or asset building, and these different roles remain important as groups mature. Improved access to cheaper credit enables members to invest in all aspects of their lives, and our report gives a picture of women who juggle with their different social roles as entrepreneurs, mothers and wives preserving and improving their household's human capital, and more often than not financially supportive members of their communities.

References

[1] APMAS, 2003. *SHG Bank Linkage Program: A Study in Andhra Pradesh*. http://www.apmas.org/studies.aspx

[2] Armendariz de Aghion, B., and Jonathan Morduch. 2005. "Microfinance : Where Do We Stand?" in Charles Goodhart (ed.), *Financial Development and Economic Growth: Explaining the Links*, London: Macmillan/Palgrave.

[3] Berg,C., Bredenbeck,K., Schurmann A., Stanzick J., and C. Vaneker. 1998. *NGO-Based Participatory Impact Monitoring of an Integrated Rural Development Project in Holalkere Taluk, Karnataka State, India*. Centre for Advanced Training in Agricultural and Rural Development, Humboldt Universitat zu Berlin.

[4] Bosshardt, K. and S. Meier. *Comparative study of men and women Self Help Groups*, Available from MYRADA on request.

[5] Ghate, Prabhu. 2006. *Microfinance in India: A State of the Sector Report, 2006*. Delhi: Microfinance India.

[6] Gurski, B. 2005. "Perspectives from the field : the SHG Experience and Quality Assessment". CASHE/CARE India.

[7] Khandker,S.F., Khalily, B., and Z. Khan. 1995. "Grameen Bank: Performance and Sustainability", World Bank Discussion Paper 306

[8] Kropp, E.W. and B.S. Suran. 2000. "Linking Banks and Financial SHGs in Indian – An Assessment", Paper presented at the Seminar on SHG-Bank Linkage program at New Delhi on 25th and 26th of November 2002.

[9] Luders, Marianne and Matthew Luke Osborne. 1996. "Why do Self Help Groups Sometimes Fail?: A Short study of Non - Functioning Self Help Groups In Three MYRADA Project Areas." Available upon request from MYRADA.

[10] Morduch, Jonathan. 1999. "Microfinance Promise", *Journal of Economic Literature*, Vol. 37

[11] Mullainathan, Sendhil. 2006. "Better Choices to Reduce Poverty", in Banerjee A.V., Benabou R., and Mookherjee D., *Understanding Poverty*, Oxford University Press.

[12] Puhazhendi, V. and K.C. Badatya. 2000. "SHG-Bank Linkage Program for the Rural Poor– An Impact Assessment", NABARD, Mumbai.

[13] Sinha, Frances et al. 2006. *Self Help Groups in India: A Study of the Light and Shades*. http://www.edarural.com/documents/SHG-Study/Executive-Summary.pdf

[14] Stiglitz, Joseph. 1990. “Peer Monitoring and Credit Markets”, *World Bank Economic Review*, vol.4 nb.3, World Bank.

A SHG Creation and Support: the Hand in Hand Model

Hand in Hand has been operating in Kancheepuram district, Tamil Nadu since 1988. Its main focus was initially child labour elimination and development of education facilities. Mainstreaming out-of-school children through innovative education centres remains its most prominent activity. In 2002, it began working with SHGs, taking over the role of monitoring SHGs which had been promoted by the Voluntary Health Education and Rural Development Society (VHERDS, a government funded organisation) which was gradually withdrawing from the area. Since then Hand in Hand has organized around 115,000 women into over 7,336 SHGs in five districts of Tamil Nadu.

A.1 Group creation

All the SHGs included in our study were started by VHERDS. Groups of between 15 and 20 members were formed on the basis of economic homogeneity to avoid domination by the economically stronger women. The organisation was explicitly targeting families through women so no men were allowed in the group, and as a general rule no single girls could join a group though there were a few exceptions. In the preparatory phase the organisation provided the women with basic training on book keeping and group organisation.

A group leader is selected – Hand in Hand suggests group leaders should change every other year to avoid prominent members getting better access to loans but in practice group leaders tend to remain in place longer than two years and sometimes never change. Our focus groups indicate that literacy is one of the main criteria for choosing a group leader and often this means only a few members are eligible. The group leader also needs confidence to deal with the bank and has to be seen as completely trustworthy by other members. Both these qualities take time to build up which means members are unwilling to change leaders too often.

A.2 NGO Involvement in Supervising the Groups

After 1 or 2 years the groups are organised into Cluster Level Federations of around 40 groups, each supervised by a Cluster Coordinator employed by Hand in Hand and generally herself a group member. The aim is for SHGs to be sustainable and independent of the organisation and so all contacts between the older groups and Hand in Hand is done through the Cluster Coordinator who visits them at least once a month.

Hand in Hand offers training to group members in literacy, computer skills, 'economic development' (accounting and marketing techniques) and a great variety of vocational courses such as tailoring, animal husbandry and soap making. Training is widely encouraged, however compensation wages are only offered for trainings subsidised by the local government (a minority of cases) and illiterate women are not allowed to join a training course unless they first take the literacy course. We find that only 37% of the women interviewed had attended training provided by Hand in Hand.

Hand in Hand has developed a model which is a mix between the SHG model and the Grameen model and which focuses on enterprise development (their target is that 80% of loans should be taken out for that purpose). They offer loans from their own funds to a third of the group members in turn if the members have a structured enterprise development project. These loans are offered when groups are young to supplement bank credit with cluster coordinators getting very much involved in the planning of the business project. Hand in Hand only started micro lending a few years ago, so the groups we have seen have not in general had access to credit from the NGO. However, both the Cluster Coordinators and the bank staff go through all the groups' loan registers to check what the loans are being used for and push for business-orientated loans - more so for young groups but older groups are scrutinized occasionally. Banks in particular direct loans towards certain purposes: a majority of the groups we have seen have taken specific housing loans from the bank, for which bank staff comes to the village to check that houses are effectively being built or repaired. One group had had access to a specific cattle loan from the bank.

B SHG Creation and Support: the MYRADA Model

MYRADA originally began as an NGO to help Tibetan refugees in 1968. In 1978 they began work in rural development. They now operate in several states within Southern India including Karnataka, Tamil Nadu and Andhra Pradesh. Their programming is largely focused on livelihood promotion through some core activities that include Self Help Affinity Groups (SHGs), AIDS/HIV support to high-risk communities, Watershed Management Associations, Organic Farming and other technical and sustainable support for farmers. As of 2005, they had around 9400 SHGs throughout their areas of operation, collectively holding approximately Rs. 1079 million in common funds.

B.1 Group Creation

The majority of the groups have between ten and twenty members, usually all women or all men. These groups are formed mainly due to proximity to other group members within a village or locality with the support of a MYRADA field staff.

A field official will usually identify a need in a particular community after visiting and talking with people in the village. This process continues until groups are formed and women can commit to attending meetings and contributing savings. All of the group members attend training after group creation so they can get a better understanding of how SHGs work and what type of support they can expect to receive from MYRADA.

B.2 SHG Support Structure

Unlike other microfinance and community development organizations, MYRADA does not dictate that loans taken from the group should be for productive purposes. The women are encouraged to take out loans to satisfy any king of need. The banks have no restrictions on how the funds are used either, as they are very familiar with the MYRADA SHG model. This attitude put forth by MYRADA allows for a high level of transparency amongst group members and also makes auditing a much more direct process.

MYRADA organises its groups in federations, usually ranging between 150 and 200 groups. The federation gives SHG members the opportunity to interact with other group members, find out about new techniques and different types of loans being offered. The federations also help SHGs with auditing their books and making sure that their finances are in order. If conflicts arise amongst members they send volunteers to group meetings and individuals' homes to try and alleviate the problem. They also make sure that groups are maintaining healthy practices and are functioning efficiently. Each SHG gets to elect a federation representative, who represents them to the federation and brings back any news or information that might be relevant to the groups.

When several federations are formed in a particular region, MYRADA has instituted a community-based, member-run institution called a resource center (RC). Resource centers are centrally located amongst a region where several federations exist. The funding for the resource center comes from MYRADA and the federations and SHGs that compose the RC. The RCs are usually comprised of a market outlet where some group members are employed (see *Case Study: Janakamma, putting literary skills to the service of the community*), a training center and an office where auditing and bookkeeping activities take place. They provide women with the opportunity to attend trainings for such skills as tailoring, incense stick creation, or candle making and their families are also allowed to sign up for a variety of courses. Federations occasionally give out loans for starting group businesses like arekka plate making.

Federations give MYRADA an effective communication pathway between themselves and the individual SHGs, without having to directly manage the effort. In this way, the combination of RCs and federations can almost be viewed as a small subsidiary NGO of the parent, MYRADA.

C Methodological Note: Categorizing Loans according to Their Purpose

Categorizing loan usages is a fairly ambiguous task. Defining a 'productive' loan as opposed to a consumption loan may in particular be prone to interpretation: why should buying a handloom count as a productive loan but not paying for its owner's health expenses (which enables her to remain productive) or repairing the roof which protects the handloom? We have tried to keep our loan usage categories as straightforward as possible, but they necessarily involve some arbitrary choices which we explain below.

Asset Building refers primarily to loans taken out to build, repair or ameliorate houses – gas connections or water filters come in the latter category. In our field data and whenever the loan registers provides sufficient detail we have counted investment in household durable goods (fans, TVs, etc.) as asset building.

Agriculture refers to loans taken out to invest in agricultural activities, such as buying seeds, fertilisers or a plough. Loans for livestock have been assigned a separate category as a livestock purchase may be considered as investment, savings or asset building. In our field data however agricultural loans include loans taken out to buy livestock.

Consumption loans are loans taken out for household expenses and life events (weddings, funerals, festivals, etc.).

Health and Education loans have been grouped together as they are both investments in human capital.

Business loans include all loans which can be seen as investments in an income generating activity except for agriculture and livestock loans. Purchases of machines, raw materials and autos or carts fall in this category.

Finally, **Savings** loans refer to loans taken out to buy gold, insurance or grain storage.

D Investment Opportunities in Kancheepuram, Tamil Nadu

This information was collected in Kancheepuram after we realized that few women had been able to start a business with their loan: a majority of them said they had business plans, but that these were too expensive to undertake. We wanted to have a better understanding of what investment opportunities and constraints they were facing. Declared prices vary a lot depending on the respondents, so these are only gross estimates.

Textile manufacturing is the main source of income for the members interviewed. The work is usually done at home on machines that often get handed down generation to generation, but around 25% of the women working in textile do not possess these machines and have to work on someone else's. They generally make 30-40% less income than women doing the same work on their own machines. Buying a machine seems like an obvious income generating investment for these women as they have the skill to use them. The first constraint they face is lack of space, as these machines generally take up a room. The second constraint is availability of labour, as a lot of machines require two people to be operated. The third constraint is cost: a small hand spinning machine or weaving machine may cost only Rs 5000 (but income from it seems to be under Rs 1000 a month), while a weaving machine costs Rs 15,000-20,000 (see *Case Study: Lakshmi, her Business Plans and her Credit Constraints*).

We found only 4 women who had bought one of these machines with a loan. Most loans taken out for textile manufacturing were used to buy raw materials or repair and improve existing machines. Amongst the latter a popular investment seems to be buying a 'box' for the weaving machine which costs Rs 5000 and which cuts down the number of people necessary to operate the machine (see *Case Study: Thilagam and Getting Rid of the Middleman*).

Starting an income generating activity in **agriculture** involves either buying land (which no member in Kancheepuram has done) or, more realistically, buying **livestock**. A bullock typically costs Rs 4000-7000, and can be used to plough fields or carry materials around in a cart - this is generally a man's job. Buying a cow is a popular investment, but taken up mostly by women who already possess at least one cow. Reported prices of cows vary greatly from Rs 7000 to Rs 20,000 (roughly Rs 11,000 on average). There seems to be great variability in the returns from buying a cow, making buying just one cow a fairly risky investment: the best-performing cow produced 8 litres/day, but a lot of women reported getting only 2-3 litres and some reported getting none at all (see *Case Study : The Failed Investment of Dhanabagyal*). A litre sells for Rs 6-8. The only members we met who were able to stop working as daily labourers because they were generating sufficient income from cows bought with loan money are part of a dairy cooperative through which they sell their milk everyday at a fixed price.

Finally starting a **shop** seems to be a profitable investment: two women had opened food stalls with an initial investment of only Rs 1000 each. A petty shop is slightly more expensive than a food shop - a Rs 5000 loan should cover start-up costs – but can brings a steady income of Rs 2000-3000 per month. This was the most frequent new business investment we encountered. It can, however, only be undertaken by women who own sufficient space for a shop to be set up in, and who live near a road on which they will find customers. The latter condition restricts the opportunity to only a few of the villages which we have visited (see *Case Study: The Group which Started a Shop*, for an example of a geographical location turned into a business opportunity in a joint venture).