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**Ramanagaram Financial Diaries: Loan repayments
and cash patterns of the urban slums**

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***Ramanagaram* Financial Diaries: Loan repayments and cash patterns of the urban slums**

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Abstract

We provide the preliminary analysis of a three month pilot study tracking the daily cash inflows and outflows of twenty households in two urban slums of Ramanagaram, indebted to micro-credit organizations. Indebtedness of many of these households to multiple MFIs was a result that came out very strongly from the analysis of the daily cash transactions of these financial diaries. Secondly, a rather disturbing finding related to this, is the size of each household's budget that goes towards servicing loan repayments. Loan repayments vied with food in the expenditure profiles of most of these households. Reinforcing this is our third finding that households are observed to recycle their debts to a substantial extent as evidence by over 27% of borrowings being used to finance various kinds of borrowings (including MFI and SHG borrowings). The fact that most of these borrowings are taken as small sums from several entities also does not boost the use of these funds towards productive purposes. All this points towards some pressing issues that need to be addressed in the fast-track growth of the microfinance sector in urban India.

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Basic information about Ramnagaram is available at: <http://www.ramanagaracity.gov.in/>

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***Ramanagaram* Financial Diaries: Loan repayments and cash patterns of the urban slums**

Introduction:

Today, most parts of urban India are seeing a substantial scaling-up of micro-credit disbursements in response to the ever increasing policy thrust on financial inclusion. Ghate (2006) estimates that micro-credit disbursements reach about a fifth of the total poor in India across the two main micro-credit models – the SHG-Bank Linkage Program [SBLP] and the Microfinance Institutions [MFI] model. Further expansion in this sector is anticipated with a specific focus on increasing disbursements in urban and peri-urban areas.

The microfinance sector is seen as being more “demand-driven” in designing its loan products and processes, and therefore seen as being more competitive with the informal sector credit markets (chit funds, finance companies, money lenders et. al). However, the microfinance Institutions suffer from at least three key problems that relate to their financial sustainability, increasing outreach, and improving the impact of their loans on the livelihoods of the borrowers. This “critical triangle of Microfinance”, a term coined by Zeller (2002), often drives the institutional rigidities of these micro-credit models in defining the size of lending, the frequency of repayments and the rates of interest that they charge. The MFI methodology believes in intensively tracking loan repayments through weekly group meetings with the MFI representative. The repayments are weekly equated sums, which kick-in within the first week of disbursing the loan. While the payments are well monitored, the purpose of loans has at best token monitoring allowing for fungibility of borrowings and creates issues in understanding the impact of micro-credit. The size of the loan is also restricted and this also restricts the uses of the money and creates the need to borrow from multiple formal and informal lenders. Based on our study of weekly cash inflows and outflows, this work therefore aims at understanding (a) the actual use made by the households of the borrowings from MFIs and (b) the pattern of cash inflows and outflows that result from managing the rigid microfinance repayment structure.

Our study finds that households borrow money from a number of different microfinance institutions at the same time. Most household end up spending over 30% of their budgets in servicing these loans and as much as 33% of their large borrowings go towards repaying existing loans. Much of this work suggests that households are using microfinance to manage consumption expenditure and a large use of much of their borrowing is currently being used to repay existing loans.

Genesis of the *Ramanagaram* Financial Diaries:

Financial Diaries for the poor is a methodology, which chronicles the money management

practices of the poor over a period of time (generally a year). A record of the financial transactions of the household (income, expenditure, saving, borrowing and investment) is compiled by means of periodic interviews with a chosen sample of households over the study period. Financial Diaries as an instrument for study of the financial practices of the poor and very poor was first carried out in Bangladesh by Stuart Rutherford and India by Orlanda Ruthven, as a part of the Institute of Development Policy and Research's study on 'Finance for the Poor and Poorest'; this has been extended by Daryl Collins in South Africa [www.financialdiaries.com]. Household diaries have historically been used in a diverse number of areas such as transportation research, health, apart from consumer spending and understanding financial flows (Thompson et al. 1980, Rogman and Haggerty 1972, Lee et al. 2000).

We tried a variant of this methodology (on a pilot basis for three months from Oct 2007 to Dec 2007), to specifically understand the cash inflows and outflows of 20 urban poor households residing in Ramanagaram, Karnataka and using the two predominant models of microfinance services prevalent in India – the MFIs and the SHGs. While the debate regarding the impact of microfinance on the livelihoods of the poor continues, we felt that the Ramanagaram diaries could give us some clues on how microfinance was affecting the day-to-day cash flows of the urban poor.

A major change that we made in the methodology was that these diaries were required to be written by the households themselves. There were four exceptions for which our field investigator was forced to write the diaries for these households on a weekly basis as these households had no literate member. Our investigator also visited each of the other households on a weekly basis and recorded transactions details for the entire sample onto a separate form which was used for data entry. Thus, a major strength of using financial diaries is the far shorter recall period over which households need to report their transactions when compared to most other diaries that have at best a weekly or fortnightly recall and where the diaries are written by a field investigator. This way of collecting data has also made data collection more participatory as can be seen in the level of detail given by some households in recording their cash transactions¹. The 90 odd pages diary that we gave to the 20 households was unstructured, each page (corresponding to one day) in a two-columnar format, asking the households to report the rupee amount that was spent on expenditures or income inflows in the household on each day. Due to the need to keep a diary most of the women were themselves literate or had a literate person in the household who could help them keep their financial transactions diary.

Keeping the Diaries – some Learnings:

For us, training the households to keep these regular diaries was learning in itself. When we started explaining the concept of these diaries and the purpose of our study to the women for the process of recruitment, there were some key issues we had to tackle head-on (a) some women stated that they would get nothing tangible (in terms of incentives) from keeping

these diaries and therefore saw no use in it (b) many women said that they were unable to assess the money flows of the households, because their husbands took the major financial decisions and they were not sure of his co-operation in this task (c) many women also stated that while they would be able to give a picture of what they do with the money their husbands give them for spending, they had no idea of the income or the expenditure of their husbands. There was also an additional issue of the time involved. A lot of these women were already hard-pressed for time, even for regularly attending MFI/SHG group meetings, which were compulsory.

This also made us realize that it was important to stress as early as possible on the time investment needed to maintain these diaries when inviting people to participate in the study. We typically followed this with stating quite clearly that their most significant gain was realizing how much money would be spent under different heads. Households in India's urban slums are more monetized than many rural areas and we hoped they would be able to identify systemic sources of income and expenditure from keeping a diary. To this end, we distributed a breakdown of each household's income-expenditure profile at the end of the study. Some women, whom we spoke to, felt a strong need to share with us the risks that they take and the vulnerabilities that they face in managing their day to day cash flows. These women were quicker to respond to our appeals. We realized we also had to ensure the co-operation of their husbands, and get them to understand the purpose of our study. Whenever possible, we then decided to speak to the couple jointly about the project. In a few cases, the husbands were quicker to understand and respond. Recruitment was quick when we spoke to the couple jointly. As regards the time involved – we realized we had to be flexible in visiting these households for diary / data collection. Our Field Investigator in Ramanagaram had to go to these households at the convenient times when the women were free and available to talk to her.

We decided to embark on this project as a pilot study for 3 months (October to December 2007). Once the respondents (in some cases, the children of the respondents) started maintaining the diaries there were additional questions about the level of detail to be kept. We began initially by having the diary entries structured as per the expenditure/income items, but we felt it was best left to the households to decide on the level of detail. Interestingly, at the last meeting to discuss findings of the study, there were demands for our presenting them with diaries to maintain as well as requests for diaries for other family friends who had begun to see this act of keeping a diary as something important.

To corroborate the information in the diaries – three snapshot surveys were also collected. The first (Baseline One) dealt with the socio-economic information of the household and was taken at the very beginning. The second (Baseline Two) dealt with the annual income-expenditure information and the third (Baseline Three) dealt with the saving, borrowings and use of financial instruments and was executed at the end of three months. The first two surveys were taken at the beginning of the study to get a sense of the household as their data

came in and the third was collected at the end of the three months.

Sample Description:

For sample design, the minimum we required of the households in the sample was for them to be either a member of an MFI or a member of a SHG. The study began with a group of twenty three poor households who were either borrowing from a microfinance institution (MFI) or were a part of a self-help group (SHG). The households were chosen from two locations in Ramanagaram; Hajinagar and Ambedkarnagar. Three out of the twenty three households dropped mid-way during the study due to personal reasons. These women live in households that are engaged in selling fruits, trading in metal scrap, Pilature (working in the silk industry of Ramanagaram), and working as a coolie, working on the municipality payrolls as a sweeper, beedi-rolling, making sandals, and a range of other semi-formal professions.

Given this diversity in professions in the sample it is not surprising that we also found that self-reported annual income varied substantially across these households from Rs. 10,000 a year to a maximum of Rs. 2, 88,000 with a median income of Rs. 40,080. In our baseline surveys almost all households report owning a functional TV, some also own CD players, small amounts of jewellery (4-60 gms of gold), and mobile phones. Family size varies in the sample with a minimum of two (a married couple) to a maximum of eight (a married couple with six children) and has a median of four. In the state of Karnataka urban poverty line was estimated to be Rs. 599.66 per month in 2004-05 based on a uniform recall of 30 days (Planning Commission 2007); thus, a family four would be officially counted as being poor if they had a household income less than Rs. 28,783.68 ($= 599.66 * 4 * 12$). Our sample thus has some households who would be classified as urban poor, but on average, it consists of households whose annual income is about one and half times more than the official poverty line.

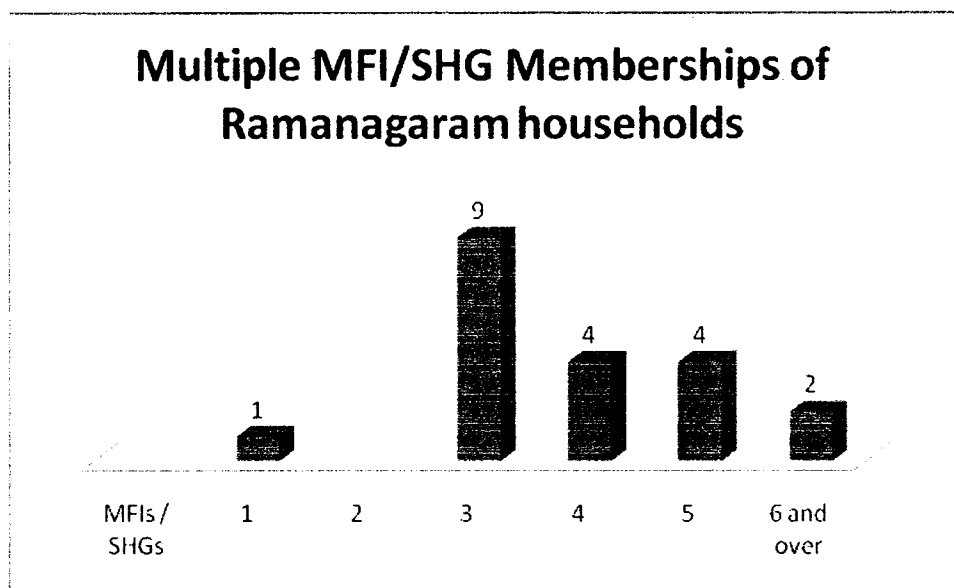
Preliminary Results from the *Ramanagaram* Financial Diaries:

(a) Multiple Memberships

One of the strong results that came out from the analysis of the diaries was that our sample had many households borrowing systematically from multiple MFIs and SHGs. In the sample all, except one of the households were indebted to multiple MFIs / SHGs. 19 of these 20 households was indebted to more than 2 MFIs / SHGs and 10 of these were indebted to more than 4 MFIs / SHGs. 14 of these households also had loan repayments to finance companies, chit-funds and money-lenders. At the extreme end, there were two households that were indebted to a total of 7 MFIs / SHGs, apart from taking loans from a private finance company. While the transactions showed both savings and loan-repayments in their dealings with the SHGs, with the MFIs – it was primarily loan repayments on a weekly basis. On our last count, the households within a square kilometer of the Hajinagar slum area were being catered to by 4 different MFIs and 3 SHGs, quite apart from the informal money-lenders and finance

companies. In our interactions with the women, the most common reason cited for multiple memberships of MFIs was the size of the loan. Most women felt that they would be happier getting the entire amount from just one entity. Multiple memberships also throw up important questions about transactions costs of borrowing money that the borrower faces. Quite apart from the time involved in meeting on a weekly basis, borrowers have keep track and attend multiple meetings in a week, save up and make available money a couple of times a week for each of the different lending institutions. A lot of the women in our sample worked in the silk units of Ramanagaram, and attending an MFI meeting meant half a day off from work. The transactions costs of such methodology to the borrowers are something on which more data needs to be collected and assessed.

Figure 1



(b) Burden of Loan Repayments

One expected result that emerges out of the Ramanagaram data is that the debt-service burden of these urban poor households. In fact, loan repayments are vying with expenditure on food in the weekly budgets for most households. In fact, as Figure 2 shows, on an average, households are spending almost the same amount on repaying their loans as on food. Breaking this down further, 10 out of the 20 households spent a higher proportion of their expenditure on loan repayments than food. 11 households spent greater than 30 percent of their total expenditure on loan repayments. This raises important questions of whether this constitutes “over-lending” by the MFIs or “over-borrowing” by the households. Are MFIs “dumping money on borrowers”ⁱⁱ or is there an insatiable hunger for credit which they are fulfilling? It will be difficult answering these questions given the scope of our pilot study, but we could narrow down these questions by analyzing the uses for which these loans have been put. Given these commitments on loan repayments, and after factoring in food, most

households are able to only spend a very fraction of their income on other important expenditure groups such as clothes, health, building up assets and education (almost all households have children at home who are studying).

Sample Distribution of Household Budget Composition

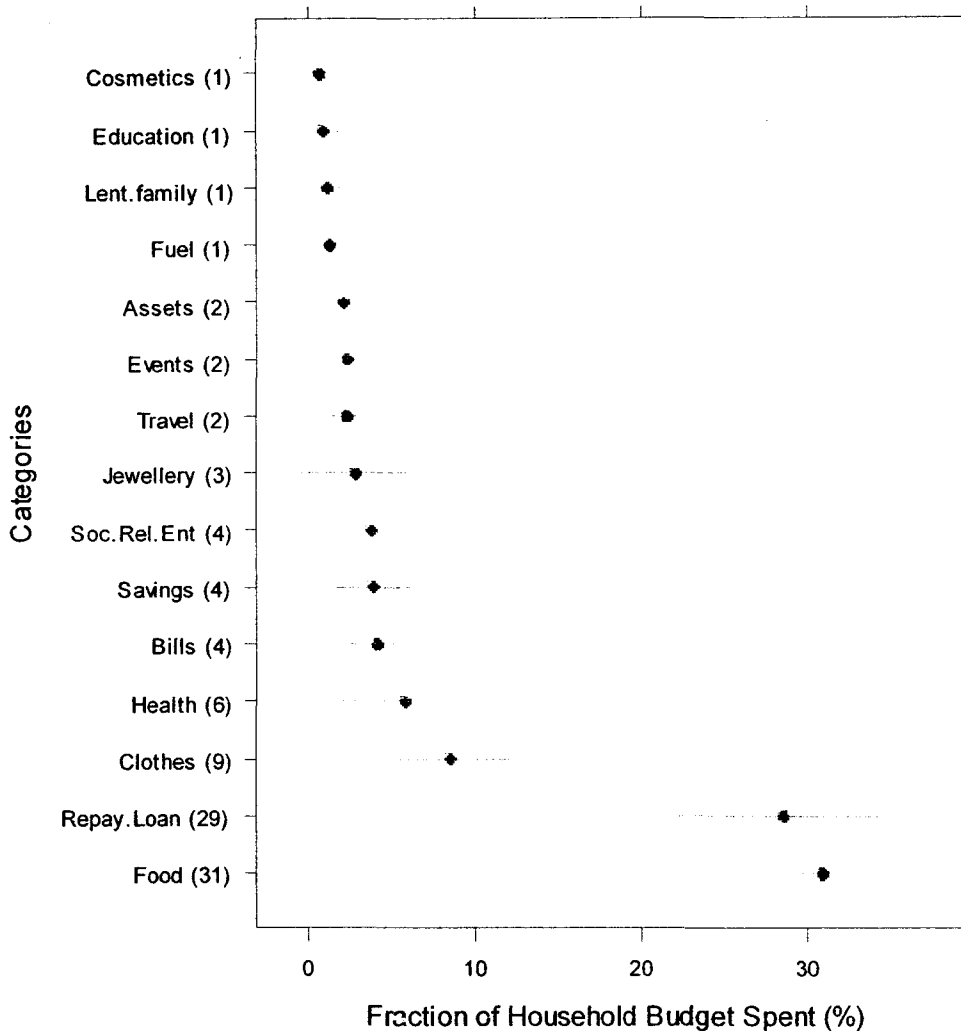


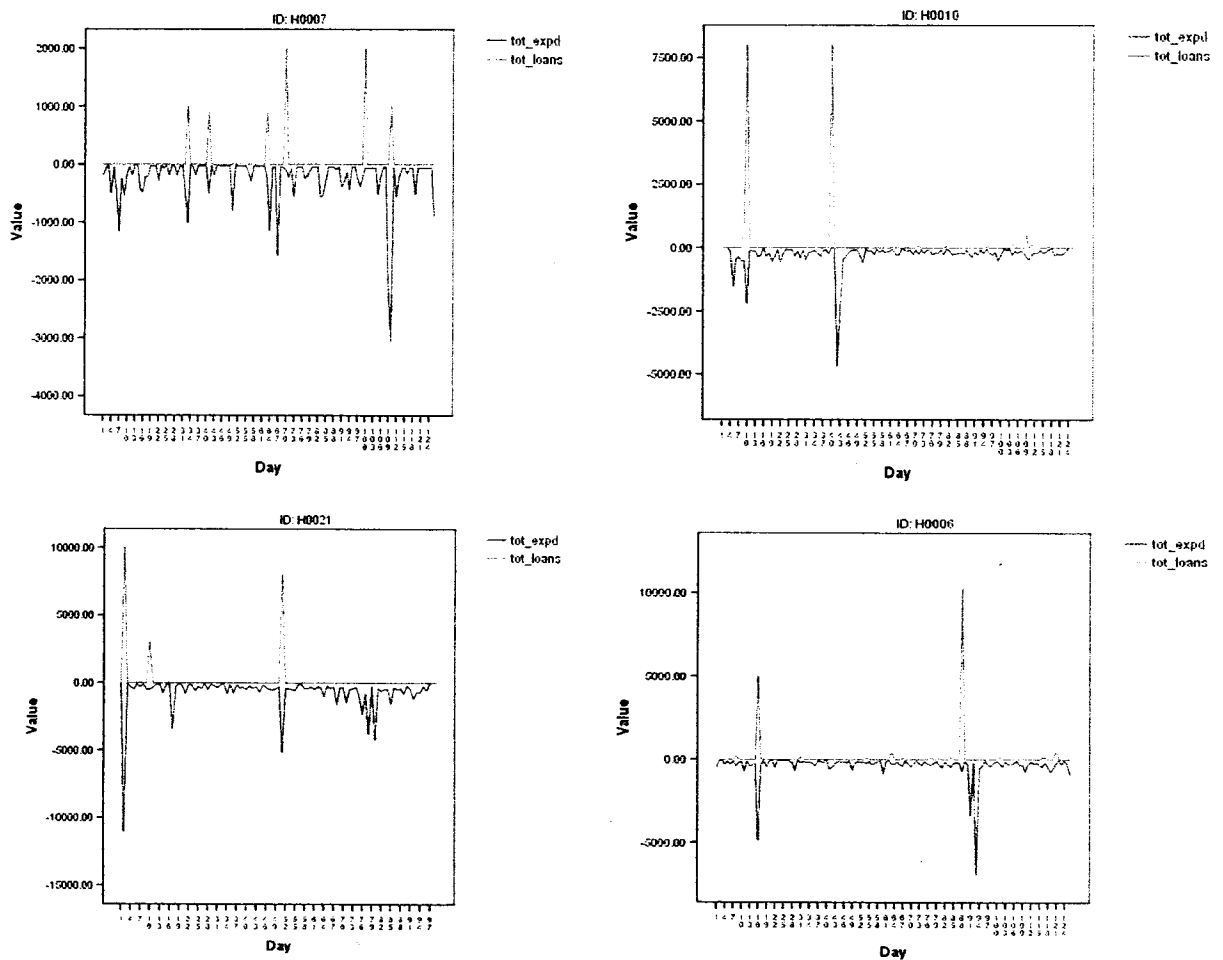
Figure 2

(c) The use of microfinance loans

One of the major sources of excitement in policy making circles about micro-credit has been

its potential use for scaling-up economic activity amongst people who have poor access to credit and thus, there is a lot of discussion about the use of micro-credit for “productive” purposes as a poverty alleviation tool. Most MFIs require the borrowers to state the purpose for which loans are being taken with only productive uses mentioned on their application forms. This is in stark contrast to the actually observed use of these loans in our study and this brings us to our next finding – the divergence between stated uses of loans and actual uses of loans. Money being fungible, closely tracking household transactions around the period a loan is taken is the only way to capture the uses for a loan and this is something our financial diary allows us to do. For each borrowing episode we identified a seven day band, three days prior and three days post a borrowing episode to identify large and in-flows and outflows. Figure 3 plots the time line of loan inflows and expenditures for a set of randomly selected four households from our sample.

Figure 3



Given above is the weekly summary of the loan and expenditure transactions of 4
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households. Typically every blip in the transactions (indicating a borrowing) is either followed or follows an equally sharp dip in the transactions (indicating a higher than average expenditure). We will classify these expenditures around such borrowing episodes – this would give some idea of how typically are the loans being spent by the households. i.e. the use or the purpose to which the loan has been put. If these loans were used for consumption, then this would say something about the loan repayment burden of these households.

As we see in the table below, there have been 71 such spikes in borrowings in the total sample. We restrict our analysis to borrowing amounts greater than Rs. 500 of which there are 41 episodes in our data-set.

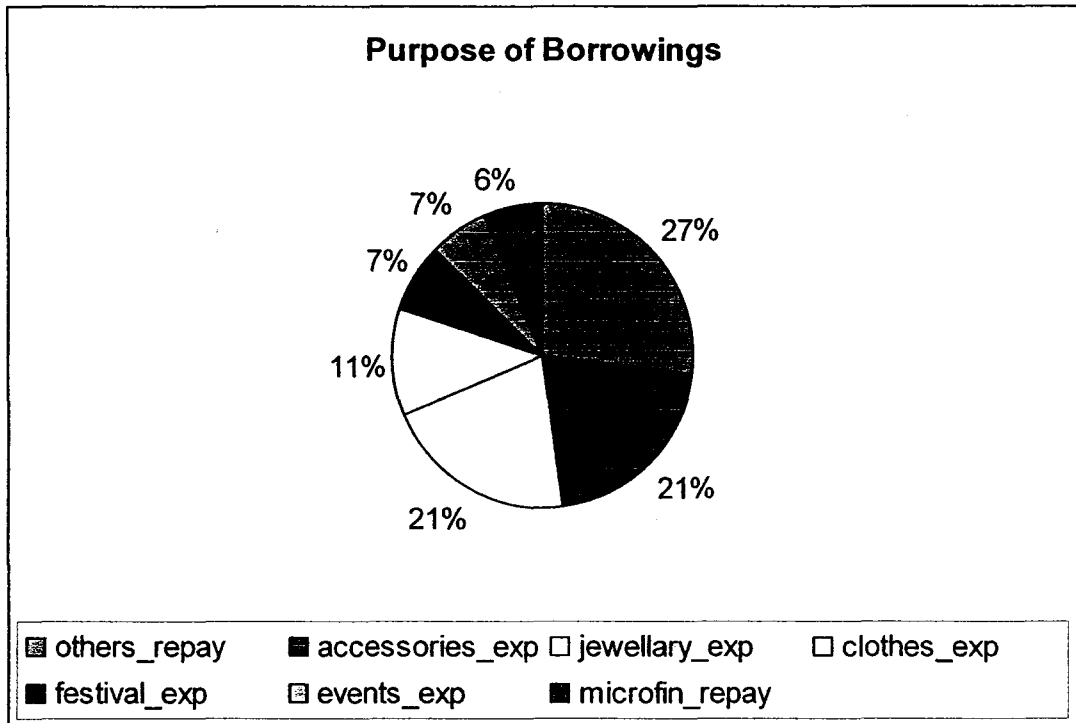
Table 1: Episodes of Borrowing for the Diary period

Amounts (Rs.)	Episodes
50-500	30
501-1000	13
1001-3000	12
3001-5000	5
8000	6
10000	3
10001-12000	2
Total	71

We then construct the 7 day band (3 days prior to the day of borrowing and 3 days post the day of borrowing) centering each of these 41 episodes. The expenditures done in these bands were most likely to be (a) either financed by the borrowings or (b) done in expectation of the borrowings. This would thus tell us the exact purpose for which these borrowings were made. We find that there have been 55 episodes of expenditures greater than Rs. 500 for these time-bands for the households. These expenditures will give clues on the uses to which these borrowings have been put. We find that out these, 5 expenditures coincided very closely with the borrowings on the very day of the borrowing. We analyzed the purposes for which these expenses were incurred. All of them were spent on clothes, accessories and jewellery for the festival of Ramadan (which occurred during the period of study).

A summary analysis of these expenditures for the entire sample shows the purpose for which the borrowings were made. Greatest proportion of the total borrowings during this period went into repaying other loans (informal loans – moneylender, chit-funds, finance companies) but a lot was being used on festival related expenditure - accessories, jewellery, clothes, festivals and events (which in this case meant social events like birthdays). Borrowings have also been used for repayment of microfinance installments.

Figure 4



This result is important because it has been culled from the transactions data of the households. Recall based surveys asking respondents for the “purpose” of the borrowings may not throw up such uses, since most of these uses are consumption related. If we further analyze the number of occasions when loans were used for these purposes, microfinance repayments come next to repayment of other loans. Thus, the major purpose of these borrowings has been repaying of old / existing loans.

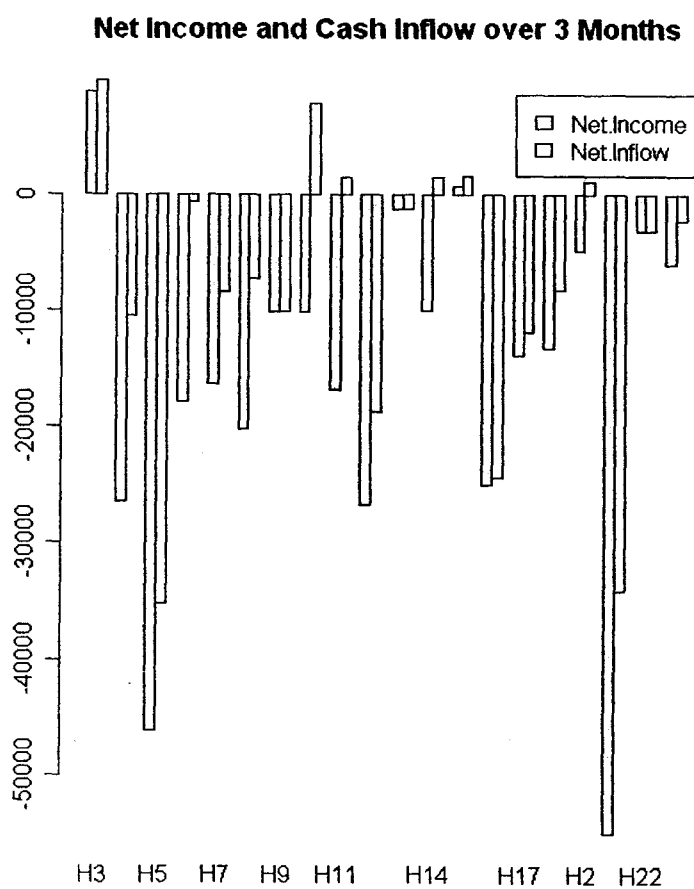
Table 2: Uses of Microfinance borrowings

Reasons for Borrowing	Frequency	Average Expenditure (Rs.)
Repaying other loans	15	1790
Microfinance repayments	13	485
Expenditure on clothes	9	1277
Expenditure on events	8	813
Expenditure on accessories	6	3508
Expenditure on jewellery	6	3445
Festival expenditure	4	1775

(d) Level of indebtedness

The burden of loan repayments becomes crucial because in our 3 month sample period, all households except two had a surplus when we look at the excess of income over expenditure. When we consider inflows net of borrowings, a majority of the households still had a deficit at the end of the 3 month survey period. Figure 5 plots the cumulative net income and the net cash inflow for each of the households in the sample. Net income is the excess of income over total expenditures that have been made while Net inflow is the excess of income and borrowings over total expenditures. As has been hinted in the earlier diagrams and calculations these households are spending well in excess of their incomes. Some households are also spending in excess of their net inflows. Only two of these households are able to have a net positive income, while about six have positive net inflow over these three months. For the remaining households the size of their outflows (real household expenditures as well as servicing existing debts) is in excess of their income and borrowings. Part of the explanation could be the heavy festival related expenditure that occurred during the survey period, but this does bring in the question of the sustainability of the debt of these households. Data obtained for a longer period of time would help us say more conclusively on whether this debt is sustainable, and how much of this is driven by borrowings from the MFIs themselves.

Figure 5



Conclusion:

The micro-finance sector is a booming sector in terms of the large growth rates it has been witnessing in terms of both its operation and the size of money it handles. Thus, Ghate (2006) reports that the SHG sector grew from 263,825 SHGs disbursing Rs 481 Crores in 2001 to 2,238,565 SHGs disbursing Rs. 11,398 Crores; similarly, the MFI sector saw a growth in outreach by 63% over three years from 2002-03 to 2004-05. Such booming growth rates in a sector that provides credit to households close to and even below the official poverty line ensure that this sector brings with it concerns of two natures raises concern about the benefits and costs that existing business practices impose on borrowers.

In this context, our study reports a few worrying trends that are clearly present in the households we studied and may be of concern to the sector at large if they are more prevalent. First of all, households seek to join multiple MFI and SHG groups quite apart from borrowing from moneylenders. They appear to be under provided in terms of the size of loans that these households receive from a single source. This hunger for extra credit requires households to not only approach multiple borrowing institutions, but is very expensive in terms of time and effort since they need to comply with rules of each of these institutions. For the urban poor, the transactions cost of attending group meetings also is higher. We found that in our sample women who were working had to take a half a day's leave from work to attend group meetings. Policy and institutional reforms that make the size of loans flexible and contingent on the risk profile of clients would reduce the need physical and mental stress of managing money with multiple financial entities.

Secondly, a rather disturbing finding is the size of each household's budget that goes towards servicing loan repayments. Even allowing for under reporting of expenses items the fact that almost 60% of a household's budget is spent on servicing existing loans and buying food items is worrying since it suggests households have little ability to spend under other budget categories such as health, and education. Reinforcing this is our third finding that households are observed to recycle their debts to a substantial extent as evidence by over 27% of borrowings being used to finance various kinds of borrowings (including MFI and SHG borrowings). We also observe that most of the major outflows that are preceded by or followed by a major borrowing (i.e. a borrowing greater than Rs. 500) are on consumption items (jewellery, household accessories, etc.). Additionally, if we look at aggregate incomes made in the three months we find evidence to suggest that for most households' total incomes exceeds their total expenditures (including repayments for borrowings) during this period. More data would be necessary to confirm this as often expenditure have delayed income inflows that we may not have captured as yet. However, there is evidence to suggest that the avenues to invest in various micro-enterprises or other economic activity for micro-finance borrowers are considerably more constrained than is usually imagined when researchers and

policy makers think of micro-credit as a way of generating income growth. The fact that most of these borrowings are taken as small sums from several entities also does not boost the use of these funds towards productive purposes.

The Ramanagaram Diaries tell us that for the urban poor, organizing lives around multiple lending organizations introduces serious limitations on their schedules, apart from the contingent stress of managing debts of small amounts from various lenders. While financial inclusion through micro-credit is well recognized as a socially desirable goal, substantial focus also needs to be placed on creating enabling and flexible institutional frameworks within which this is attained.

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Notes

i Over the three months these households recorded transaction in great detail; for example, if we look at expenditure on household items alone we observe purchases of matchboxes, buckets, lamps, light bulbs, mirrors, locks, cell phones, candles, plastic pots, mosquito repellent, photos, vessels, watch batteries, ironing costs, clothes, brush, pesticide, rubber band, stove repair, and camphor. Cumulatively, we observe more than 1, 38,000 transactions in our sample.

ii This was the accusation made against MFIs at the height of what is now called the AP crisis of Microfinance (see Ghate, 2006 for further details)