CASH-FLOW ESTIMATION FOR RESPONSIBLE LENDING

Study commissioned by SIDBI in collaboration with KfW, Germany

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ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

Cash-Flow Estimation For A Responsible Lending Model

One of the prime reasons for the outcome of over-indebtedness is inability of financial institutions to estimate the borrowing capacity of a household. This study was conducted within this context of imprecise assessment of income and cash-flows. The study aims at creating a robust cash-flow analysis tool for assessing the eligibility of client households for microfinance (MFI) loans.

The study focuses on the two states of Uttar Pradesh and Karnataka where cases of over-indebtedness have been reported. It was based in Allahabad (UP) and Mysore (KA), districts where the highest cases of over-indebtedness were reported within the above-mentioned states. The sample size for the study was 250 respondents (125 in each state), interviewed using a questionnaire-survey. The surveys were conducted with clients who have at least one active loan from an MFI. In addition to questionnaire-surveys, qualitative interviews were conducted with MFIs in order to get a better understanding of how their cash-flow estimation processes work.

The workings and the operations of NBFCs are regulated by RBI and other regulatory bodies like Sa-Dhan and MFIN (Microfinance Institutions Network). Guidelines were setup to avoid over indebtedness on the side of the clients and to ensure responsible lending from the side of the NBFCs. We tested our data against each guideline mentioned by the RBI and found some interesting results. These included 66% of the households having an annual household income of over the limit prescribed for borrowings from an MFI. 5.18% of the sample clients had total indebtedness of more than ₹1,00, 000. This shows that the RBI guideline which puts a cap of ₹1,00,000 on the total indebtedness of a client is not being followed in the case of these households. Additionally, 13.15% of the clients in our sample were repaying more than 2 MFI loans at the same time, even while the prescribed limit is of 2 MFI loans. Despite the fact that all the MFIs follow some or the other method of estimating cash-flow of potential client households, problems related to over-indebtedness and default still exist as we can see from the study results.

Given this limitation on calculating variables like income, consumption, savings & information related to sources of loans for the cash-flow estimation process of an MFI, we have identified some ways through which we can improve on capturing near accurate information on these variables.

Referring to the cash-flow estimation brochures of the MFIs and conducting interviews with them on their cash-flow processes gave the study an in-dept understanding of challenges faced with such data.

The cash flow toolkit developed by the study has been divided into 7 parts. These are as follows: -

a) General information: This covers the general information of the applicant.

b) Details of Family members - Household roster: This covers details like name, age, gender, education, occupation, annual income (Both primary & secondary) for each member in the household.

c) Household income: Information pertaining to household monthly income (primary & secondary sources) and income from various other sources will be captured in detail in this section.

d) Consumption of the household: Expenditure incurred by the household on the items mentioned on a weekly, monthly and annual basis forms the core of this section.

e) Liabilities & savings: This section captures information on different type of loans and the different types savings that a client can have.

f) Details on outstanding loans: All the necessary information pertaining to the outstanding loans that a household can have will be captured within this section.

g) Business information: Captures information on client's business, if any.

It has added questions to capture and cross-check the income from primary and secondary sources of not just the primary respondent but also the household. In addition to this, questions related to income from various sources in the past 12 months are asked. This is crucial to identify respondents' tendency to go wrong in estimating income on the spot. Adding cross-checks not only enables detecting these discrepancies while conducting assessments easily but also providing an opportunity to cross question the respondent on these.

A module on consumption has been added as a means to triangulate the stated income in the tool-kit. The consumption roaster will capture the regular expenses the clients' household incurs. This section has been divided into weekly, monthly and yearly segments with the aim to accurately capture the expenses that the household incurs on many items. The probability of receiving accurate information is higher when these questions are broken down into shorter purchase time relevant periods.

MFIs usually access credit bureau data to get information on outstanding loans of the clients. However, credit bureau data does not cover informal loans and loans from some other sources. It is also really hard to get outstanding loan information correctly from a prospective client. Therefore, in order to capture more accurate information, we have added a few data check points, as well as designed the loan roster in a way that it is easy for the loan officer to keep track of information on different loans.

Language clarity and ease for both the loan officer and client to understand have been other priorities of the tool-kit development process. Attention was paid to frame the questions in such a way that the client can clearly understand the data being asked for. The design of the loan roster, liabilities and savings and income boxes has been kept really simple in order for the loan officer to make the calculations alongside client answering these questions.

In addition to the development of a robust cash-flow estimation tool, concerted efforts needs to be put in by various other stakeholders in the sector. There are other means which can complement a robust cash-flow estimation process to assess debt capacity of potential clients accurately. While advocating for an environment for responsible lending the study proposes client protection on two fronts i.e. on the part of the MFI & the credit bureau.

Firstly, a proper client protection mechanism needs to be set up by each MFI in order to ensure that issues faced by the clients in relation to repayment, MFI products, behavior of the loan officer and customer service is adequately captured and addressed. This can be ensured through Interactive Voice Response (IVR) calls from the credit bureau.

Secondly, short monthly IVR calls from the credit bureau to all MFI clients', sharing information on the best practices to follow while borrowing a loan may also go a long way in solving the issue of over indebtedness of the client. The best practices that should be shared during such calls may pertain to make clients aware of best practices in borrowing and/or giving information on the guidelines in place in the sector for MFIs.

In order to tackle the issue of over indebtedness, the credit bureau can also come up with a memo which is updated every quarter with the latest information on clients' financial situation, outstanding loans etc., aggregated at a block or district level. This would give MFIs and other lenders a proper understanding of the loan situation in specific regions.

1 INTRODUCTION

The estimated size of the organized microfinance industry in India is roughly INR 42,106 crore as of the end of June 2015, with about 3.1 crore last mile borrowers being directly impacted by RBI registered NBFC-MFIs.

Back in 2010, Andhra Pradesh was highly penetrated by both Microfinance Institutions (MFIs) and Self Help Groups (SHGs) giving rise to multiple borrowing and was hit by a crisis. Some of the causes identified for multiple borrowings included client poaching and loan pushing on the MFIs side, and loan recycling on the clients' side.

Although, data now suggests that MFIs have picked up again after the 2010 crisis, recent reports[1,2] are suggesting that the sector maybe heading towards a fresh crisis. New incidents of over-indebtedness have surfaced in regions of Odisha, Karnataka and Uttar Pradesh which have been associated with pipeline loans (taking loans using their KYC for others and ending up with multiple loans), spending loan amounts on consumption rather than income generation etc. Some reports have argued that these incidents are a cause of worry for they point to deeper problems within the system.

According to Inclusive Finance India Report 2015, while MFIs grew to 390 billion in FY2015 from INR 240 billion in FY 2014, this growth wasn't accompanied with concurrent growth in the number of MFI branches, employees and clients. This could mean that the infrastructure, employees and clients of MFIs are being stretched beyond capacity. This fast growth of microfinance services without sufficient infrastructural support, it is argued, runs the risk of multiple borrowing by clients and over-indebtedness, without proper checks and governance of these borrowings. On the other hand, some reports such as a recent one by IFMR Capital[3] argues that these suicides are sporadic events and detailed analysis of data from credit bureaus does not indicate towards overheating of the system.

The lack of reflection of such episodes in the credit bureau data could be because of the existing gaps in reporting to credit bureaus. Some spurious localized lenders are aping MFIs without being supervised by RBI, SHG lending is not reported and some NGO-MFIs with large portfolios may not be subscribing to credit bureaus. A recently completed study at IFMR-LEAD on over-indebtedness of MFI clients in Karnataka, Uttar Pradesh (UP), and Madhya Pradesh (MP) suggests that one of the prime reasons for the outcome of over-indebtedness is inability of financial institutions to estimate the borrowing capacity of a household. The data showed that while having multiple number of loans increased the likelihood of clients being over-indebted, 41 per cent of our respondents who had loans in accordance to the RBI guidelines (2 loans of less than 1.60 lakhs) we over-indebted. Further follow-ups with MFIs point towards loan officers giving less weightage to debt estimation of the household, when the potential client has less than two loans or falls within the prescribed loan limit. Application

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[1]   http://www.livemint.com/Opinion/Gn7z2lGvfvwgoyjxByRHpO/Murmurs-of-a-fresh-crisis-in-the-microfinance-sector.html

[2]   Over indebtedness of MFI Clients in Saturated Study Areas, a report(2016), IFMR-LEAD

[3]   http://www.ifmr.co.in/blog/2016/01/22/microfinance-through-a-data-lens

of a standard limit as such does not take into account the varying levels of household income within the prescribed limit, and therefore reducing the ability of respondents to service loan repayments based on their income. Within this context of imprecise assessment of income and cash flows, we carried out a study that would aim at creating a robust cash-flow analysis for client households.

1.1 Literature Review for Cash-Flow Estimation

India has been a late starter compared to its neighbor Bangladesh in terms of microcredit. However, since its inception in the 90s the microfinance sector in India has come a long way. Given the history of credit being used as an instrument for social policy; we can see the transformation that has happened clearly over the past 50 years. A large portion of lending to poor people in India in the 1970s and 1980s came from the state through the Integrated Rural Development Program (IRDP), whose subsidized credit for farming improvements and livelihood diversification projects was not an operational success, but left a legacy of rural lending as a major tool in the development portfolio (Taylor, 2011). This was followed by the setting up of SHGs by the state in the late 80s. Therefore, microfinance began in India with state-sponsored SHG lending models increasingly fulfilling formal lending to the poor (Mader, 2013). Post-liberalization the rapid rise of microfinance — to be precise, loans disbursed by specialized MFIs — in India began, continuing the tradition of credit as an instrument for social policy (Mader, 2013)

As mentioned in the previous section, in the mid -2000s there was an enormous growth in microfinance sector especially in states like Andhra Pradesh. Loans were easily available and in many cases people were holding multiple loans borrowed from the same MFI with no means to pay it back. This unscrupulous lending by the MFIs led to a minor crisis in the Krishna district of Andhra Pradesh in 2006 followed by a major crisis in the entire state in 2010. The immense growth of MFIs along all dimensions had overstretched their internal systems, and they had cut corners everywhere, particularly in the client acquisition process (Arunachalam, 2011). This led to large scale delinquency in the repayment of loans by clients. The fact that the growth witnessed in AP was impossible on a "know your customer" basis is illuminated by SKS Microfinance — the sector leader — adding 4.17 million clients from April 2008 to March 2010, pushing its loans to 488 loans per loan officer by 2009 (as reported to the database Mixmarket). Also in the same period, the average borrower's debt balance (toward each MFI) more than doubled; a debt accumulation compounded by multiple borrowing (Mader, 2013). Ghate (2006), author of the Indian microfinance State of the Sector reports, argued that the "underlying" longer-term causes for the crisis was rooted in MFIs' "quest for numbers" (viz. growth), their in-transparent interest charges and questionable collection practices. In addition Mishra and Mohapatra (2010) also argued that some problems might arise if the proper systems are not in place to support the intensification of microfinance. They went on to add that if lending institutions are not well-versed about the creditworthiness of potential clients, it can lead to negative effects on the performance of MFI loan portfolios and will result in over-indebtedness of clients.

India's experience shows that, until the recent past, MFIs did not have a proper cash-flow assessment in place or their assessment of clients repaying capacity was based more on informal sources rather than a more formal one. There have been a few studies that have been done in this context. Aggarwal et al, (2012) suggest that, among micro finance clients who are willing to borrow at either weekly or monthly repayment schedules, a more flexible schedule can significantly lower transaction costs without increasing client default. Another study done by Mishra and Mohapatra (2010) suggests

that delinquency management requires a comprehensive review of the lending methods, operational procedures, and institutional image of the MFI. Delinquency is often a result of poorly designed loan products and delivery mechanisms. For this reason the clients must be screened carefully before loan disbursement. They go on to add that the MFIs should follow a credit scoring model which would help them in making better decisions. In addition, N, Abhay, founder of a microfinance blog named "Indian microfinance" adds MFIs can neither afford to be too conservative in their lending (as it will restrict their growth) nor can they be over enthusiastic, which will result in losses. Hence, an MFI needs to have an effective risk management system to have reasonable growth without letting the risk cross the thresholds of acceptable limits. While measures along these fronts are being taken in the MFI sector post the crisis in 2010, these measures are mostly being taken by individual MFIs rather than being unanimously adopted by MFIs across the sector. Measures taken to accurately calculate credit capacity of clients can however go a long way in having sustainable borrowing/lending practices. "In Latin America, India and Southeast Asia, MFIs are competing on both loan sizes and client numbers, and therefore are reluctant to make distinctions based on clients' ability to repay. Default risks are higher because of the inability of MFIs to forecast client cash flows during and after each cycle. This is typically due to the inaccuracy of classification information, starting all the way from when the loan officer first acquired clients and incorrectly classified them based on household cash flows. The author further states that one of the measures through which an MFI can limit this default risk is by accurately assessing the credit capacity of clients by identifying which clients have stronger or weaker capacity to repay, categorize them accurately, then provide them with loan products that balance their varying credit limits with a need to enforce group liability".[4] The pin code analysis carried out by the MFIs using the data from the credit bureau is a right step in this regard however there are certain issues primarily related to data which needs to be addressed quickly especially when it pertains to regular data updation and availability of data from all types of financial institutions. This is especially important from the point of view of the MFIs as they will have full information on the financial condition of their prospective clients before giving them a loan.

(Laksmypriya, 2013), identifies institutional culture, staff orientation, client orientation, as few of the strategies for successful delinquency management. Evidence from other parts of the world also suggests that focusing on the cash flow estimation procedures followed by the MFIs, can go a long way in inculcating sustainable lending practices in the industry.

Sometimes management & the loan officers are also to blame for not following the correct estimation procedures. Evidence from Zambia shows us that the management put the loan officers under pressure to form groups. The loan officers lent out loans in order to reach targets within a short period of time. As a result, loan officers enrolled clients with little or no assessment and not just those who were in need for credit and economically active. Loan officers did not necessarily follow officially stated lending procedures. For instance, the Clients' businesses were not visited before disbursing loans (Dixon et al, 2006) Additionally, a study conducted by Access assist on loan disbursement in 2017 saw that less than 25% of the MFIs actually checked for the cash-flow before providing loans to clients.

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[4]   https://nextbillion.net/how-microfinance-institutions-can-manage-default-risk/

1.2 Rationale And Objectives

The process of calculating near accurate cash-flow estimates of potential clients is one of the basic tenets for a well-functioning loan model as it is a process that helps the MFIs get quality information on counterparties. Reducing the information asymmetry between lenders and borrowers will provide a fillip to growth of credit especially among disadvantaged sections of society and foster financial inclusion and inclusive growth. However, there are certain challenges on this front especially due to the absence of accurate information on variables such as income, expenses, saving and outstanding loans. This is further compounded by the absence of a strong credit bureau data. Hence, it is of utmost importance that this process be improved in order to aid the MFIs in their aim for improving their loan portfolio and also help them move towards a more responsible loan lending model.

The main objectives of the study under the existing context therefore is to:

1) Develop a robust cash flow analysis tool to help in estimating an optimal loan: income ratio for the client/client household – such that the client's loan can generate income for repayment and the client can repay without much struggle.

2) Determine other tools and procedures that can assist in determining the credit eligibility of the client – supporting tools that can determine an appropriate loan amount for the client, which meets the client's aspiration and also ensures repayment to maintain credit security from a provider level.

These objectives will not only help in providing a robust mechanism to estimate the cash flow of a client, but will also be helpful from the point of view of client protection as it will address the issue of over indebtedness. These together will aid the MFIs towards a more responsible lending model.

2 METHODOLOGY

2. Data Collection

The study focuses on the two states of Uttar Pradesh and Karnataka where cases of over-indebtedness have been reported. Within these, the study accordingly focuses on households in districts which have the largest proportion of "borrowers servicing more than three active MFI loans" – Allahabad, Uttar Pradesh; and Mysore, Karnataka (Credit Bureau Data, 2016).[5] The sample size for the study was 250 respondents (around 125 in each state) who were interviewed using a questionnaire-survey. The surveys were conducted with clients who have at least one active loan from an MFI. In addition to questionnaire-surveys, qualitative interviews were conducted with MFIs in order to get a better understanding of how their cash-flow estimation processes work. The interviews were conducted with the higher management of such MFIs where we asked those questions related to their cash flow estimation processes that they follow while giving out a joint liability & individual liability loan. Specific questions were discussed related to the type of loans they provide, eligibility criteria on giving out such loans, the uptake on these loan products, the background work that they do before entering a new area, procedures they follow before giving out a loan to the client and whether there were any changes in these processes etc. This helps us understand cash-flow analysis at both provider and the client level, which would enable us to develop a robust toolkit for analysis.

2.1 Data Collection Instruments

Consumer survey was one of the primary components of the study. The survey was conducted using a detailed questionnaire which had modules on demographics, consumption, financial & social background of the client, loan history of the client, outstanding loans, general information about business, financial status of business (expenditure, income, surplus), status of business over time, household employment history, household savings & assets, education levels of household members, coping strategies with emergency situation, repayment pattern on other loans, and other borrowing behavior.

Additionally, an interview script was developed to have standardized interviews with MFIs on their cash-flow estimation processes.

2.2 Inclusion Criteria, Sample And Location Of The Study

As mentioned above, for the consumer survey, the only inclusion criteria for the client was that of having at least one MFI loan.

The study was based in two districts: Allahabad (UP) and Mysore (KA). Each district comprises of blocks. We randomly selected two blocks within each of the two districts using randomization software and within each of these blocks we randomly selected 10 villages each. It was ensured that the villages selected had high MFI penetration before commencing with the fieldwork. The reason for selecting villages with high MFI presence is that the probability of getting clients who have borrowed from multiple MFIs is higher in such areas. This in turn helps us in identifying the issues as to why such

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[5]   Highmark provided us with district level data on borrowings from MFIs on request

behavior is prevalent and therefore is important from the point of view of developing a cash-flow tool. In addition, it was also important from the view of managing time given the short timeline, as it is easy to get households to survey in villages where MFI penetration is high.

Table.1 Study Sample Area Details
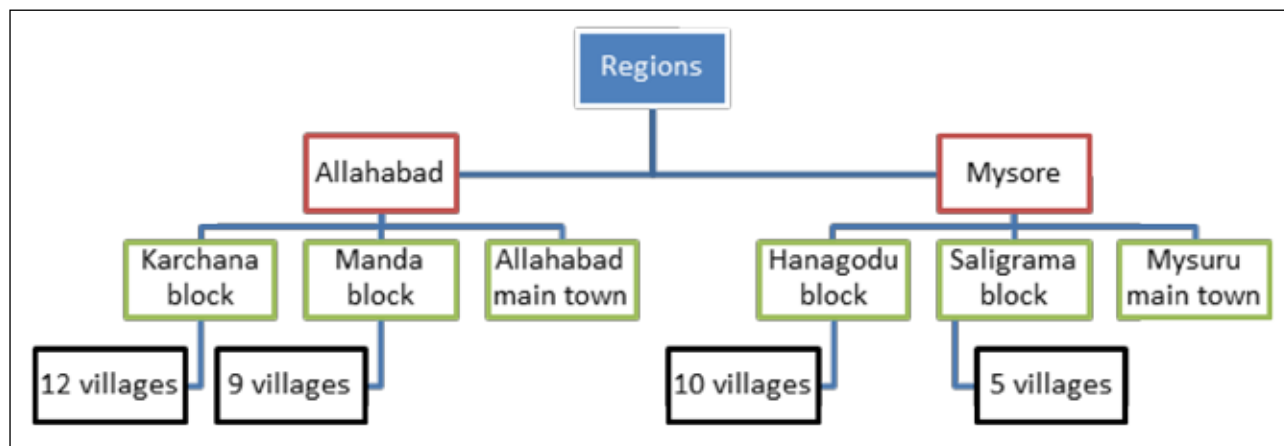
2.3 Limitations Of The Study

While the study has tried to be systematic and comprehensive in its approach, there are limitations to the study that need to be mentioned.

Self-reported data: Many aspects of the study instruments, especially the surveys contain data that cannot be independently verified. These data points have been taken at face-value of what people have said. The self-reported data therefore is prone to several potential sources of bias like that of selective memory, wherein respondents may not have remembered experiences or events that occurred at some point in the past, and recalling events from a different time from when they actually took place, or where the respondent attributes positive events and outcomes to one's own agency but attributing negative events and outcomes to external forces etc. In addition, respondent might also withhold information in order to protect his or her privacy. Information on savings, business income, annual income etc. is prone to such type of bias. Likewise, the data especially cash-flow of the respondent business and households are based on the information given to us only by the respondents. Being self-reported in nature, the data could be perception based or incomplete where the respondent may have chosen to leave out giving us certain information on some other reasons attributing to cash-flow fluctuations etc.. Such limitations are also faced by the MFIs during their own cash-flow estimation processes. However, we have taken these limitations into consideration while developing the cash-flow tool kit. Given that there is no structured way of calculating income, we have identified a few ways through which we can overcome these issues which we have discussed in detail in the sections below.

The data on Cash-flow was therefore collected through different mediums, like survey-questionnaires, MFI interviews and involves cross referencing with data acquired on the client side when possible.

Representative Sample: One key element to being able to generalize results is to have a representative sample. Given that we are working with a small sample size, our study is not representative of the pan-Indian context of MFI lending scenario and its impacts. Additionally, being exploratory in nature, the study could not control for all of the other inevitable, often unmeasurable, exposures or factors that may actually be pointing towards certain results. Thus, any "link" between cause and effect in this study is indicative at best of the potential impacts that the MFI loaning can have on the client household, and the sector overall.

3 | CASH FLOW DATA ANALYSIS

3.1 DEMOGRAPHY OF SAMPLE

Primary Respondent Information

Our sample is composed of 250 clients in total, evenly split across our two field sites. Majority of the respondents in our sample are female as MFIs lend primarily to women. The average annual income for the primary respondent was found to be INR 21208.81, with a significant difference between the two districts, as can be seen from the figure (1.1) below. The mean monthly household income of our sample size, stood at ₹20,634.89. The 25th percentile/first quartile income was ₹7166 whereas the 75th percentile income was ₹18,333.33. In terms of overall income distribution by district, Allahabad district had the lowest average household monthly income (₹833.33) and also the highest (₹3, 50,000)

Table 2 Monthly income of primary respondents

Area	Mean	Percentile	
		25th percentile	75th percentile
Overall	INR 20,634.89	INR 7,166.00	INR 18,333.33
Allahabad	INR 28,672.75	INR 8,000.00	INR 24,000.00
Mysore	INR 12,532.72	INR 6,150.00	INR 16,500.00

The mean age of the primary respondent was found to be 38.8 years. Within our sample 38.25% of the respondents belonged to the 40-50 age category followed by people in the 30-40 age group (33.86%) and 20-30 (16.33%).
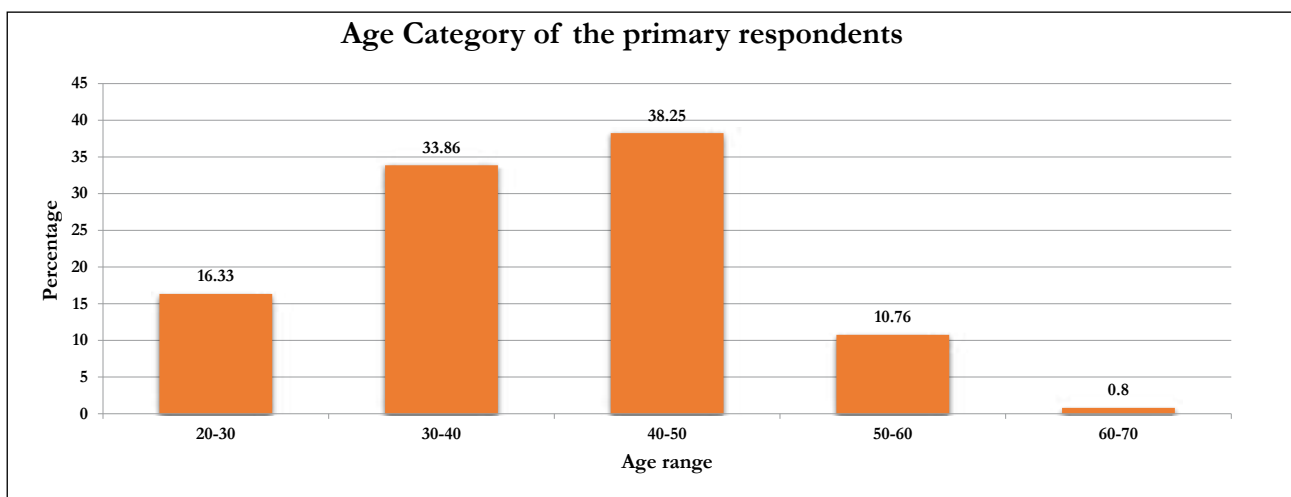
Figure 1 Age of the primary respondents
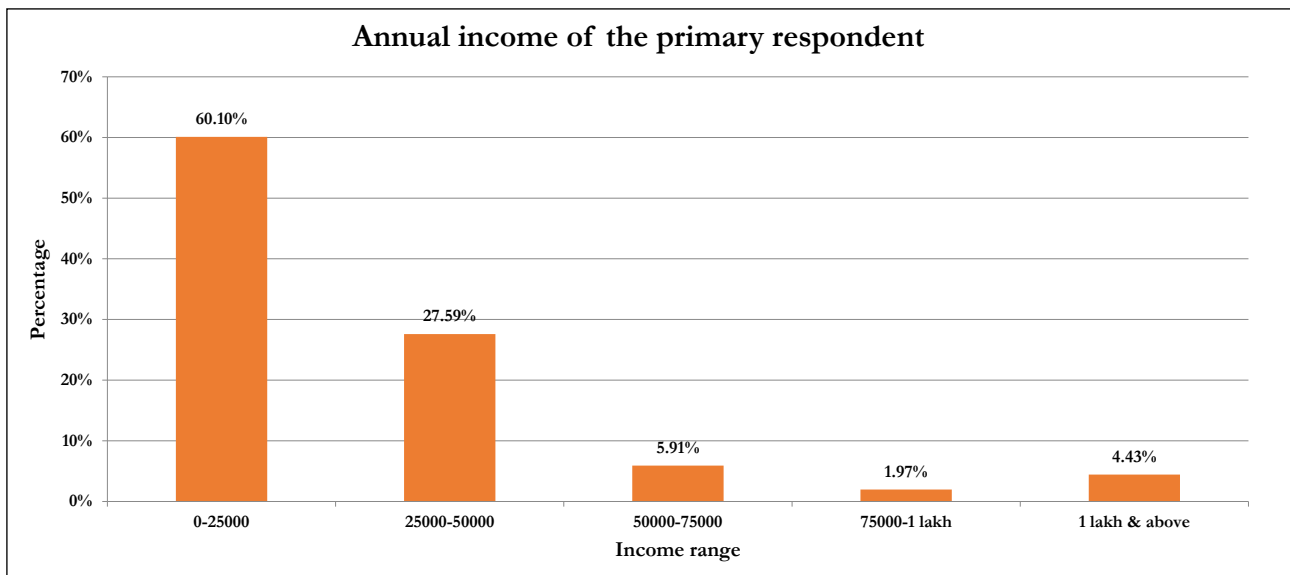
Figure 1.1 Annual incomes of the primary respondents
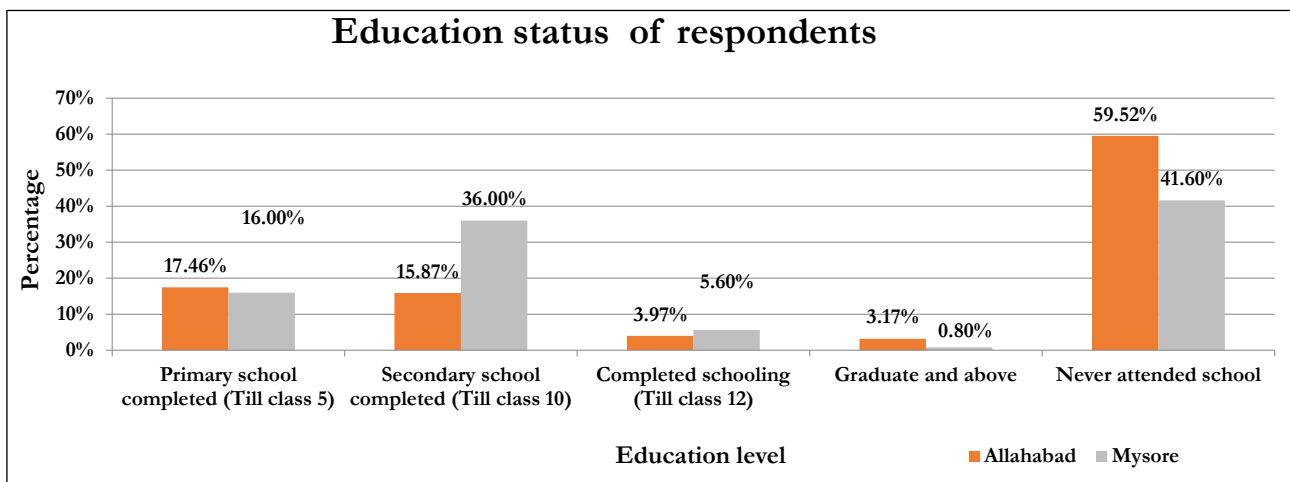
Figure 2 Education status of respondent

Majority (50.6%) of our respondents had never attended school. i.e. no form of schooling was given to them. This was followed by a quarter of our respondents who had completed secondary school and those who completed primary school. The percentage of people having a degree was found to be very low within our sample. One hypothesis behind this may be the fact that majority of them may have belonged to agrarian households who might have felt the need to discontinue their studies after school in order to help their relatives in their family activity. In terms of the primary occupations of the clients that we interviewed, the results were varied (see figure 2). However, the majority stated that they worked as a "Home Maker" (see figure 3). Within patriarchal cultural set up, this is not surprising, as majority of our respondents were women. The second largest occupation category in our sample was that of "Agricultural laborers" which comprised of 21.91% of our sample, followed by "Cultivators" who formed 13.94 % of our sample.

Primary occupation of the respondent

Occupation	Mysore	Allahabad
Home maker	36%	52.38%
Retired/senior citizen/with special...	0.80%	0.00%
Salaried employee	6.40%	4.76%
Organized trader or business man	2.40%	7.14%
Artisan/independent worker	6.40%	6.35%
Non-Agricultural labourer	3.20%	2.38%
Agricultural labourer	25.60%	18.25%
Cultivator	19.20%	8.73%
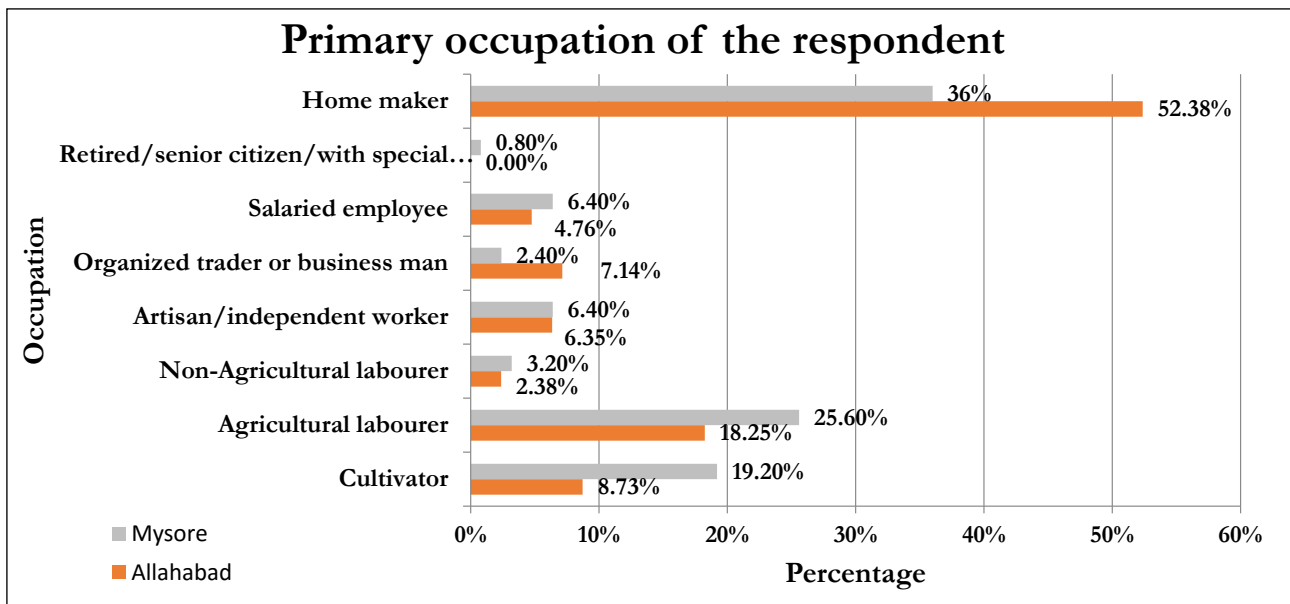
Figure 3 Primary occupation of the respondent

3.2 Improved Cash-Flow estimation as a means to a robust risk management system.

Like any other industry, microfinance is faced with financial and operational risks. Given the nature of the market in which MFIs operate, there are some risks, such as the risk of over-indebtedness which is more prevalent and inherent to microfinance.[6]

The degree of credit understanding of the target segment population of MFIs is low. While this might differ from one MFI to another, most MFIs understanding of credit eligibility of existing or potential clients is limited as pointed out in the literature review section. Additionally, the increasing number of MFI institutions in a given market area , lack of or limited regulations and strong credit bureau checks, barriers to knowing multiple sources of borrowing of a given client further limit accurate credit assessment of a client (Nandal, 2012). An excessive accumulation of debts combined with household's liquidity constraints could cause deterioration in household's economic well-being thus increasing their vulnerability towards social exclusion and poverty.

Cash-flow estimation in such a scenario becomes an important process on which a MFI can rest its judgment on the eligibility of the client to receive a loan. The primary goal of cash flow analysis is to identify, in a timely manner, cash flow problems as well as cash flow opportunities. It is essential therefore to have a robust cash-flow assessment instrument in order to ensure a reduction in the incidence of default in the sector which in turn would help the MFI in mitigating the problems related to over-indebtedness. The primary document used in cash flow analysis is the cash flow statement. However, capturing accurate information related to a clients' income, expenses and other sources of loan is more easily said than done. This is especially true for the clientele that MFIs cater to, many of whom lack documentation on the same. Such a process should be robust on the following aspects:

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[6]   Challenges in microfinance: An EY perspective (http://www.ey.com/Publication/vwLUAssets/EY_-_Challenges_in_microfinance/$FILE/ey-challenges-in-microfinance.pdf)

1) It should accurately capture income, expenditure and the outstanding loans of the household: Given the lack of reliable supporting/ supplementary information on these variables for low-income groups, more often than not MFIs have to depend on self-reported data from the clients on these. Additionally, the process must not just look at individual income of the client or potential client but also capture the household income of all members from primary and secondary sources. This is important, given the variations in income that such low-income households are subject to due to predominantly engaging in seasonal occupations.

2) It should not be time consuming: The process of estimation of cash flow should not take a lot of time as long questionnaires tend to make the respondent anxious and tired which affects their ability to give accurate information. Participants in the process are less likely to omit any details, eventually lowering the overall risk if the process is precise and short.

3) It should be clear and easy to follow: The questions in the assessment should be clear and easily comprehendible. Once the respondent comprehends the question, he or she must retrieve the relevant information from memory, make a judgment as to whether the retrieved information matches the requested information, and communicate a response.[7] This entire process becomes easier to start with if the respondent understands the questions better.

Keeping in mind these factors we seek to develop a toolkit that will address challenges intrinsic to such estimations and attempt to make the cash-flow estimation process for MFIs more stream-lined and accurate.

As part of the survey we captured client household information related to income, consumption, outstanding and repaid formal & informal loans trends, business well-being, savings of the household etc. The information collected from our detailed survey-interview with the clients helped us in not only understanding parameters that are essential for developing a screening tool with a robust cash flow, but also designing and testing the same.

Outstanding loans per household

In terms of outstanding loans, 50.20% of the households we surveyed had only 1 outstanding loan that they were currently repaying. This was followed by 30.68% of households having 2 loans outstanding. Additionally, there were about 19.13% of households which had more than 2 loans which means that these households had an increased loan burden compared to the remaining 80.87% (see figure 4 below for more details). Majority of these loans were sourced from MFIs (86.62%). This is not surprising given that the villages that were surveyed were rural and with around 60.10 percent of the respondents having an annual income less than ₹25000 (see figure 5).

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7   https://www.nap.edu/read/10206/chapter/8#159

Outstanding loans per household
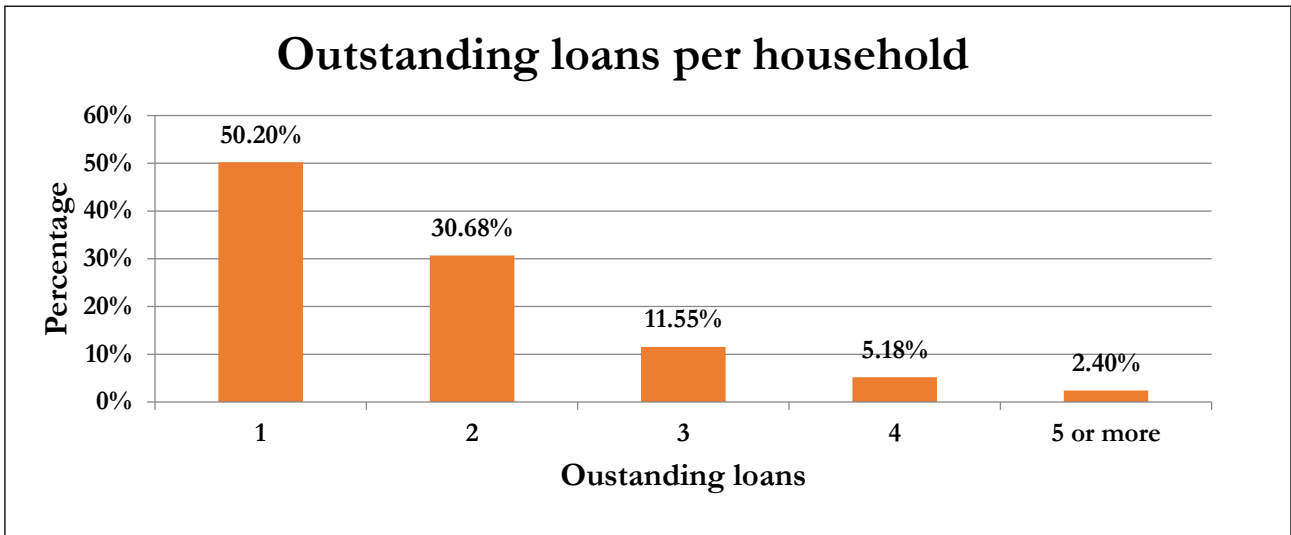
Figure 4: Outstanding loans (formal and informal) per household
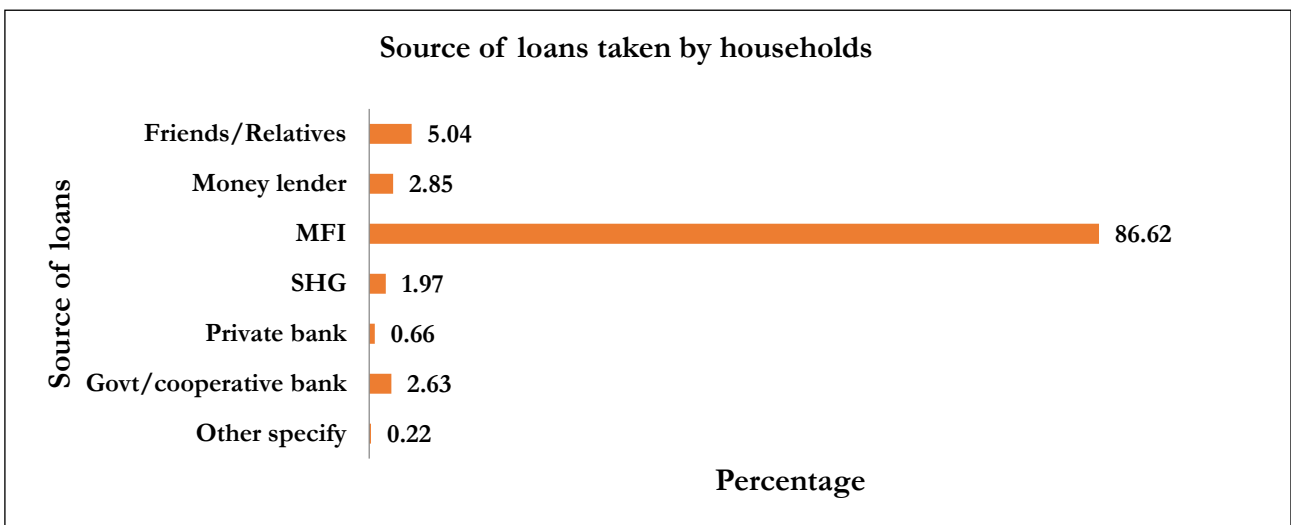
Figure 5: Source of loans taken by households

Out of the loans that the respondent households had with MFIs, most of the were in their first cycle (46.41%). This was followed by borrowers who were repaying their second loan (24.62%). We can clearly see that as the loan cycle increases, the percentage of clients in these loan cycles decreases (see figure 6 below for more details). The interest rate for majority of these loans were between 15-25 percent.
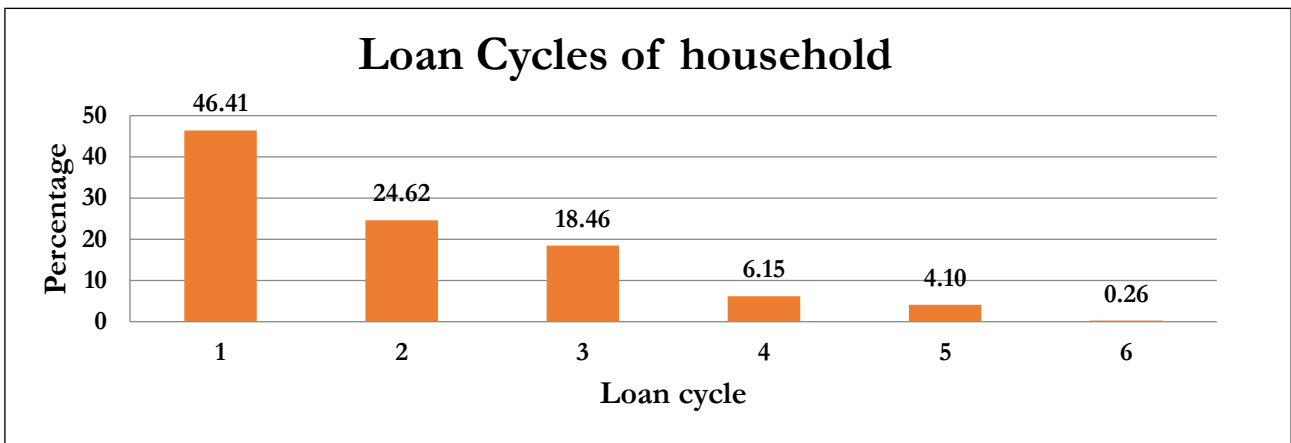
Figure 6: Loan cycle of household
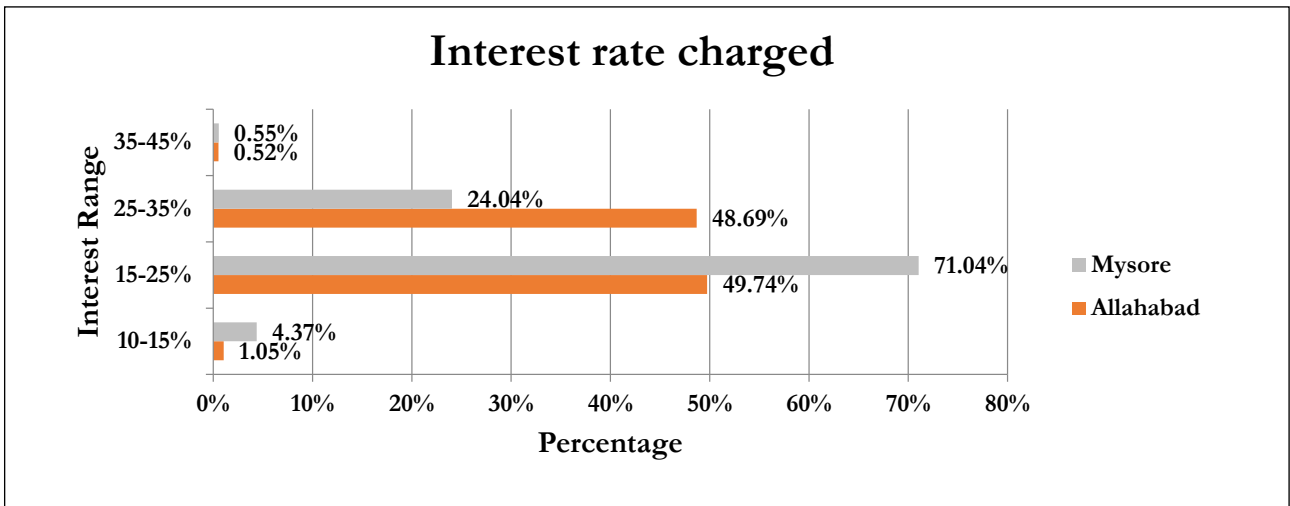
Figure 7: Interest rates on loans

Majority of respondents that we surveyed reported having only joint liability loans (88.1 percent) percent. This is not unusual given that group loans are the focus of most MFIs.
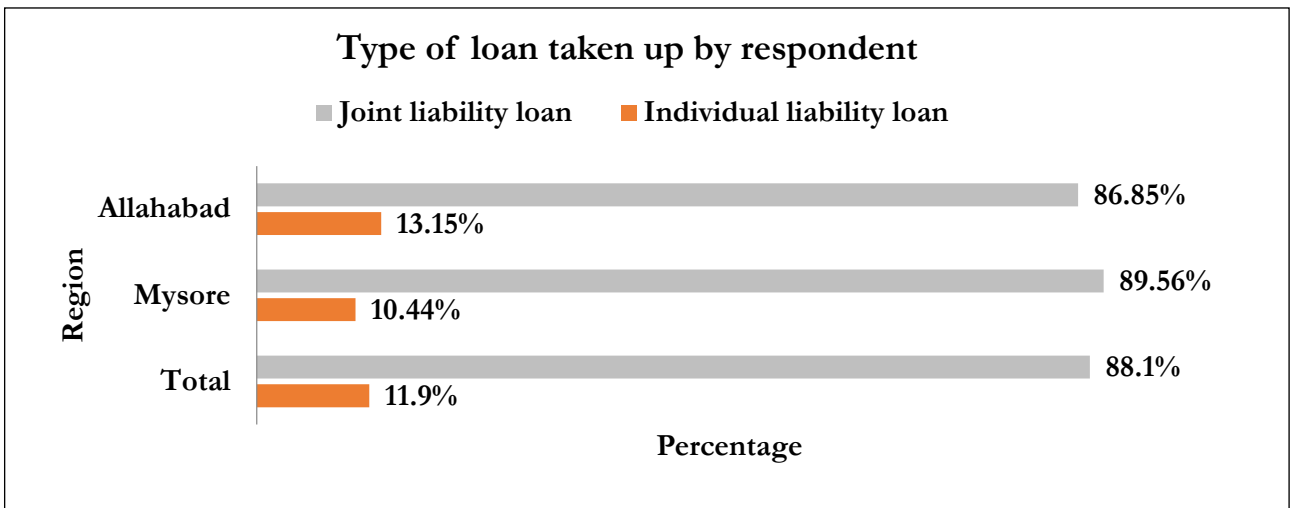
Figure 8: Loan type of respondent
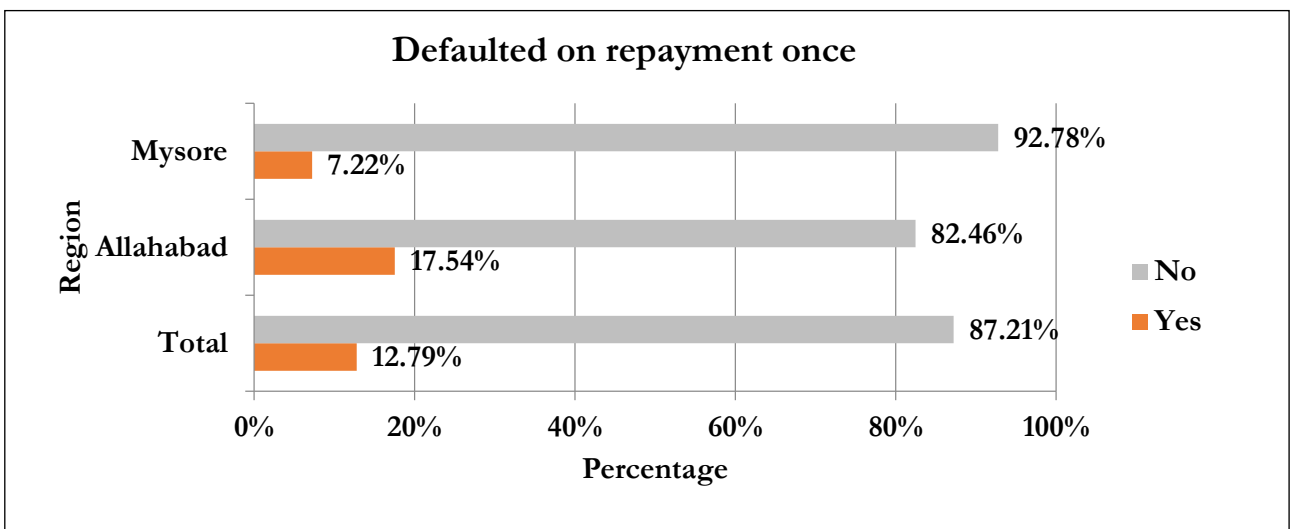
Figure 9: Default on loan repayment once

12.79% of clients reported to have defaulted on repayment of loan at least once. We can see that the default rates were reported to be higher in Allahabad (17.54 per cent) as compared to Mysore (7.22 per cent). The default rate that has been shown in the figure pertains to the client defaulting on a repayment at least once. Apart from collecting information on households defaulting on a repayment once, we also captured data through our surveys on inability of clients to repay loan installments three times in a row. This question was targeted to those who said that they had defaulted at least once. Such defaults, where the clients had missed payments three times in a row were prevalent among 14% of them. The split up across districts shows us that such a type of a default did not exist in our sample for Mysore as compared to 18.92 % in Allahabad who said that they defaulted on a loan thrice continuously.

The percentage of households who reported having defaulted on the repayment of a loan installment for previous loans they had taken stood at 8.88% (10 percent in Allahabad and 8 percent in Mysore). This shows that even though they have repaid these loans, they struggled to make some repayment instalments. This may be due to many factors ranging from increased loan burden due to repayment on multiple loans, increase in household expenses to varied income in some months.

Our surveys also captured information on the primary intended use of the loan amount, and the actual use of the loan once it was received by the respondent. Most respondents intended to use the loan for income generating purposes (more than 70 percent of the respondents). However, when it came to actual usage, there was a drop in this percentage (see figure 10 and 11 below). We saw a sharp increase in the actual use of loans for household consumption smoothening (3.29% to 10.59%) and health emergencies (4% to 8.94%).
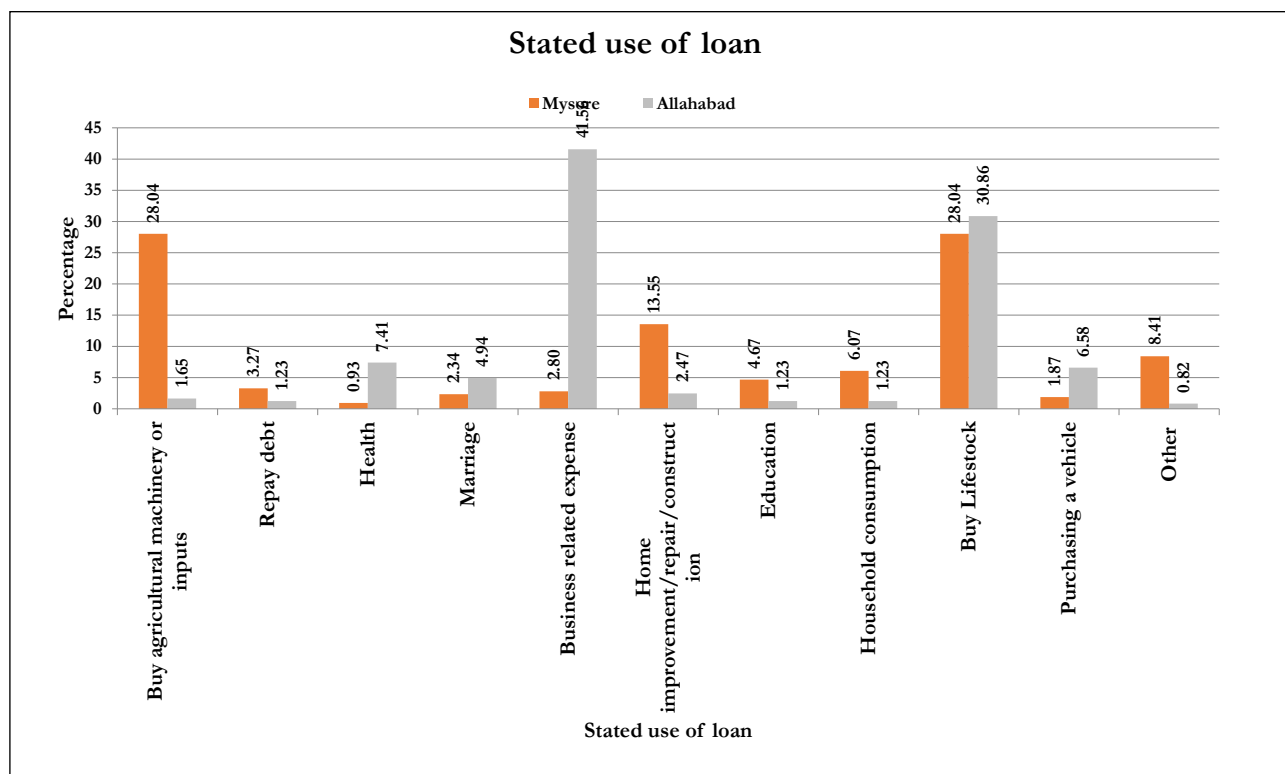
Figure 10: Stated purpose of taking a loan[8]

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[10] Others include occupations like tailoring and embroidery, funeral, other festival, unemployment, purchase land, purchase jewelry.

Actual use of loan

Actual use of loan	Mysore	Allahabad
Buy agricultural machinery or inputs	24.77	1.23
Repay debt	6.07	3.70
Health	3.27	13.99
Marriage	2.80	7.00
Business related expense	2.80	37.4
Home improvement/repair/construction	13.55	2.47
Education	7.48	1.65
Household consumption	17.76	3.70
Buy Lifestock	9.35	22.22
Purchasing a vehicle	1.87	4.94
Other	10.28	1.65
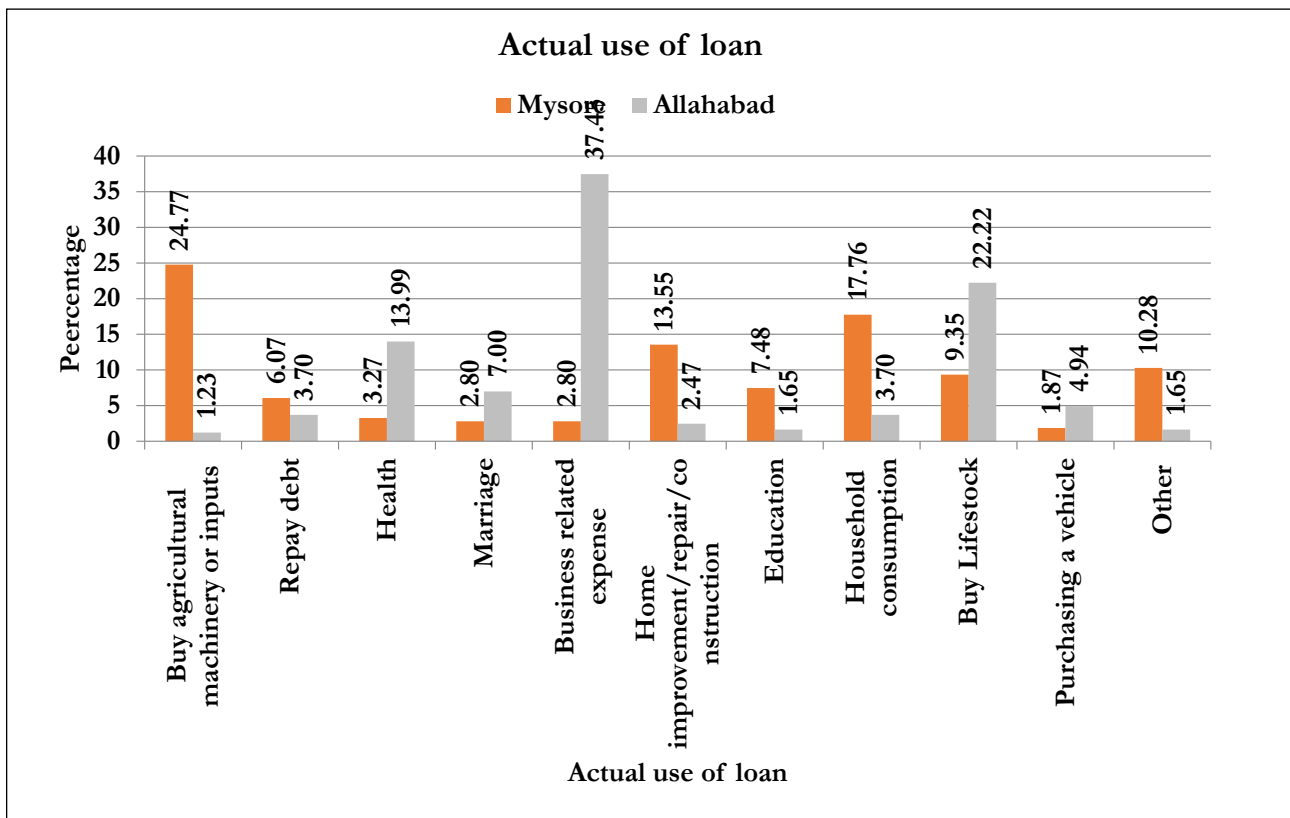
Figure 11: Actual primary purpose for which loan was used[9]

One of the reason for this allocation of loan amount towards other non-income generating purposes stemmed from shortage of income during some months to cover consumption costs. For instance, 31% of the households surveyed by us stated experiencing over the course of a year, one or more instances in which their income was less than their expenses. This may be a combination due of over-indebtedness, reduction in income or some form of emergency (health, marriage etc.).

Out of the respondents who stated having incomes that were at times lower than their expenses, 38.46% of them cut back on spending in order to adjust for this in months when income was lower. This was closely followed by 37.18% household who would prefer selling something they owned to cope up with the high expenses and work overtime to earn extra money (see tables 3 and 4 for more details). Using savings to cope with this income shortage was not an option for many, as a significant portion of our respondents had savings which were less than ₹5000.

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9   Others include occupations like tailoring and embroidery, funeral, other festival, unemployment, purchase land, purchase jewelry.

Table 3: Household coping mechanism when income is less than expenses

Primary method of coping	Freq.	Percent
Don't know	1	1.28
Draw money out of savings or transfer savings into current account	9	11.54
Cut back on spending, spend less	30	38.46
Sell something that I own	29	37.18
Borrow food or money from family or friends	4	5.13
Borrow from employer/salary advance	1	1.28
Pawn something that I own	3	3.85
Use an existing loan from an informal provider/moneylender	1	1.28

Table 4: Secondary method of coping

Secondary method of coping	Freq.	Percent
Cut back on spending, spend less	4	9.76
Sell something that I own	3	7.32
Work overtime to earn extra money	23	56.10
Borrow food or money from family or friends	4	9.76
Borrow from employer/salary advance	4	9.76
Pawn something that I own	2	4.88
Use an existing loan from an informal provider/moneylender	1	2.44

Savings

Majority of the households (98.17%) had savings only of ₹25000 at the most. The same trend can be seen across both the districts. However, as stated above even within this category a majority of the households had savings below ₹5000 for both the districts (i.e. 86.18% for Allahabad and 71.16% for Mysore). It can therefore also be said that majority of the clients do not have sufficient savings to even repay a loan using their savings in case they find themselves in a difficult position when making repayments.
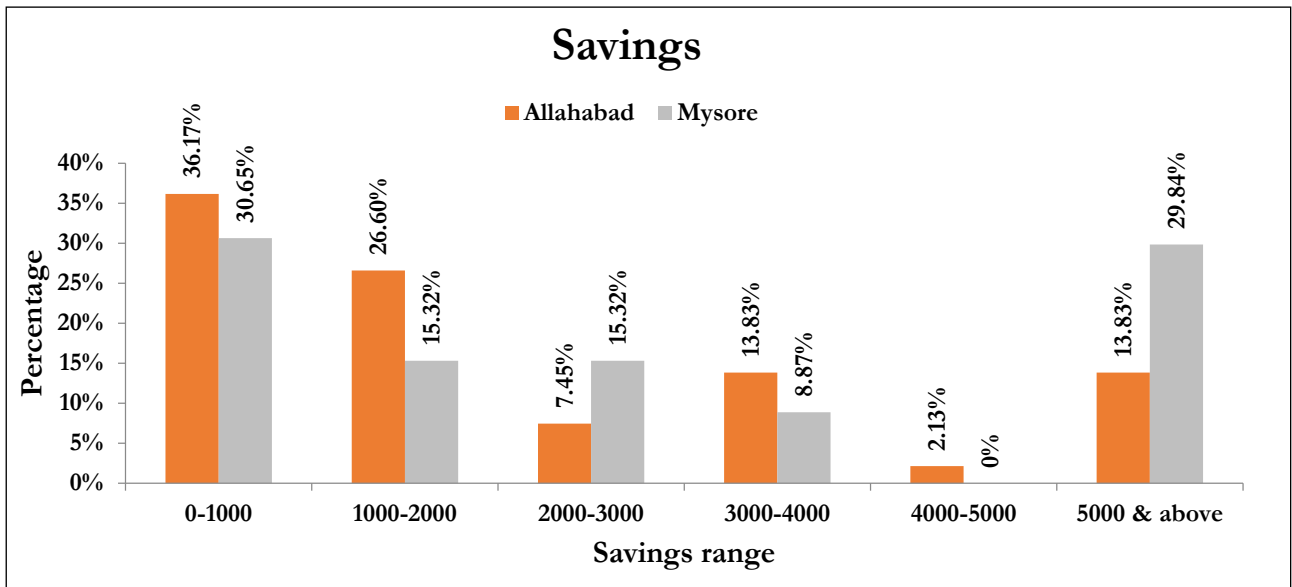
Figure 12: Savings of the respondent

To get more clarity on the credit needs of the households in our sample, we asked them about their credit needs. All respondent stated their credit needs to be more than a lakh. This could be a reason why a quarter of our respondents stated not informing loan officers of all their their existing loans. As we can see from the graph below 94 percent of the respondents gave limited information to loan officers due to fear of not being offered more loans.
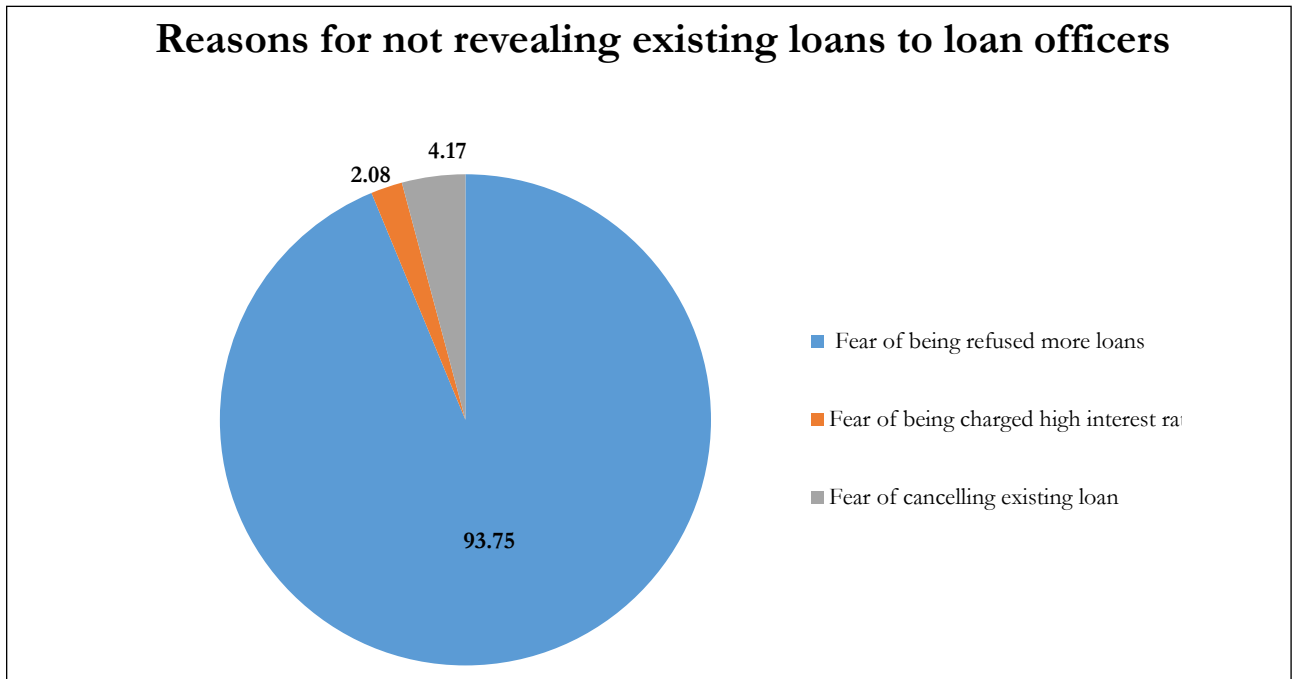
Figure 13: Reasons for not revealing existing loans to loan officers

4 TESTING DATA AGAINST CURRENT GUIDELINES

The workings and the operations of NBFCs are regulated by RBI and other regulatory bodies like Sa-Dhan ans MFIN (Microfinance Institutions Network). Guidelines were setup to avoid over indebtedness on the side of the clients and to ensure responsible lending from the side of the NBFCs. The evolution of the regulatory framework for NBFCs in India has gone through a cyclical phase– from simplified regulations to stringent and extensive regulations and finally towards rationalization as part of the recently revised NBFC regulatory framework. In line with the recommendations of the Nachiket Mor committee on 'Comprehensive Financial Services for Small Businesses and Low Income Households' and to give a fillip to the microfinance industry, the RBI significantly enhanced the borrowing limits for an individual, income limits borrowers, and disbursement amount for NBFC-MFIs.

We have summarized these guidelines below:[10]

1. Borrower's household annual income does not exceed ₹1, 00,000 or ₹1,20,000 for rural and urban areas respectively.
2. Maximum loan size of ₹60,000 (first cycle), subsequent cycles 1 lakh INR for rural households.
3. Maximum borrower total indebtedness of 1 lakh. Cap of 2 MFI loans.
4. Minimum tenure of 24 months when loan exceeds ₹15,000.
5. No prepayment penalties.
6. No collateral.
7. Repayable by weekly, fortnightly or monthly installments at the choice of the borrower.

We tested our data against each guideline mentioned by the RBI and we found some interesting results:

Clients from rural households whose annual income exceeds 1 lakh:

Around 66% of the households in our sample have an annual household income which exceeds ₹ one lakh. Majority of them had their household income deviating between 0-1 lakh (61.21%)
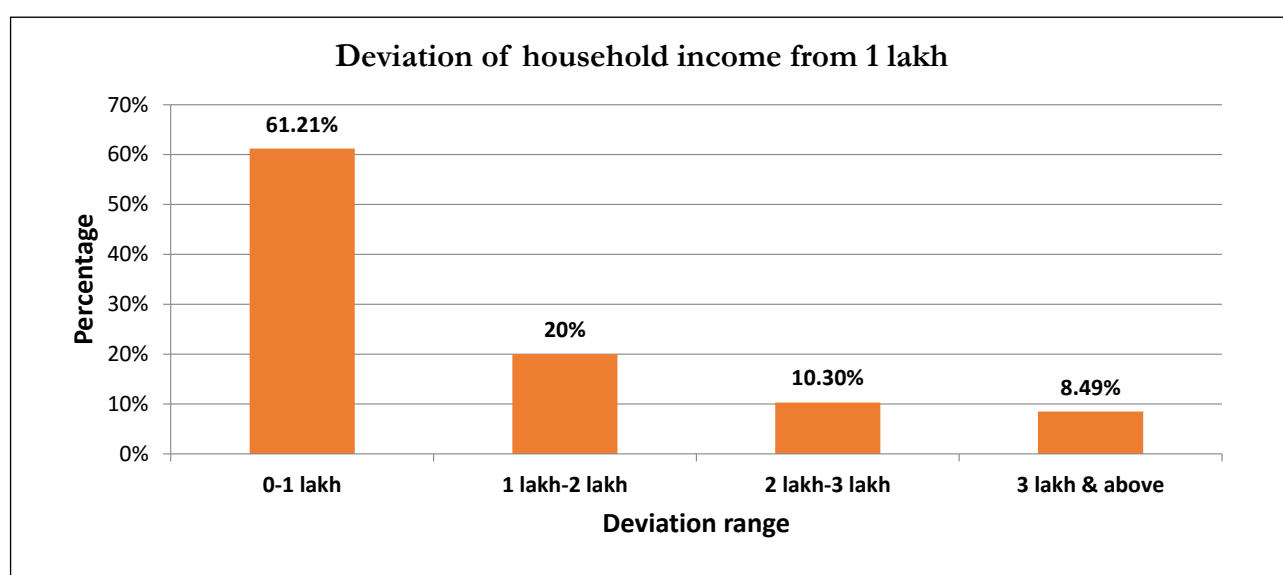
Figure 14: Income deviation from 1 lakh

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[10] Notification No.DNBR.014/CGM (CDS)-2015 dated 8 April 2015, and Notification No. DNBR. 033/CGM (CDS)-2015 dated 26 November 2015

Clients having total debt burden of more than ₹1 lakh & more than two MFI loans

Total indebtedness is more than 1 lakh

5.18%

94.82%

Yes No
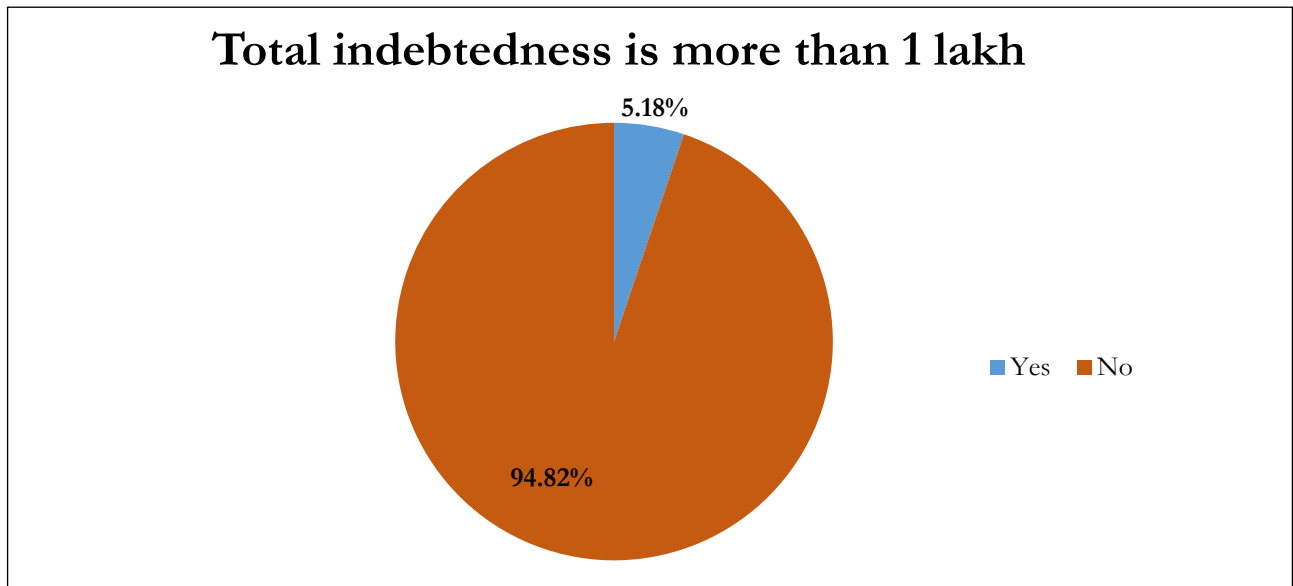
Figure 15: Total client indebtedness

5.18% of the clients in our sample had a total indebtedness of more than ₹1,00, 000. This shows that the RBI guideline which puts a cap of ₹1,00,000 on the total indebtedness of a client is not being followed in the case of these households. Additionally, 13.15% of the clients in our sample were repaying more than 2 MFI loans at the same time. 5.97% of the clients had more than 3 formal loans. This shows that for these households the debt burden was already high.

Respondents with more than 3 formal outstanding loans

5.97%

94.02%

Yes
No
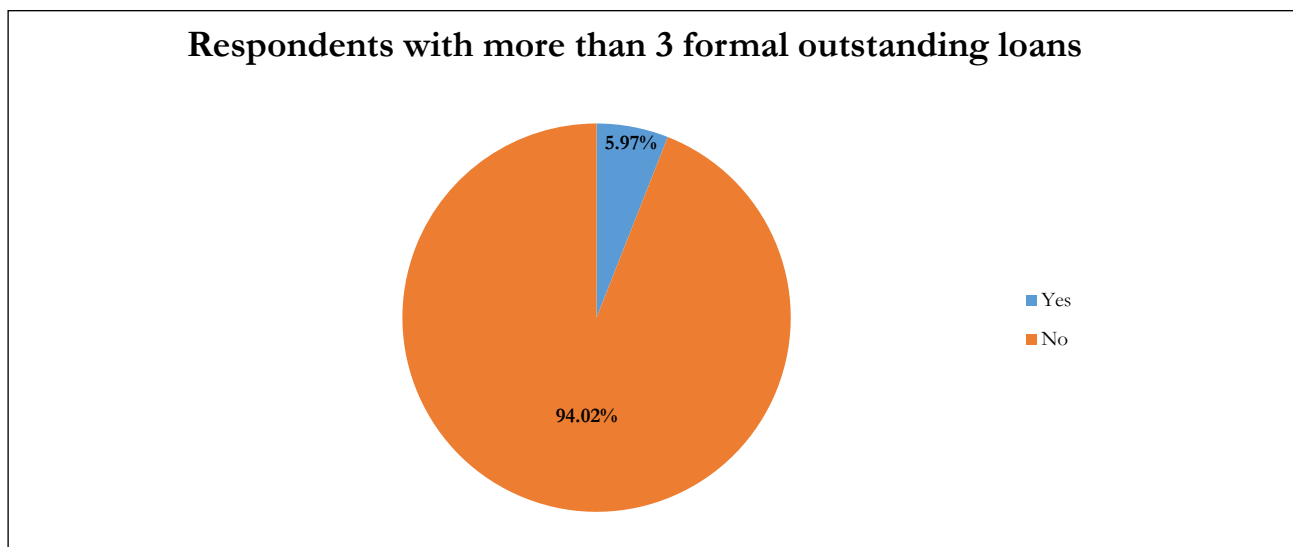
Figure 16: Clients having more than 3 formal loans

4.1 Findings from the field & steps towards creation of a Cash-Flow tool

In the previous section important statistics were discussed for a nuanced understanding to cash-flow estimation in the microfinance sector. Some prominent findings include that around 5.97% of the households reported having 3 or more outstanding loans (formal & informal loans) at a time. Additionally, for outstanding loans around 12.79 % reported on having defaulted on repayment at least once and among these around 14% reported to having defaulted on their repayment installments 3 times in a row. Adding to this, around 31% reported that in the past year they faced a situation where their income was less than their household expenses.

These findings point towards a gap between guidelines that exist on credit processing in the sector and a need also to restructure cash-flow estimation strategies in place. Despite the fact that all the MFIs follow some method for estimating cash-flow of potential client households, problems related to over-indebtedness and default still exist as can be seen from the results above. Restructuring such a cash-flow estimation process is not an easy task especially when it means accurately capturing income, savings and information on other loans. It is a fact that the measurement of the characteristics and behavioral experience among members of the low-income and welfare populations offer particular challenges with respect to reducing various sources of response error. This is especially due to bias on the side of the client when they report such information.[11] Such a bias originates when survey instruments like a cash-flow estimation instrument ask questions on socially and personally sensitive topics. As a result there is a high probability that they might elicit patterns of underreporting (for income, savings and other sources of loan) as well as over reporting (household expenses).[12] Many such questions contain data that cannot be independently verified or are not easily verifiable since they are self-reported in nature.

Given this limitation on calculating variables like income, consumption, savings & information related to sources of loans for the cash-flow estimation process of an MFI, certain ways through which near accurate information on these variables can be captured were identified and tested.

Detailed interviews with MFIs were conducted to understand their cash flow estimation processes, and looked through various debt calculation sheets used by them for potential clients. During this process, it was observed that the debt calculation sheets used by the MFIs were less detailed, especially when it involved capturing information on variables like expenses (consumption) and outstanding loans. Additionally, it was observed that these instruments did not have any mechanism i.e. (checks) put in place to verify the information that they might capture. During these interviews we understood that MFIs more or less follow the same processes before disbursing a loan to a client. These processes involved a Continuous Group Training (CGT) conducted by the loan officer, which was followed up by a Group Recognition Test (GRT) by the branch manager. Cash-flow estimation is done as part of the GRT and it tries to capture the income and outstanding loan information of the client. Most MFIs stated that they have issues in capturing correct information on income & outstanding loans as this

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[11]   https://www.nap.edu/read/10206/chapter/8#159

[12]   https://www.nap.edu/read/10206/chapter/8#159

information is shared with the MFI during verification process verbally without much proof to support the information. Additionally, some MFIs also added that the credit bureau data is not fully reliable as they have encountered cases where certain clients had more loans than what was reported in the credit bureau data. The development of a tool-kit is further validated by the unanimous need felt by MFIs we interviewed for further improving their cash flow estimation methodology. and consistently undergoing changes based on their learning from the field.

While referring to the cash-flow estimation brochures of the MFIs and conducting the interviews, we could glean that changes were needed with respect to their cash flow estimation, especially with respect to capturing information on income and outstanding loans (both formal & informal). Having tested our data against the cash-flow estimation processes for JLG clients, we developed a toolkit. Additionally, we also re-tested our tool-kit by interviewing a proportion of the sample that we had interviewed as part of the household survey in order to test its efficacy.

All the information gathered through the interviews were used to identify best practices around capturing income, consumption and loan information of households. Experiences from the field and testing this data against MFIs cash flow estimation criteria added to fine-tuning these protocols. While developing the toolkit, we added questions that will help in capturing more accurate information on income, consumption, outstanding loans (formal & informal). These questions have been added keeping in mind not just the reliability of the data but also the ease for loan officers to monitor inconsistencies in the data on the spot and also the time taken to complete the entire cash-flow estimation exercise of a potential respondent (20-25 mins).

The cash flow tool kit that we have developed has been divided into 7 parts. These are as follows: -

h) General information: This covers the general information of the applicant.

i) Details of Family members - Household roster: This covers details like name, age, gender, education, occupation, annual income (Both primary & secondary) for each member in the household.

j) Household income & expenses: Information pertaining to household monthly income (primary & secondary sources) and income from various other sources will be captured in detail in this section.

k) Consumption of the household: Expenditure incurred by the household on the items mentioned on a weekly, monthly and annual basis forms the core of this section.

l) Liabilities & savings: This section captures information on different type of loans and the different types savings that a client can have.

m) Details on outstanding loans: All the necessary information pertaining to the outstanding loans that a household can have will be captured within this section.

n) Business information: Captures information on client's business, if any.

Following are the unique features which have been incorporated for segments on income, consumption and the outstanding loans: -

1) Income: In the cash-flow toolkit, questions have been added to capture income in a more accurate way. These questions capture and cross-check the income from primary and secondary sources of not just the primary respondent but also the household. In addition to this, questions related to income from various sources in the past 12 months have also been added. A need to do this was felt since through the fieldwork conducted for the study it was realized that there was a tendency for

the respondents to go wrong in estimating these on the spot. Adding cross-checks not only helped surveys in detecting these discrepancies while the field team was conducting the assessments but also but also provided an opportunity to cross question the respondent on these. So if a client gives inaccurate information on income when he or she is asked for it the first time, then these cross checks that will follow later in the questionnaire will be able to help the loan officer to compare whether the responses match for all the income related questions.

2) Consumption: An entire section on consumption as a means to triangulate the stated income in the tool-kit has been added. The consumption roaster will capture the regular expenses the clients' household incurs. This section has been divided into a weekly, monthly and yearly segments. The idea behind designing it in such a way is to accurately capture the expenses that the household incurs on many items. The probability of receiving accurate information is higher when questions on items are broken down into relevant purchase periods. The weekly segment captures information on items that the household spends on a daily basis like fruits and vegetables, dry fruits, dairy products, eggs, sugar. The monthly segment captures information on items that are purchased once every 10-15 days or in a month. The monthly segment of the roaster captures information on expenditure on items such as cereal products, pulse products, edible oil, meat items, salt & spices, processed food, temptation goods, cooking fuel, toiletries, mobile recharge, entertainment, electricity & water charges, house rent, shop rent, salary paid to a servant or maid or an employee employed, monthly travel expenses (work, relatives etc.) Similarly the yearly segment captures expenditure on items like school & tuition fees, books, geometry set, library charges, stationary charges, school van/bus transport fees, uniforms etc., Festivals, Ceremonies and Religious Events and Expenditure, Weddings and Festivals, Funeral, expenditure on Clothing and Footwear, Medical Expenses – medication, doctor's fee, hospitalization, travel etc., Legal Expenses – fee to advocate, travel to court, etc., repair/ Improvement of House.[13]

3) Outstanding loans of the households (formal & informal): MFIs usually access credit bureau data to get information on outstanding loans of the clients. However, credit bureau data does not cover informal loans and loans from some other sources. Additionally, it is really hard to get outstanding loan information correctly from a prospective client. Therefore, in order to capture more accurate information a few data check points have been added, as well as the loan roster in such a way that it is easy for the loan officer to keep track of information on different loans. As stated earlier, the purpose for adding cross checks is to improve the reliability of the data.

4) Additionally, the toolkit has been designed in such a way that it is easy for both the loan officer and client to understand. Attention was paid to frame the questions in such a way that the client can clearly understand the data being asked for. The design of the loan roster, liabilities and savings and income boxes has been kept really simple in order for the loan officer to make the calculations side by side as the client answers the questions.

The toolkit has been tested against the study data for validation purposes. 58 clients were randomly selected from the study data and the toolkit was run across their data on loans, income, savings etc. Two approaches were followed for the validation:

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[13] The calculation of weekly & yearly household consumption can be converted into a monthly figure. This amount can be added to the figure that you get from the monthly consumption section to get total consumption of the household in a month. Further, this can be deducted from monthly household income to get a figure for "Net income" for the house-hold.

One; the calculation process used by MFIs (wherein consumption is not taken as a part of the calculation)-Method-I.

Two, the toolkit method (which includes consumption in the calculation)-Method-II.

It was found that at the primary respondent level 85.37% of households would be able to service their loans using Method–I calculation. However, this was significantly lower when the serviceability was checked by taking into account consumption costs. Using Method-II the figure declined to 51.22%. A similar trend could be seen when household income was used as the base. 100% of the households were found to be able to service their loans when not taking into account consumption (method-1). However, using Method-II such households decreased to 93.10%.

Our calculations clearly point towards the importance of having a rigorous toolkit with nuanced assessment of cash-flow and purchases to get a near accurate estimation of debt calculation.
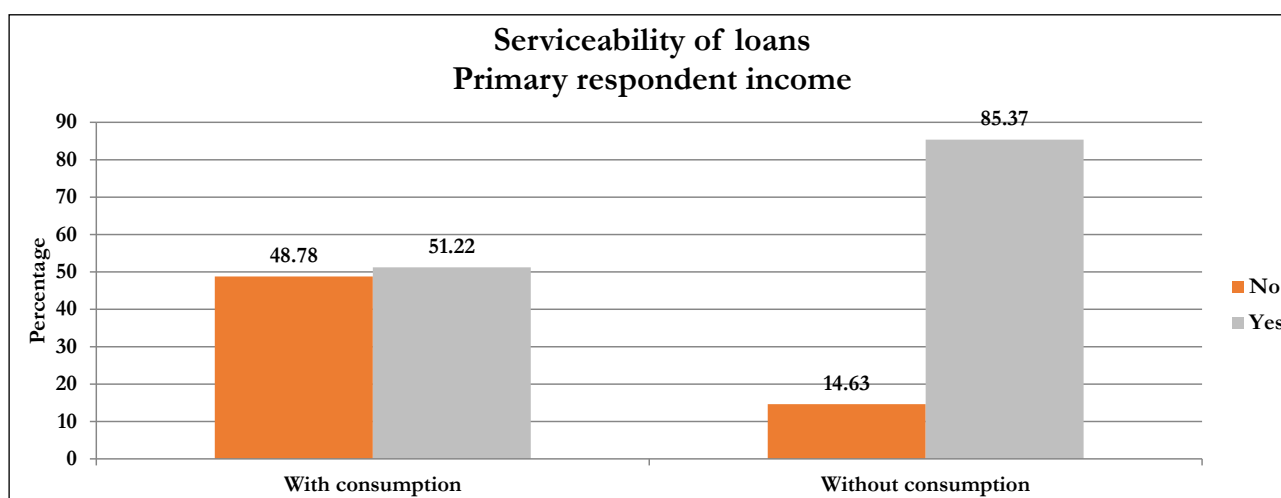
Figure 17: Clients having more than 3 formal loans
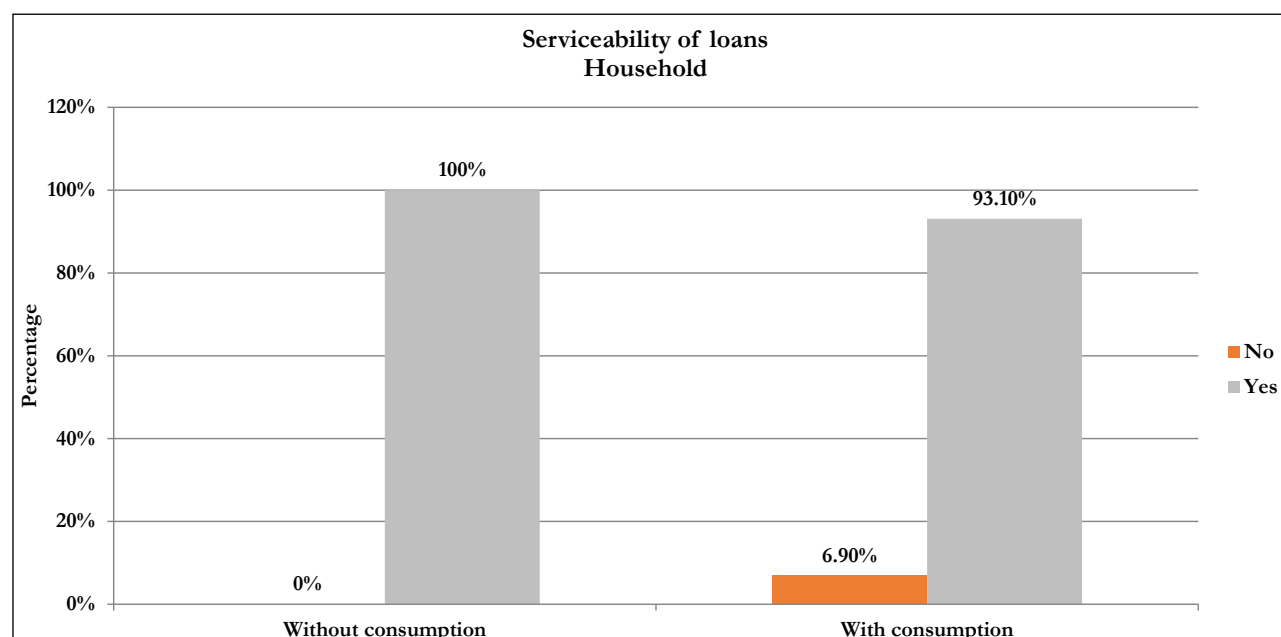
Figure 18: Clients having more than 3 formal loans

A robust cash-flow estimation process is a necessary step to ensure responsible lending, however it is not sufficient to solve the issue of over-indebtedness of the client. Concerted efforts needs to be put in by various stakeholders at the same time. There are other means which can complement a robust cash-flow estimation process to assess debt capacity of potential clients accurately. Therefore, to answer our second research question: we have two suggestions to make:

1) Setting up of a client protection mechanism:

The purpose of the credit bureau is to set up an environment for responsible lending and to guard against over indebtedness. One important aspect of such a framework is client protection. Client protection is not only beneficial to the MFI client but is also beneficial for the organization. In fact, a European Microfinance Platform study which was conducted has found a positive relationship between client protection principles and financial returns.[14] Client protection goes a long way in developing a good understanding between the client and the MFI. Two relevant findings of the above mentioned study were:

a) Good practices in transparency, collection practices, ethical staff behavior, complaints resolution, and privacy all coincide with better financial returns

Secondly, ethical staff behavior and collection practices are also associated with higher financial returns.

If an environment for responsible lending is to be advocated, then we suggest client protection on two fronts i.e. on the part of the MFI & the credit bureau. Firstly, a proper client protection mechanism needs to be set up by each MFI in order to ensure that issues faced by the clients with regards to repayment, MFI products, behavior of the loan officer and customer service is adequately captured and addressed. This can be ensured through Interactive Voice Response (IVR) calls from the credit bureau. In fact, a study conducted by MIX and Hivos in India which involved four MFIs found that clients were inclined to provide more candid responses to sensitive questions when they perceive themselves to be answering under conditions of anonymity.[15] Such information can then be captured and shared with the concerned institutions which in turn may help in influencing policy which might further help in reducing the problem of over-indebtedness.

Secondly, short monthly IVR calls from the SROs to all MFI clients', sharing information on the best practices to follow while borrowing a loan may also go a long way in solving the issue of over indebtedness of the client. The best practices that should be shared during such calls may pertain to providing instructions to clients on giving correct information during loan application. Such calls could also make them aware of the maximum number of loans that they can borrow or the general guidelines in place in the sector for MFIs.

2) Quarterly reports from the credit bureau:

In order to tackle the issue of over indebtedness, the credit bureau can come up with a memo which is updated every quarter with the latest information on clients' financial situation, outstanding loans etc. Given that the credit bureau has all of this data from various lending bodies, this will actually give MFIs and other lenders a proper understanding of the loan situation at the district level and thereby help them in lending responsibly.

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[14] http://www.e-mfp.eu/sites/default/files/resources/2014/05/Brief_No_4_2014_web.pdf

[15] https://hivos.org/sites/default/files/voice_of_the_client_an_analysis_of_client_satisfaction_and_consumer_protection_across_four_microfinance_institutions_in_india.pdf

5   CASH FLOW TOOLKIT

Name & Address of the applicant:

1)   **Name of the co-applicant(s)**

2)   **Details of Family members (17 & above)**

Full Name	Sex	Relation	Age	Education	Occupation	Annual income (approx.)	**Annual Income from Primary sources**	**Annual Income from secondary sources**

3)   **Household Income & Expenses**

4.1)   **What is your average monthly household income per month?**

4.2)   **What is your average household income per month from primary sources?**

4.3)   **What is your average household income per month from secondary sources**

How much did you earn from the following in the last 12 months:-

B.4.4	Agricultural Income	₹ _____._____
B.4.5	Income from Livestock	₹ _____._____
B.4.6	Business Income	₹ _____._____
B.4.7	Sale of Assets	₹ _____._____
B.4.8	Salaries and wages	₹ _____._____
B.4.9	Payment for some injury or work related accidents/ Insurance Payments received (e.g. LIC)	₹ _____._____
B.4.10	Rent/ Lease of property (house and land. Includes cash and in-kind income from leasing out land converted to money value)	₹ _____._____

B.4.11	Rent of property (vehicle, electronic appliances, tractor, etc.)	₹ _____._____
B.4.12	Financial Investments (Fixed Deposits, Interest Earned, etc., Insurance maturity)	₹ _____._____
B.4.13	Remittances from Non-Household Members	₹ _____._____
B.4.14	Pensions	₹ _____._____
B.4.15	Government Grants/ Welfare Schemes/ Relief Projects	₹ _____._____
B.4.16	Inheritance (Only Cash)	₹ _____._____

4) Consumption of the household

SECTION C

Consumption and expenditure:

Interviewer read: I will now list a number of items. Please indicate how much of each of these your HOUSEHOLD consumed in the last 7 DAYS. If your household did not consume the item, just say "0"

Flag: At regular intervals remind respondent to only include home consumption and not purchases for a business run out of home. If they did not consume one of these items, report a value of '0' in both boxes. The value means the total value of all of these goods that was consumed including home produced goods, self-collected products, given in kind as wage or given as part of allowance, gifts and purchases from retail centers of all kinds.

If the good was purchased, the value should be the average price they paid for the product multiplied by the quantity. If the good was self-produced, the value should be the price they can charge at the market for the specified quantity

C.1		7 DAY CONSUMPTION PERIOD			
Question	Item	Quantity of Goods Consumed		Value of Goods Consumed	
		Produced for HH Consumption	Purchased for HH Consumption	Produced for HH Consumption	Purchased for HH Consumption
A.	FRESH FRUITS and VEGETABLES	_____.___ Kg	_____.___ Kg	₹_____.	₹_____.
B.	DRY FRUITS	_____.___ Kg	_____.___ Kg	₹_____.	₹_____.
C.	Dairy Products	_____.___ Ltr	_____.___ Ltr	₹_____.	₹_____.
D.	EGGS			₹_____.	₹_____.
E.	SUGAR -	_____.___ Kg	_____.___ Kg	₹_____.	₹_____.
F	Other Expenses (Specify)…………			₹_____.	₹_____.

C.2		Items consumed in last 30 days Interviewer read: I will now list a number of items. Please indicate how much of each of these your household consumed in the last 30 days. If your household did not consume the item, just say "0" or "did not consume". Interviewer flag: At regular intervals remind responder to only include home consumption and not consumption for business run out of home.			
30 DAY CONSUMPTION PERIOD					
		Quantity of Goods Consumed		Value of Goods Consumed	
Question	Item	Produced for HH Consumption	Purchased for HH Consumption	Produced for HH Consumption	Purchased for HH Consumption
A.	Cereal & Cereal products	_____.___ Kg	_____.___ Kg	₹_____.	₹_____.
B.	Pulses and Pulse Products	_____.___ Kg	_____.___ Kg	₹_____.	₹_____.
C.	Edible Oil	_____.___ Ltr	_____.___ Ltr	₹_____.	₹_____.
D.	FISH/ Chicken/ Meat etc.	_____.___ Kg	_____.___ Kg	₹_____.	₹_____.
E.	Salt, Spices etc. Note: If they have bought it in the last 30 days then enter the amount normally like you would do. IMPORTANT NOTE: If they don't regularly buy it or purchase in bulk once or twice a year then take the average of the amount they spent in a year for this item.	_____.___Kg		₹_____.	
F	PROCESSED FOOD (Outside food, biscuits, sweets etc.)	₹_____.			

G	Temptation Goods (bidi, liquor, pan, tobacco.)	₹ _____._____			
H	Cooking Fuel	_____ ₹_____.____			
I	Toiletries (Soap, Detergent, etc.	_____	₹_____.____		
J	Mobile/ Landline	₹ _____._____			
K	ENTERTAINMENT (Newspaper, Magazine, Movies, etc.)	₹ _____._____			
L	Electricity & water Charges	₹ _____._____			
M	Lottery Ticket/ Gambling	_____ Times	₹_____.____		
N	Rent for the house or any other household item	₹ _____._____			
O	Rent for the Shop or other assets used for income generation	₹ _____._____			
P	Salary paid to a servant or maid or an employee employed	₹ _____._____			
Q	Travel to work, relatives or for the entertainment purpose	_____ Times	₹_____.____		
R	Other expenses (Specify)…………	_____	_____	₹____._	₹____._

Household Consumption over the last 12 months (1 Year)

Interviewer read: I will now list a number of items. Please indicate how much of each of these your household consumed in the last 365 days. If your household did not consume the item, just report "0".

Interviewer flag: If the good was purchased, the value should be the average price they paid for the product multiplied by the quantity. If the good was self-produced, the value should be the price they can charge at the market for the specified quantity.

365 DAY CONSUMPTION PERIOD

Education Expenditure

A.	School Fees And Private Tuition Fees	₹ _____ . _
B.	Books, geometry set, library charges, stationary charges, school van/bus transport fees, uniforms etc	₹ _____ . _

Festivals, Ceremonies and Religious Events and Expenditure		
	Books, geometry set, library charges, stationary charges, school van/bus transport fees, uniforms etc	₹ _____ . _
C	Weddings and Festivals	₹ _____ . _
D	Funeral	₹ _____ . _
E	Expenditure on Clothing and Footwear	₹ _____ . _
F	Medical Expenses – medication, doctor's fee, hospitalization, travel etc.	₹ _____ . _
G	Legal Expenses – fee to advocate, travel to court, etc.	₹ _____ . _
H	Repair/ Improvement of House	₹ _____ . _
I	Other Expenses	₹ _____ . _

5) Liabilities & Savings

S.no	Liabilities	**No. of loans for each.**	No. of loans from other household members
1	Loans with Banks (Public & Private)		
2	Loans with MFIs companies		
3	Loans from SHG		
4	Loans from Money lenders		
5	Loans from Friends/Relatives		
6	Loans from others		

	Savings	No. of savings account in each. (Self)	Total Amount in all the accounts. (Self)	No. of savings account in each. (H.H)	Total Amount in all the accounts. (H.H)
1.	RD(Bank and PO)				
2.	SIP				
3.	Cash holdings				
4.	FD (Bank & PO)				
5.	Time deposits (Bank & PO)				
6.	Bonds/mutual funds/stocks				
7.	MIS account				
8.	PPF acount				
9.	Jewelery				
10.	Kisan Vikas Patra (KVP)				
11.	Insurance/Premium				
Total					

6) Details on outstanding loans

6.0) How many outstanding loans do you have?

Number_____

Q. no	Details on Outstanding loans (Formal & informal)	Loan 1	Loan 2	Loan 3	Loan 4	Loan 5	Loan 6	Loan 7	Total
6.1	From whom did you borrow this loan?								
6.2	What was the amount that was sanctioned?								
6.3	How much do you pay during each installment?								
6.4	How frequently do you pay the installments? (Weekly, monthly, bi-monthly) ** Convert this to monthly amount if the answer is weekly or bi-monthly)								
6.5	Was this information confirmed through the loan card or through word of mouth								

7) Business information

a) What is the purpose of your business?

b) Who manages the business?

c) Where is the business located? (Full address)

d) Is your Business outlet-

i) Self-owned

ii) Parent/Family owned

iii) Owned with partner

iv) Rented

e) If partner owned, is the premise rented?

f) When you establish your business?

i) Less than a year ago

ii) 1-2 years

iii) 2-3 years

iv) 3-4 years

v) 4 years or more

g) How many people work in your business?

i) 1-10

ii) 10-20

iii) 20-30

iv) 30-40

v) 40 or more

h) Out of these, how many are family members?

i) What are the lean periods for sales in your business?

January	February	March	April	May	June
July	August	September	October	November	December

j) What are the peak periods for sales in your business?

January	February	March	April	May	June
July	August	September	October	November	December

k) What are the terms of purchase?

   i) Daily

   ii) Weekly

   iii) Fortnightly

   iv) Monthly

   v) Half yearly

   vi) Yearly

   vii) Other (Specify)

l) What is your average daily sale during low season?

m) What is your average daily profit from this sale during low season?

n) What is your average daily sale during high season?

o) What is your average daily profit from this sale during high season?

p) Business Income & Expenses

S.No	Sources	Amount	S.no	Application	Amount
D	Total Business income		E	Total business Expenses	
I	Present Value of Stock		I	Purchase of equipment (machinery, office equipment etc)	
ii	1st quarter (April to june) average sale		ii	Purchase of property (office space, branches etc)	
iii	2nd quarter (July to sep) average sale		iii	Purchase of furniture	
iv	3rd quarter average sale		iv	Purchase of raw materials for production (livestock, good etc)	
v	4th quarter (jan to march) average sale		v	rent	
vi	Total sales		vi	labour	
vii	Net monthly average sale		vii	transportation	
			viii	Equipment rent	
			ix	Telephone	
			x	Electricity & water	
			xi	Others	
	Total business Income			Total business Expenses	
	Net household income F=(D-E)				
	Net total income (C+F)				

q) Details of Assets

S.no	Business assets	Amount	S.no	Household assets	Amount
	Shop/premise/building			House(multiple)	
	Plant/machinery			Vehicle (Two/three/four wheeler)	
	Furniture/racks/others			Household appliances(Stove, electric fan,Sewing machine)	
	Vehicle (Two/three/four wheeler)			Tv/fridge/Radio/VCR/VCD/VCP	
	livestock			livestock	
	Office equipments (desktops, laptops, printers, tablets etc)			Gold	
	Cash holdings			Well	
	FD			Thresher	
	RD			Land (Agricultural & Non-agricultural)	
	SIP				
	Bonds/mutual funds/stocks				
	Total of business assets			Total of household assets	
Total assets					

USER MANUAL FOR THE CASH –FLOW TOOL KIT

WHAT'S NEW?

The cash flow tool kit has been developed as a robust mechanism that can capture information on the income and expenditure of a household in the most accurate way possible. In order to ensure this, certain measures have been incorporated to help the users keep track of the information given in an easy & efficient manner. The bulk of these measures have been introduced with reference to income, consumption, outstanding loans (Formal & Informal). In addition, adequate importance has been given to the overall design, so that it is easier for the loan officer to record information on clients. The toolkit along with its new features related to income, consumption, liabilities, savings & outstanding loan information have been adequately summarized below with illustrations.

Income:

In the cash-flow toolkit, questions have been added to capture income in a more accurate way. Questions have been added to capture and cross-check the income from primary and secondary sources of not just the primary respondent but also other members of the household. In addition to this, questions have been added which are related to income from various sources in the past 12 months. So, if a client gives inaccurate information on income when he or she is asked for it the first time, then these cross checks that will follow later in the questionnaire will be able to help the loan officer to compare whether the responses match for all the income related questions, and identify descrepencies easily.

Illustration 1: For example, let us assume that a household has three members X, Y & Z. X works as a kebab shop owner and she earns around ₹1000 per month. She has applied for an income generating loan with an MFI in order to purchase cattle to carry out a livestock business. Y owns a small tract of land in which he does farming based on crop rotation. Y reports that he takes some quantity for consumption and sells the rest from which he earns an approximate of ₹3000 a month. In addition, he works as an agricultural laborer through which he earns an approximate secondary income of ₹2000 a month. Z on the other hand is a student. Based on this information the loan officer will fill these details of the family members.

Full Name	Sex	Relation [16]	Age	Education	Occupation	Annual income (approx.)	Annual Income from Primary sources
X[17]	F	Self	35	Till class 8	House help	11520	12000
Y	M	Spouse	40	Till class 9	Cultivator/ Agri-laborer	60000	36000
Z	F	Daughter	17	Higher secondary	Student	0	0

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[16] Relation to the primary respondent.

[17] Primary respondent: The person who has applied for a MFI loan.

Once the loan officer has filled in the above details he/she can proceed to ask details on income in further detail. This section has been specially designed to act as a cross-check to the income data that has been filled in the previous section. The following example shows how this works.

Illustration 2: The loan officer proceeds further by asking questions related to income in further detail. The answers given by the respondent are as follows:-

4.1)   What is your average monthly household income per month? ₹5500

4.2)   What is your average household income per month from primary sources? ₹3500

4.3)   What is your average household income per month from secondary sources? ₹ 2000

How much did you earn from the following in the last 12 months:-

B.4.4	Agricultural Income	₹36000
B.4.5	Income from Livestock	₹0
B.4.6	Business Income	₹12000/-
B.4.7	Sale of Assets	₹0
B.4.8	Salaries and wages	₹0
B.4.9	Payment for some injury or work related accidents/ Insurance Payments received (e.g. LIC)	₹0
B.4.10	Rent/ Lease of property (house and land. Includes cash and in-kind income from leasing out land converted to money value)	₹12000/-
B.4.11	Rent of property (vehicle, electronic appliances, tractor, etc.)	₹0
B.4.12	Financial Investments (Fixed Deposits, Interest Earned, etc., Insurance maturity)	₹0
B.4.13	Remittances from Non-Household Members	₹0
B.4.14	Pensions	₹0
B.4.15	Government Grants/ Welfare Schemes/ Relief Projects	₹0
B.4.16	Inheritance (Only Cash)	₹0

As can be seen, this section collects information on income from multiple sources. This helps in capturing information on each and every source of income that comes in to the household. The loan officer has entered values according to what has been reported to him by the prospective client. However, looking closely one can understand that there is a mismatch in the self-reported data between illustration 1 and what we have in illustration 2. Here, the monthly income has been reported to as ₹5500 which does not add up to the income they receive from both primary and secondary sources. In addition, an extra income of ₹1000 (monthly) has been reported as rent received which have not been captured in question 4.1.

The rationale behind such cross checks is simple i.e. clients have a tendency to understate & overstate their income. Hence, such cross checks help in capturing the most accurate information on household and individual income.

Consumption:

An entire section on consumption as a means to triangulate the stated income has been added in the tool-kit. The consumption roaster captures the regular expenses the clients' household incurs. This section has been divided into a weekly, monthly and yearly segment. Doing so accurately capture the expenses that the household incurs on many items. The probability of receiving accurate information is higher when we break down these questions into time periods for the purchase of varying items.

The consumption roster has been divided into goods produced & purchased for household consumption with corresponding columns for assigning values to these numbers. This was necessary as majority of people living in rural areas pursue an agrarian occupation and sometimes consume what they produce. Therefore it is important to capture the opportunity cost of such a consumption, which effectively is an income foregone by these households. Additionally, in the case of certain items there is no differentiation between goods produced and purchased as these items cannot or are rarely produced within an agrarian society. In order to calculate the value of goods produced for consumption, we can take the value per unit that the respondent feels she will get if she sells these in the market. This value can be used and multiplied with the number of units (Kg, litre etc) to get the total value. The illustration below further explains this in detail.

Illustration 3: X says that her household spends around ₹50 on vegetables each week which comes around 1 kg in weight. In addition, she reports that they grow some seasonal vegetables which when ripe are sold in the market every two weeks. She further adds that she takes around 1 kg of the vegetables for household consumption each time before her husband sells off their produce. She quotes the market price of the vegetables that she has taken for household consumption to vary between ₹10-20 per kilo. The loan officer could enter the information as follows:-

C.1		7 DAY CONSUMPTION PERIOD			
Question	Item	Quantity of Goods Consumed		Value of Goods Consumed	
		Produced for HH Consumption	Purchased for HH Consumption	Produced for HH Consumption	Purchased for HH Consumption
A.	FRESH FRUITS and VEGETABLES	____0.5___Kg	__1__.___Kg	₹__7.5[18]__	₹__50_____.

Similarly, once all the values have been filled for each item, the weekly & yearly household consumption can be converted into an approximate monthly figure. This amount can be added to the figure that is received from the monthly consumption section to get total consumption of the household in a month. Further, this can be deducted from monthly household income to get a figure for an approximate "Net income" for the particular household in a month.

Liabilities[19] & Savings:

The section on liabilities and savings is pretty straight forward to fill. It has been designed in such a way that it not only captures number of loans taken by the primary respondent but also by the other members of the household. The idea is to capture information on all the loans that have been borrowed by that household in general, as it has a direct impact on the repayment capacity of the individual in question. A similar design has been adopted for the savings section as well.

Illustration 4: When asked about the loans that they have taken which are currently outstanding, X stated that her husband had taken a loan from the bank in order to purchase agricultural land. Further, when asked they said that they have a cumulative of ₹8000 in their two bank accounts i.e. ₹2000 owned by X and ₹6000 owned by Y. Additionally, they had jewellery worth Rs 20000. The loan officer can enter the information as follow:-

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[18]   In order to get the value per week the average of the price range is divided it by 2 i.e. [(10+20)/2]/2

[19]   In order to further ameliorate this process, it is advised that the MFI should cross verify this through credit bureau data.

S.no	Liabilities	No. of loans for each.	No. of loans from other household members
1.	Loans with Banks (Public & Private)	0	1
2.	Loans with MFIs companies[20]	0	0
3.	Loans from SHG	0	0
4.	Loans from Money lenders	0	0
5.	Loans from Friends/Relatives	0	0
6.	Loans from others[21]	0	0

	Savings[22]	No. of savings account in each. (Self)	Total Amount in all the accounts. (Self)	No. of savings account in each. (H.H)	Total Amount in all the accounts. (H.H)
1.	RD(Bank and PO)	0			
2.	SIP	0			
3.	Cash holdings	1	2000/-	1	4000/-
4.	FD (Bank & PO)	0			
5.	Time deposits (Bank & PO)	0			
6.	Bonds/mutual funds/stocks	0			
7.	MIS account	0			
8.	PPF acount	0			
9.	Jewelry[23]	1	20000/-		
10.	Kisan Vikas Patra (KVP)[24]	0			
11.	Insurance/ Premium	0			
Total		2	22000/-	1	4000/-

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[20] One should always ask for the loan card pertaining to that particular loan from the household.

[21] This can include money borrowed through online lending platforms like peer to peer lending.

[22] Ask for a passbook for each saving account (RD, FD, TD) that the household has with a bank or India post.

[23] A good way of capturing the total value of the jewelry is by asking the respondent how much she thinks she will get if she sells it in the market.

[24] Kisan Vikas Patra (KVP) is a savings certificate scheme which was first launched in 1988 by India post.

Outstanding loans of the households (formal & informal):

Following from the previous section which captured the number of outstanding loans per household, this section aims at capturing information on the loans in a detailed manner. This section also acts as a cross check to the information provided in the previous section. Here the loan officer can be at liberty to cross question the respondent in order to extract valuable information on all the loans taken by the household as it is usually hard to get outstanding loan information correctly from a prospective client. We have also designed the loan roster in such a way that it is easy for the loan officer to keep track of information on different loans. As stated earlier, this feature helps in improving the reliability of the data.

Illustration 5: X states that she has not taken a loan yet. However, Y has taken a loan from a bank of Rs 2.00,000 to purchase land for agricultural purposes two years ago which he is repaying at a monthly installment of Rs 2000. However, on cross questioning on how they manage to repay the loan properly given their income, X states that they sometimes borrow from the local money lender at a monthly interest installment[25] of Rs 200. Currently they have borrowed an amount of Rs 3000 as they were short on money to repay the installment for the bank loan. The loan officer can fill the following information as follows:-

Q.no	Details on Outstanding loans (Formal & informal)	Loan 1	Loan 2	Loan 3	Loan 4	Total
6.1	From whom did you borrow this loan?	Bank	Money lender			
6.2	What was the amount that was sanctioned?	2,00,000 /-	3000/-			
6.3	How much do you pay during each installment?	2000/-	200/-			
6.4	How frequently do you pay the installments? (Weekly, monthly, bi-monthly) ** Convert this to monthly amount if the answer is weekly or bi-monthly)	Monthly	Monthly			
6.5	Was this information confirmed through the loan card or through word of mouth (For loan officer)	Loan card	Verbal			

As a result, we can see that the loan borrowed from the money lender was not captured in the previous section. This illustration is one that can be encountered during field visits. Therefore, it re-emphasizes the importance of having questions which act as cross checks (same question designed in a different manner) in order to bring out accurate information from the prospective clients.

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[25] Rs 200 is an amount that they pay as interest every month till they are able to repay back the entire amount that they have borrowed.

Business Information

Till now, the toolkit assessed how accurately income, consumption and loan information can be captured. This section assesses another important component of cash-flow estimation i.e. capturing business information.

Illustration 6: X states that they have been operating a small shop for the past 8 months in which they make kebabs. X, states that she is the one who manages this alone. Sometimes her daughter helps her in washing the utensils. She states that they have rented the shop and states that it does enough business to pay the rent and earn some extra money. She said that she operates this shop only 4 days a week. She also adds that the sales fall during the agricultural season i.e. July to September as many people migrate from the village to other places in order to work as agricultural laborers. This information can be filled as follows:-

a) What is the purpose of your business? Kebab Shop

b) Who manages the business? X

c) Where is the business located? (Full address)
   Near the banyan tree in ABC village (opp. Barber shop).

d) Is your Business outlet-
   i)   Self-owned
   ii) Parent/Family owned
   iii) Owned with partner
   iv) Rented ✔

e) If partner owned, is the premise rented? N/A

f) When you establish your business?
   i)   Less than a year ago ✔
   ii) 1-2 years
   iii) 2-3 years
   iv) 3-4 years
   v)   4 years or more

g) How many people work in your business?
   i)   1-10 ✔
   ii) 10-20
   iii) 20-30
   iv) 30-40
   v)   40 or more

h) Out of these, how many are family members?
   1

i) What are the lean periods for sales in your business?

January	February	March	April	May	June
July ✔	August ✔	September ✔	October	November	December

j) What are the peak periods for sales in your business?

January ✔	February ✔	March ✔	April ✔	May ✔	June ✔
July	August	September	October ✔	November ✔	December ✔

k) What are the terms of purchase?
   i) Daily ✔
   ii) Weekly
   iii) Fortnightly
   iv) Monthly
   v) Half yearly
   vi) Yearly
   vii) Other (Specify)

Illustration 7: X says that during lean periods, she is about to sell only 30 plates worth 20 ₹ each. While during peak season the sale goes up to 50 plates. The profit she earns is ₹2 per plate. She also had to purchase some new utensils in the past few months' worth ₹1000. Additionally, she pays ₹30 per day as rent for the push cart that she uses. Additional costs that she incurs are for water that she uses for the kebab shop which comes out to be ₹20 per month.

l) What is your average daily sale during low season?
   ₹600

m) What is your average daily profit from this sale during low season?
   ₹60

n) What is your average daily sale during high season?
   ₹1000

o) What is your average daily profit from this sale during high season?
   ₹00

p) Business Income & Expenses[26]

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[26] All the figures are for the past fiscal year.

S.No	Sources	Amount	S.no	Application	Amount
D	**Total Business income**		E	**Total business Expenses**	
i	Present Value of Stock	0	i	Purchase of equipment (machinery, office equipment etc)	0
ii	1st quarter (April to june) average sale	₹3000	ii	Purchase of property (office space, branches etc)	0
iii	2nd quarter (July to sep) average sale	₹1200	iii	Purchase of furniture	0
iv	3rd quarter average sale	₹3000	iv	Purchase of raw materials for production (livestock, good etc)	₹1000
v	4th quarter (jan to march) average sale	₹3000	v	rent	₹1440
vi	Total sales	₹10200	vi	labour	0
vii	Net monthly average sale	₹850	vii	transportation	0
			viii	Equipment rent	0
			ix	Telephone	0
			x	Electricity & water	240
			xi	Others	
	Total business Income	₹10200		Total business Expenses	₹2680
	Net household income F=(D-E)	₹7520/-			

r) Details of Assets

S.no	Business assets	Amount	S.no	Household assets	Amount
	Shop/premise/building	0		House(multiple)	₹1,00,000
	Plant/machinery	0		Vehicle (Two/three/four wheeler)	0
	Furniture/racks/others			Household appliances(Stove, electric fan, Sewing machine)	Don't Know
	Vehicle (Two/three/four wheeler)	0		Tv/fridge/Radio/VCR/VCD/VCP	Don't Know
	livestock	0		livestock	0
	Office equipments (desktops, laptops, printers, tablets etc)	0		Gold	₹20,000
	Cash holdings	0		Well	0
	FD	0		Thresher	0
	RD	0		Land (Agricultural & Non-agricultural)	₹2,00,000
	SIP	0			
	Bonds/mutual funds/stocks	0			
	Total of business assets	0		Total of household assets	₹3,20,000
Total assets					

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APPENDIX-1

Cash-flow Questionnaire-Study instrument 1

INTERVIEWER READOUT: We would like to know who lives in this household. Let me assure you that any information you provide is strictly confidential.

I would like to know the age, gender, education level, occupation, and relationship to you of each of the members of this household who lives here.

*Interviewer Flag: All people, including children, who live or have lived under this "roof" or within the same house for at least 30 continuous days in the past 1 year, and when they are together, they share food from a common source, and contribute to and/or share in a common resource pool and individuals who do not have a permanent residence outside of this household.

Z.1 By the definition explained above, how many household members are there in your household, including yourself?

RECORD THE NUMBER

Line no.	A. First and last name of household member	B. Sex of the member	C. Relationship to respondent	D Age	E. Highest education level of the member	F. Occupation of the member	Annual Income of the member
		MALE-------1 FEMALE---2	SPOUSE/ PARTNER....................2 SON/ DAUGHTER...............3 SON/DAUGHTER-IN-LAW.......................4 STEPSON/ DAUGHTER ....5 GRANDCHILD.........6 BROTHER/ SISTER.........................7 BROTHER/SISTER-IN-LAW........................8 FATHER/ MOTHER....................9 FATHER / MOTHER-IN-LAW...........................10 GRANDPARENT...11 GREAT-GRAND CHILD......................12		COMPLETED CLASS 1….. 1 COMPLETED CLASS 2 …2 COMPLETED CLASS 3……3 COMPLETED CLASS 4......4 COMPLETED CLASS 5….. 5 COMPLETED CLASS 6……6 COMPLETED CLASS 7….. 7 COMPLETED CLASS 8 …..8 COMPLETED CLASS 9 …9 COMPLETED CLASS 10 …10	1. Cultivator.......1 2. Agricultural labourer.............2 3. Non-agricultural labourer ....3 4. Artisan/ independet worker................4 5. Petty shop owner or other trader..................5 6. Organized trader or business man....................6 7. Salaried employee...........7 8. Domestic labor for another household..........8 9. Unemployed but looking for a job....................9 10. Student......10	

Line no.	A. First and last name of household member	B. Sex of the member	C. Relationship to respondent	D Age	E. Highest education level of the member	F. Occupation of the member	Annual Income of the member
			OTHER FAMILY.....13 HOUSEHOLD HELP........................14 LODGER................15 FRIEND..................16 OTHER(Specify)....888		COMPLETED CLASS 11........... 11 COMPLETED CLASS 12............12 OTHER DIPLOMA..........13 CERTIFICATE COURSE..............14 GRADUATE AND ABOVE................15 INFORMAL SCHOOLING.....16 GOVERNMENT PROGRAM FOR CHILDREN (ANGANWADI). 17 ADULT LITERACY PROGRAMME ..18 LOWER THAN CLASS.................19 NEVER ATTENDED SCHOOL.............20 OTHERS (SPECIFY) ....888 DON'T KNOW 999	11.Retired/ senior citizen/ with special needs...11 12. Unemployed but not looking for a job..........12 Other (specify)......-888	
1							
2							
3							
4							
5							

Section A - Household Wealth

A.1	How many of the following items does your household have:	RECORD NUMBER FOR EACH. IN CASE THE HOUSEHOLD DOES NOT POSSESS AN ITEM, PLEASE ENTER ZERO
	1. Telephone (landline)	
	If yes, number	
	2. Telephone (Mobile)	
	If yes, number:	
	3. Clock or watch	
	4. Stove – electric, gas or kerosene	
	5. Stove - coal, wood (primus)	
	6. Electric fan	
	7. Black and white television set	
	8. Color television set	
	9. VCR/VCP/CD PLAYER	
	10. Radio, transistor or stereo	
	11. Refrigerator ……………………..	
	12. Sewing machine	
	13. Car or jeep	
	14. Bicycle	
	15. Motorcycle, Moped or Scooter	
	16. Bullock cart	
	17. Thresher	
	18. Tractor	
	19. Well/Tube-well	
	20. Grain storage can	
	21. Pressure Cooker	
	22. Chair/stool	
	23. Cot or Bed	
	24. Table	
A.2	What is the total value of all the jewelry owned by this household? (in rupees) Interviewer Note: If they were to sell all the jewelry how much do they think they would get	

A.3	Who owns this house?	RECORD MEMBER ID FROM HOUSEHOLD ROSTER A non-household member … …1→A.5 Others (Specify) Don't know …………....................-999
A.4	According to you, what is the value of this house? Interviewer note: If they were to sell this house how much do they think they will get	RECORD THE AMOUNT Don't Know……………..............…-999 Refused to Answer………...............-777
A.5	Do you or any member of the household own any other house?	Yes…..1 No……2-- →A.7
A.6	What according to you is the value of that house?	RECORD IN RUPEES Don't Know ………………-999 Refused to Answer ………..-777
A.7	Does this household own any agriculture land?	YES........1 NO………2---→A.10
A.8	If yes, how much agriculture land does this household own?	RECORD NUMBER OF BIGHA (1 acres=40 guntas)
A.9	How much is the value of this land, according to you, in rupees?	RECORD THE AMOUNT
A.10	Does your household have a **ration card?**	YES……...…1 NO……......................................2---→A.12 DO NOT KNOW…..........-999---→A.12 REFUSED TO ANSWER…… ....…….-777---→A.12
A.11	If yes, what type of ration card does your household possess?	APL...1 BPL...2 Annapurna…......................…………..3 Antyodaya ....4 Others, specify.................................-888 Do not know…...............................…-999 Refused to answer…........................…-777
A.12	Please enter the current value of the financial assets owned by the household. If the household does not own a particular asset, please enter 0.	BONDS…… MUTUAL FUNDS…...........................… SHARES……......................................

Section B– Household Income

B.0 what is your average household income in a month?

RECORD THE AMOUNT IN RUPEES

B.1) What is your primary source of income?
   A. Cultivation
   B. Agricultural wage labor
   C. Non-agricultural wage labor
   D. Artisan/independent work
   E. Petty shop or other trade
   F. Organized trade or business
   G. Salaried employee
   H. Domestic labor for another household
   I. Casual employment or odd jobs
   U. Pension, rent, or dividend
   J. Remittances
   K. Government grants, welfare schemes, or relief projects
   L. Inheritance
   M. Do not work
   N. Other: _____
   O. Refused to answer

B.1A What is your average monthly income from primary sources?

B.2) What is your secondary source of income?
   A. Cultivation
   B. Agricultural wage labor
   C. Non-agricultural wage labor
   D. Artisan/independent work
   E. Petty shop or other trade
   F. Organized trade or business
   G. Salaried employee
   H. Domestic labor for another household
   I. Casual employment or odd jobs
   U. Pension, rent, or dividend
   J. Remittances
   K. Government grants, welfare schemes, or relief projects
   L. Inheritance
   M. Other: _____
   N. Refused to answer

B.2A) What is your average monthly income from secondary sources?

B.3) Identify the months in which you experience high incomes. (multiple choice)

January	February	March	April	May	June
July	August	September	October	November	December

B.4) Why is revenue highest in this month? (open textbox)

B.5) Identify the months in which you experience low incomes. (multiple choice)

January	February	March	April	May	June
July	August	September	October	November	December

B.6) Why is the income lowest in this month? (open textbox)

B.7) Now I am going to ask you about the different sources of your household income in the last 12 months. Please include income of everyone who has been included in the household roaster at the beginning of the survey.

Interviewer Read: How much did your household receive in total in the last 12 months from: Interviewer Flag: All household members as included in the household roaster		
B.7.1	Agricultural Income	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777
B.7.2	Income from Livestock	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777
B.7.3	Business Income	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777
B7.4	Sale of Assets	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777
B.7.5	Salaries and wages	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777
B.7.6	Payment for some injury or work related accidents/ Insurance Payments received (e.g. LIC)	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777

B.7.7	Rent/ Lease of property (house and land. Includes cash and in-kind income from leasing out land converted to money value)	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777
B.7.8	Rent of property (vehicle, electronic appliances, tractor, etc.)	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777
B.7.9	Financial Investments (Fixed Deposits, Interest Earned, etc., Insurance maturity)	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777
B.7.10	Remittances from Non-Household Members	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777
B.7.11	Pensions	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777
B.7.12	Government Grants/ Welfare Schemes/ Relief Projects	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777
B.7.13	Inheritance (Only Cash)	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777
B.7.14	Others (Specify) _____	₹ _____._____ DO NOT KNOW……..-999 REFUSED TO ANSWER….-777

SECTION C – Consumption and expenditure:

Interviewer read: I will now list a number of items. Please indicate how much of each of these your HOUSEHOLD consumed in the last 7 **DAYS**. If your household did not consume the item, just say "0"

Flag: At regular intervals remind respondent to only include home consumption and not purchases for a business run out of home. If they did not consume one of these items, report a value of '0' in both boxes. The value means the total value of all of these goods that was consumed including home produced goods, self-collected products, given in kind as wage or given as part of allowance, gifts and purchases from retail centers of all kinds.

If the good was purchased, the value should be the average price they paid for the product multiplied by the quantity. If the good was self-produced, the value should be the price they can charge at the market for the specified quantity

C.1	7 DAY CONSUMPTION PERIOD				
Question	Item	Quantity of Goods Consumed		Value of Goods Consumed	Value of Goods Purchased
		Produced for HH Consumption	Purchased for HH Consumption	Produced for HH Consumption	Purchased for HH Consumption

A	FRESH FRUITS and EGETABLES	_____.____Kg	_____.____Kg	₹ _____.__	₹ _____.__
B	DRY FRUITS	_____.____Kg	_____.____Kg	₹ _____.__	₹ _____.__
C	Dairy Products	_____.____Ltr	_____.____Ltr	₹ _____.__	₹ _____.__
D	EGGS			₹ _____.__	₹ _____.__
E.	SUGAR -	_____.____Kg	_____.____Kg	₹ _____.__	₹ _____.__
F.	Other Expenses (Specify) …………			₹ _____.__	₹ _____.__

C.2

Items consumed in last 30 days

Interviewer read: I will now list a number of items. Please indicate how much of each of these your household consumed in the last 30 days. If your household did not consume the item, just say "0" or "did not consume".

Interviewer flag: At regular intervals remind responder to only include home consumption and not consumption for business run out of home.

30 DAY CONSUMPTION PERIOD

Question	Item	Quantity of Goods Consumed		Value of Goods Consumed	Value of Goods Purchased
		Produced for HH Consumption	Purchased for HH Consumption	Produced for HH Consumption	Purchased for HH Consumption
A.	Cereal & Cereal products	_____.____Kg	_____.____Kg	₹ _____.__	₹ _____.__
B.	Pulses and Pulse Products	_____.____Kg	_____.____Kg	₹ _____.__	₹ _____.__
C.	Edible Oil	_____.____Ltr		₹ _____.__	
D.	FISH/ Chicken/ Meat etc.	_____.____Kg	_____.____Kg	₹ _____.__	₹ _____.__

E	Salt, Spices etc. Note: If they have bought it in the last 30 days then enter the amount normally like you would do. IMPORTANT NOTE: If they don't regularly buy it or purchase in bulk once or twice a year then take the average of the amount they spent in a year for this item.	_____.____Kg	₹_____.____
F	PROCESSED FOOD (Outside food, biscuits, sweets etc.)	₹ _____._____	
G	Temptation Goods (bidi, liquor, pan, , tobacco eyc	₹ _____._____	
H	Cooking Fuel	_____	₹ _____._____
I	Toiletries (Soap, Detergent, etc.	_____	₹ _____._____
J	Mobile/ Landline	₹ _____._____	
K	ENTERTAIN-MENT (News-paper, Maga-zine, Movies, etc.)	₹ _____._____	
L	Electricity & water Charges	₹ _____._____	

M	Lottery Ticket/ Gambling	_____ Times	₹ _____._____
N	Rent for the house or any other household item	₹ _____._____	
O	Rent for the Shop or other assets used for income generation	₹ _____._____	
P	Salary paid to a servant or maid or an employee employed	_____ Employees	₹ _____._____
Q	Travel to work, relatives or for the entertainment purpose	_____ Times	₹ _____._____
R	Other expenses (Specify) …………	_____	_____		

C.3 Household Consumption over the last 12 months (1 Year)

Interviewer read: I will now list a number of items. Please indicate how much of each of these your household consumed in the last 365 days. If your household did not consume the item, just report "0".

Interviewer flag: If the good was purchased, the value should be the average price they paid for the product multiplied by the quantity. If the good was self-produced, the value should be the price they can charge at the market for the specified quantity.

365 DAY CONSUMPTION PERIOD

Education Expenditure

A.	School Fees And Private Tuition Fees	₹ _____. ____
B.	Books, geometry set, library charges, stationary charges, school van/bus transport fees, uniforms etc	₹ _____. ____

Festivals, Ceremonies and Religious Events and Expenditure

C.	Weddings and Festivals	₹ _____. ____
D.	Funeral	₹ _____. ____
E.	Expenditure on Clothing and Footwear	₹ _____. ____
F	Medical Expenses – medication, doctor's fee, hospitalization, travel etc.	₹ _____. ____
G	Legal Expenses – fee to advocate, travel to court, etc.	₹ _____. ____

H	Repair/ Improvement of House	₹ _____ . ____
I	Other Expenses	₹ _____ . ____

SECTION D - SAVINGS

SECTION D: SAVINGS (HOUSEHOLD)						
Interviewer Read: I will ask you about any savings you initiated at any time during the last 12 months. By "savings", I mean any amount of money that was stored in your household, with a bank, institution, or person outside your household.						
HOUSEHOLD SAVINGS (FORMAL & INFORMAL: SAVINGS ACCOUNTS)						

D.1	How many such Savings accounts does the household have?	Record Number	[ ] [ ] If Zero, skip to next section
		Refused to Answer → E.1	-777
		Do Not Know → E.1	-999

Interviewer flag: Enter answers for D.2 to D.5 in the grid below for each of the savings accounts held by household members. Start with the accounts that you own yourself and then mention the ones that are remaining and the largest.

		SAVINGS 1	SAVINGS 2	SAVINGS 3	SAVINGS 4	SAVINGS 5
D.2	What is the Member ID of the account holder? **Interviewer flag:** CHOOSE THE MEMBER NAME FROM THE DROP DOWN LIST (WHICH COMES FROM THE HOUSEHOLD ROSTER) ENTER BOTH THE IDS, IF ACCOUNT IS OWNED BY MORE THAN ONE PERSON	1				
		2	2	2	2	2
		3	3	3	3	3
		4	4	4	4	4
		5	5	5	5	5
		6	6	6	6	6
		7	7	7	7	7
		8	8	8	8	8
		9	9	9	9	9
		10	10	10	10	10
		11	11	11	11	11
		12	12	12	12	12
		-777	-777	-777	-777	-777
		-999	-999	-999	-999	-999

D.3	What is the account type?	SAVINGS 1	SAVINGS 2	SAVINGS 3	SAVINGS 4	SAVINGS 5
	POST OFFICE ACCOUNT (RECURRING DEPOSIT, FD, TIME DEPOSIT)	1	1	1	1	1
	SELF HELP GROUP	2	2	2	2	2
	CHIT FUND	3	3	3	3	3
	PRIVATE BANK (RD, FD, TIME DEPOSIT, SIP)	4	4	4	4	4
	NGO/ MFI	5	5	5	5	5
	NATIONALIZED BANK (RD, FD, TIME DEPOSIT, SIP)	6	6	6	6	6
	CASH AT HOME	7	7	7	7	7
	RELATIVE OUTSIDE HOUSEHOLD	8	8	8	8	8
	NEIGHBOR	9	9	9	9	9
	FRIEND	10	10	10	10	10
	SHOPKEEPER	11	11	11	11	11
	MONEY GUARD/ OTHER PERSON	12	12	12	12	12
	DELIVERY ACCOUNT, GOVERNMENT PROGRAM—JANANI SURAKSHA YOJANA	13	13	13	13	13
	BHAMASA YOJANA— GOVERNMENT PROGRAM	14	14	14	14	14
	NREGA ACCOUNT	15	15	15	15	15
	MIS ACCOUNT (POST OFFICE/BANK)	16	16	16	16	16
	PUBLIC PROVIDENT FUND	17	17	17	17	17
	KISAN VIKAS PATRA	18	18	18	18	18
	INSURANCE PREMIUM	19	19	19	19	19
	REFUSED TO ANSWER	-777	-777	-777	-777	-777
	OTHERS, SPECIFY	-888	-888	-888	-888	-888
	DO NOT KNOW	-999	-999	-999	-999	-999

D.4	What is the primary purpose for which the member is saving in this account?		SAVINGS 1	SAVINGS 2	SAVINGS 3	SAVINGS 4	SAVINGS 5
		EDUCATION	1	1	1	1	1
		FOR BUSINESS PURPOSE (BUSINESS EXPANSION, PROCUREMENT OF INPUTS, RAW MATERIALS ETC.)	2	2	2	2	2
	Interviewer flag: Do not read options, just circle one	FOR FARMING PURPOSE (PROCUREMENT OF SEEDS, FERTILIZER, ETC.)	3	3	3	3	3
		PURCHASE OF HOUSEHOLD ITEMS	4	4	4	4	4
		JEWELRY PURCHASE	5	5	5	5	5
		REGULAR CONSUMPTION	6	6	6	6	6
		LOAN REPAYMENT (LOAN IN OWN NAME)	7	7	7	7	7
		LOAN REPAYMENT (LOAN IN HUSBAND'S NAME)	8	8	8	8	8
		HEALTH EXPENSES	9	9	9	9	9
		FUTURE EMERGENCY	10	10	10	10	10
		WEDDINGS, FESTIVALS, FUNCTIONS	11	11	11	11	11
		RETIREMENT (SELF)	12	12	12	12	12

			SAVINGS 1	SAVINGS 2	SAVINGS 3	SAVINGS 4	SAVINGS 5
		REFUSED TO ANSWER	-777	-777	-777	-777	-777
		OTHERS, SPECIFY	-888	-888	-888	-888	-888
		DO NOT KNOW	-999	-999	-999	-999	-999

			SAVINGS 1	SAVINGS 2	SAVINGS 3	SAVINGS 4	SAVINGS 5
D.5	What is the total current amount in this account? Interviewer flag: For Chit funds, select '-666'.	₹ _____._____	___.__	___.__	___.__	___.__	___.__
		Not Applicable	-666	-666	-666	-666	-666
		Refused to Answer	-777	-777	-777	-777	-777
		Other (Specify)	-888	-888	-888	-888	-888
		Refused to Answer	-777	-777	-777	-777	-777
		Do Not Know	-999	-999	-999	-999	-999

Section E – Loans

E.1 How many outstanding loans does your household have at present. Please provide the following details on them. (Surveyor: If there are more than four loans, use annex sheet one at the end of the survey)

			Loan 1	Loan 2	Loan 3	Loan 4
1	Which member has borrowed this money? (ENTER THE MEMBER ID)					
2	Who was the money borrowed from?	1: Govt./Cooperative Bank Loan 2: Private Bank Loan 3. SHG 4. Committee/ Chit Fund 5. MFI_____(Mention the name of the MFI) 6. Money Lender 7. Friends/Relatives 8. Others, specify				
3	Which loan cycle is this loan in?					
4	What kind of loan is it?	Individual liability loan…….1 Joint liability loan-------------2 Don't know …….-999 Refuse to answer….-777				
5	How much loan you **applied/asked** for	₹ Not applicable…………-666				
6	How much amount was **sanctioned?**	₹ Not applicable…………-666				
7	What was the **primary (stated) purpose** of borrowing?	Start new business in Normal time……………………………..1 Buy agricultural machinery or inputs (seed, fertilizers, etc)/…...2 Improve existing business/ repaire/construction time.…………………………3 Repay debt …………………..…4				

		Health…………………....…5 Marriage……6 Funeral ………7 Other Festival or special event (puja, ceremony, travel) Home improvement/repair/ construction………9 Unemployment. …………....10 Purchase land… ……………11 Education …………12 Purchase jewelry ……………13 Household consumption ……14 Buy livestock………………..15 Buy more stock ……………..16 Grocery shop ………………17 Petty shop… ……………….18 Dairy Farm…………………19 Garments suppliers…………20 Tailoring and Embrodery……21 Purchasing a vehicle…………22 Other (Specify)_____.-888				
8	**What** was the loan amount **actually used for?**	Start new business in Normal time………………..1 Buy agricultural machinery or inputs (seed, fertilizers, etc)/…...2 Improve existing business/ repaire/construction time.………………………..3 Repay debt…..……………….4 Health ………………..…5 Marriage …………………..6 Funeral ……………………7 Other Festival or special event (puja, ceremony, travel) Home improvement/repair/ construction………9 Unemployment. ……....10 Purchase land…………… 11				

		Education ……………………12 Purchase jewelry …………………13 Household consumption …………14 Buy livestock…………………….15 Buy more stock ………………..16 Grocery shop ………………………17 Petty shop… ……………………..18 Dairy Farm………………………….19 Garments suppliers……………….20 Tailoring and Embrodery…………21 Purchasing a vehicle…………………22 Other (Specify)_____…………-888				
9	When was the money borrowed?	Month: Year: Don't know ……...-999				
10	What is the duration of the **loan period?**	_ (years) _ _ (months) _ _(weeks) _ _ _ (days)Others (Specify) _____-888 Refuse to Answer………..-777 Don't know ……………...-999				
11	How much of the member's loan is currently **outstanding** (principal only)?	₹ Refuse to answer ……-777 Don't kNow				

No.	Question	Options				
12	How do you usually source the repayment for this loan?	Choose 1 or more options that apply: Through agricultural income…..1 Through business income……2 Through other income……….3 With savings…………………4 Borrowing from friends/ family….5 Using money from another loan…6 Other, Specify:_____ Don't know………………..-999 Refuse to answer…………..-777				
13	What is the **interest rate you are paying** for this loan?	_ _ (numerical value) NONE…………………. -555 Others (Specify) _____-888 Refuse to Answer……….-777 Don't know ……………..-999				
14	Did you have to provide any **collateral** to get this loan?	Yes…………………………1 NONE…………………….. 2 Others Specify_____-888				
15	What is the current **repayment schedule?**	Weekly…1 Bi Monthly…..2 Monthly…..3 Once in 3 months …..…………4 Flexible / As and when possible …………………………….5 → 17 Others(specify)…….………….6				
16	In case of fixed repayment schedule, **what is the repayment installment** amount?	___ (numerical value) Others (Specify _____-888 Refuse to answer………..-777 Don't know ……………..-999				
17	Have you ever **missed a payment or paid a repayment** late?	Yes………………...1 skip to 18 No ………………...2 skip to 19 Refuse to Answer……….-777 Don't know ……………..-999				

18	Have you ever missed or paid repayment amount late three times in a row?"	Yes…………………..1 No …………………...2 Refuse to Answer………..-777				
19	Did you ever ask for any extra **amount(top up)** from the same sources before repaying the original amount?	Yes…………………..1 No ………………...2 → E.2 Refuse to Answer…….-777→E.2 Don't know …………..-999→E.2				
20	Was the **topup sanctioned?**	Yes…………………..1 No ………………...2 → E.2 Refuse to Answer…….-777→E.2 Don't know …………..-999→E.2				
21	How much was the **recent top up amount?**	₹ _____				
22	What was the **primary (stated) purpose** of the top up?	Start new business in Normal time..1 Buy agricultural machinery or inputs (seed, fertilizers, etc)/…...2 Improve existing business/repaire/ construction time……………..3 Repay debt…..……………4 Health ……………….....5 Marriage …………………..6 Funeral ……………………7 Other Festival or special event (puja, ceremony, travel) Home improvement/repair/ construction…9 Unemployment. …………10 Purchase land…………… 11 Education …………………12				

		Purchase jewelry …………13				
		Household consumption …14				
		Buy livestock…………………15				
		Buy more stock ………………..16				
		Grocery shop …………………17				
		Petty shop… …………………18				
		Dairy Farm……………………19				
		Garments suppliers…………….20				
		Tailoring and Embrodery………21				
		Purchasing a vehicle……………22				
		Other (Specify)_____.............-888				
23	What was the top up amount actually used for?	Start new business in Normal time ……………………....1				
		Buy agricultural machinery or inputs (seed, fertilizers, etc)/ …...2				
		Improve existing business/ repaire/construction time.………………..3				
		Repay debt…....………4				
		Health ………………5				
		Marriage ………………………6				
		Funeral …………………7				
		Other Festival or special event (puja, ceremony, travel)				
		Home improvement/repair/ construction …9				
		Unemployment. ……......10				
		Purchase land…………… 11				
		Education ……………12				
		Purchase jewelry …………13				
		Household consumption ………14				

		Buy livestock …………………………15 Buy more stock …………………..16 Grocery shop ………………………17 Petty shop … ……………………….18 Dairy Farm …………………………19 Garments suppliers …………………..20 Tailoring and Embrodery ………………21 Purchasing a vehicle ………………………22 Other (Specify) _____......-888				
24	Didyou have any plan to ask for this kind of top up before repaying this loan?	Yes………………………..1 No ………………………...2 Refuse to Answer………..-777 Don't know ……………...-999				

E2	Apart from the loans you mentioned now, have you ever defaulted on any previous loan?	Yes No---☐ Skip to next section
E3	How long ago was this?	----------Months back ----------Years back
E4	Where was this loan taken from?	1: Govt./Cooperative Bank Loan 2: Private Bank Loan 3. SHG 4. Committee/ Chit Fund 5. MFI_____Specify the name 6. Money Lender 7. Friends/Relatives

			8. Others, specify
E5	What was the total amount of the loan?		ENTER LOAN AMOUNT

SECTION F : Trends in Loans

Please give us details of the **last three formal and informal loans** taken in the household.
Surveyor: Note estimated amount suggested by the respondent if the respondent is having trouble coming up with an exact amount.

Interviewer Note: These are the last three formal and informal loans taken by the household and have been repaid

Software check: Have you taken any formal loand that you have completely repaid?

Yes……..1☐

No………0☐ F.2 (Informal loan section)

F.1 Formal loans

			Formal Loan (1)	Formal Loan (2)	Formal Loan (3)
1	Who was the money borrowed from?	1: Govt./Cooperative Bank Loan 2: Private Bank Loan 3. SHG 4. Committee/ Chit Fund 5. MFI_____(Specify the name of the MFI) Others specify			
2	How much	Rs			

	was the loan amount?				
3	What was the loan amount used for?	Start new business in Normal time……………………………………..1 Buy agricultural machinery or inputs (seed, fertilizers, etc)/…...2 Improve existing business/repaire/construction time……………………….…...3 Repay debt…..…………………………….……4 Health …………………………..…5 Marriage …………………………6 Funeral ………………………………7 Other Festival or special event (puja, ceremony, travel) Home improvement/repair/construction………9 Unemployment. ……………….....…10 Purchase land……………………… 11 Education ……………………….12 Purchase jewelry ……………………….13 Household consumption ……………….14 Buy livestock………………………….15 Buy more stock ………………………..16 Grocery shop ……………………….17 Petty shop… ………………………….18 Dairy Farm………………………….19			

		Garments suppliers……………………20 Tailoring and Embrodery………………21 Purchasing a vehicle………………………22 Other (Specify)_____.............-888			
4	Did you loan money to someone else from this amount?	Yes…….1 No…….2 Don't know……-999 Refuse to answer….-777			
5	What is the duration of the loan period?	_ (years) _ _ (months) _ _ (weeks) _ _ _ (days) Others (Specify _____-888 Refuse to answer………….. -777 Don't know ………………..-999			
6	How did you usually source the repayment for this loan?	Choose 1 or more options that apply: Through agricultural income…..1 Through business income……2 Through other income……….3 With savings…………………4			

		Borrowing from friends/family….5 Using money from another loan…6 Other, Specify:_____**-888** Don't know…………………..-999 Refuse to answer…………..-777			
7	What was the interest rate you were paying for this loan?	_ _ _ _ _ (numerical value) Others (Specify _____-888 Refuse to answer…………………..-777 Don't know…………………. -999			
8	Did you ever missed a payment or paid a repayment late on this loan? ?	Yes ....1 No 2			

Software Check: Have you ever taken an Informal loan?

Yes……..1

No………0☐ F.3

F.2 Informal loans

			Informal loans (1)	Informal loans (2)	Informal loans (3)

1	Who was the money borrowed from?	1. SHG 2. Committee/ Chit Fund 3. Money Lender 4. Friends/Relatives 5. Others, specify			
2	How much was the loan amount?	Rs			
3	What was the loan amount used for?	Start new business in Normal time…………………………………..1 Buy agricultural machinery or inputs (seed, fertilizers, etc)/…...2 Improve existing business/repaire/construction time………………………….…..3 Repay debt…..………………………………… …4 Health …………………………...…5 Marriage ……………………….6 Funeral ………………………………7 Other Festival or special event (puja, ceremony, travel) Home improvement/repair/construction………9 Unemployment. ……………...…10			

		Purchase land……………………… 11 Education ………………….……12 Purchase jewelry …………………….13 Household consumption ………………14 Buy livestock…………………………15 Buy more stock ……………………...16 Grocery shop …………………….17 Petty shop… ………………………..18 Dairy Farm…………………………..19 Garments suppliers……………………20 Tailoring and Embrodery………………21 Purchasing a vehicle………………………22 Other (Specify)_____.............-888			
4	Did you loan money to someone else from this amount?	Yes…….1 No…….2 Don't know……-999 Refuse to answer….-777			
5	What was the duration of the loan period?	_ (years) _ _ (months) _ _ _ (days) Others (Specify _____-888 Refuse to answer…….-777 Don't know………….-999			

6	How did you usually source the repayment for this loan?	Choose 1 or more options that apply: Through agricultural income…..1 Through business income……2 Through other income……….3 With savings…………………4 Borrowing from friends/family….5 Using money from another loan…6 Other, Specify:_____ Don't know………………..-999 Refuse to answer…………..-777			
7	What was the interest rate you were paying for this loan?	_ _ _ _ _ (numerical value) Others (Specify _____-888 Refuse to answer………..-777 Don't know ……-999			
8	Did you ever missed a payment or paid a repaymen	Yes ……1 No …….2			

	t late on this loan?				
10	What was the reason you borrowed from informal lenders? Interviewer Note: Probe on why they prefer informal to formal sources of lending	TEXT BOX			

F.3) Would you take a loan for the following purposes? What would be the source that you would prefer for these loans and the reason behind such a choice:

1	**Emergency**	1.YES 2.NO →skip to 2 Source of Loan: 1: Govt./Cooperative Bank Loan 2: Private Bank Loan	Reason (multiple) 1 = Easy to get loan 2 = Cheaper interest rate 3 = Flexible repayment structure 4 = No need for documents 5 = Others, specify

		3. SHG	
		4. Committee/ Chit Fund	
		5. MFI	
		6. Money Lender	
		7. Friends/Relatives	
		8. Others, specify	
2	**Agriculture**	1.YES	Reason (multiple)
		2.NO →skip to 3	1 = Easy to get loan
			2 = Cheaper interest rate
			3 = Flexible repayment structure
		Source of Loan:	
			4 = No need for documents 5 = Others, specify
		1: Govt./Cooperative Bank Loan	
		2: Private Bank Loan	
		3. SHG	
		4. Committee/ Chit Fund	
		5. MFI	
		6. Money Lender	
		7. Friends/Relatives	
		8. Others, specify	
3	**Business**	1.YES	Reason (multiple)
		2.NO →skip to 4	1 = Easy to get loan

		Source of Loan: 1: Govt./Cooperative Bank Loan 2: Private Bank Loan 3. SHG 4. Committee/ Chit Fund 5. MFI 6. Money Lender 7. Friends/Relatives 8. Others, specify	2 = Cheaper interest rate 3 = Flexible repayment structure 4 = No need for documents 5 = Others, specify
4	**Day to day expenses/ Cash smoothening**	1.YES 2.NO →skip to 5 Source of Loan: 1: Govt./Cooperative Bank Loan 2: Private Bank Loan 3. SHG 4. Committee/ Chit Fund	Reason (multiple) 1 = Easy to get loan 2 = Cheaper interest rate 3 = Flexible repayment structure 4 = No need for documents 5 = Others, specify

		5. MFI	
		6. Money Lender	
		7. Friends/Relatives	
		8. Others, specify	
5	**Others, specify** _____	1.YES 2.NO Source of Loan: 1: Govt./Cooperative Bank Loan 2: Private Bank Loan 3. SHG 4. Committee/ Chit Fund 5. MFI 6. Money Lender 7. Friends/Relatives 8. Others, specify	Reason (multiple) 1 = Easy to get loan 2 = Cheaper interest rate 3 = Flexible repayment structure 4 = No need for documents 5 = Others, specify

F.4) While applying for MFI loans, do you **report your existing loans to the** loan officers?

(Surveyor note: In case of respondents who have only one loan (i.e. first one), ask them if they happen to seek a second loan, would they report their existing loan to the officers)

A. Yes ……1---▢F.6

B. No 2

F.5) If no, why not? (Multiple choice) _____

    A. Fear of being refused more loans
    B. Fear of being charged high interest rate
    C. Fear of cancelling existing loan
    D. Fear of being refused a topup if requested, on the existing loan
    E. Refuse to answer………-777

F.6) Have you ever **paid an instalment on behalf of another group member**?

A. yes

B. No

C. Don't know

D. Refuse to answer……….-777

F.7) Has any **group member paid an instalment on your behalf**?

A. Yes

B. No

C. Don't know

D. Refuse to answer………-777

F.8) Have you ever borrowed from one lender to payback another lender?

    A. Yes………………………..1
    B. No………………….....2
    C. Don't know…………....…-999
    D. Refuse to answer……-777

F.9) Would your household prefer to borrow from a single source if they gave you a bigger loan?

    A.Yes………………………..1
    B. No…………………….....2 ⸏F.11
    C. Don't know…………....…-999⸏ F.11
    D. Refuse to answer……-777☐F.11

F.10) Which source would you prefer?

A. Govt./Cooperative Bank Loan

B. Private Bank Loan

C. SHG/ Committee/ Chit Fund

D. MFI

E. Money Lender

F. Friends/Relatives

G. Others, specify

H. Refuse to Answer

I Do Not Know

F.11) What is the size of the loan you would require to completely fulfill the credit needs of your household?

  A. Less than 50,000
  B. 50,000-1 Lakh
  C. 1-2 Lakh
  D. 2-3 Lakh
  E. More than 3 Lakh
  F. Do not need another loan
  G. Don't know
  H. Refuse to answer…..-777

F.12) Select the order in which your HH **prioritized repayments of the loans** below:

SOFTWARE NOTE: We would like a numbered text box, for the surveyor to enter the preferences

A. Govt./Cooperative Bank Loan

B. Private Bank Loan

C. SHG/ Committee/ Chit Fund

D. MFI

E. Money Lender

F. Friends/Relatives

G. Others, specify

I. Do not know---→ Section G

F.12.1) Can you explain reason for your above preference?

TEXT BOX

F.13) Based on your experiences with various lenders, whose recovery practices have you been more comfortable with?

A. Govt./Cooperative Bank Loan

B. Private Bank Loan

C. SHG/ Committee/ Chit Fund

D. MFI

E. Money Lender

F. Friends/Relatives

G. Others, specify

I. Do not know---→ Section G

F.14 Please specify the reason for this preference?

   A. Non-coercive
   B. Come home to pick up repayment amount
   C. Not so strict about deadline
   D. Others(specify)
   E. Refused to answer…..-777

SECTION G .

G.1 Sometimes people find that their income does Not quite cover their living costs. In the last 12 months, has this happened to you?

A. Yes
B. No ☐G.3
C. Don't know ☐G.3
D. Not applicable (I don't have any personal income) ☐G.3
E. Refuse to answer……-777☐ G.3

G.2 What did you do to make ends meet the last time this happened (multiple choice)? *(Surveyor: Probe with: Did you do anything else?. Mark all that are relevant. DO NO READ OUT OPTIONS: although examples can be given)*

A. Existing resources

1. Draw money out of savings or transfer savings into current account
2. Cut back on spending, spend less, do without
3. Sell something that I own

B. Creating resources

4. Work overtime, earn extra money.

C. Access credit by using existing contacts or resources

5. Borrow food or money from family or friends
6. Borrow from employer/salary advance
7. Pawn something that I own
8. Take a loan from my savings and loans clubs

F. Borrow from existing credit line

9. Use an existing personal loan from a financial service provider (including bank, credit union or microfinance)
10. Use an existing loan from an informal provider/moneylender

G. Access new line of credit

11. Take out a personal loan from a financial service provider (including bank, credit union or microfinance)
12. Take out a loan from an informal provider/moneylender

G.Fall behind/ go beyond arranged amount

13. Pay my bills late; miss payments
14. Miss loan repayment cycles

H. Other responses (Please specify) _____

I. Don't know

J. Refuse to answer

G.3 According to you, how many loans worth 50,000 each do you think is ok to have for a household with your socio-economic context?

OPEN TEXT BOX (WTH NUMBER AND TEXT)

Section H: Business Information

H.0) Does this household own a business?

Yes→ J.1

No→ End of survey

H.1) who manages this business?

H.2) where is the business located? (Full address)

H.3) Is your Business outlet-

    v) Self-owned→J.
    vi) Parent/Family owned→J
    vii) Owned with partner→J
    viii)Refused to answer→
    ix) Does not know→

H.4) Is the premise of the business outletrented?

       Yes→1
       No→0

H.5) When did you establish your business?

        i)   Less than a year ago
        ii)   1-2 years
        iii)   2-3 years
        iv)   3-4 years
        v)   4 years or more

H.6) How many people work in your business?

        vi)   1-10
        vii)   10-20
        viii) 20-30
        ix)   30-40
        x)   40 or more
        xi)   Refused to Answer→ J.8
        xii)   Does not know→J.8

H.7) Out of these, how many are family members?

H.8) What are the lean periods for sales in your business? (Multiple choice)

January	February	March	April	May	June
July	August	September	October	November	December

H.9) What are the peak periods for sales in your business? (multiple choice)

January	February	March	April	May	June
July	August	September	October	November	December

H.10)   What are the terms of purchase?

(Surveyor note: Terms of purchase means, how frequently the business buys its raw materials or goods.)

     i) Daily
    ii) Weekly
    iii) Fortnightly
    iv) Monthly
    x) Half yearly
    xi) Yearly
    xii) Other (Specify)
    xiii)Refused to answer

H.11) Details on Business Income

S.No	Sources	Amount
	Total Business income	
I	Present Value of Stock	
Ii	1st quarter (April to june) average sale	
Iii	2nd quarter (July to sep) average sale	
Iv	3rd quarter average sale	
V	4th quarter (jan to march) average sale	
Vi	Total sales	
Vii	Net monthly average sale	

H.12) Details on business expenses

S.no	Application	Amount
	Total business Expenses	
I	Purchase of equipment (machinery, office equipment etc)	
ii	Purchase of property (office space, branches etc)	
iii	Purchase of furniture	
iv	Purchase of raw materials for production (livestock, good etc)	
v	rent	
vi	labour	
vii	transportation	
viii	Equipment rent	
ix	Telephone	
x	Electricity & water	
xi	Others	

APPENDIX-2

Cash-flow Questionnaire-Study instrument 2

Identification particulars	
Name of the MFI	
Full address	
City	
State	
Manager name	
Manager contact number	
MFI loan officer name	
MFI loan officer contact number	
Date of interview (give options for multiple visits)	
Place of interview	
Start time of interview	
End time of interview	

Section-1: Information on loan products and their uptake

1) What type of loans for JL do you offer?

Name of loan products
1)
2)
3)
4)
5)
6)
7)
8)
9)
10)

2) Could you briefly describe each of these JL loan products along with their eligibility criteria and the dates on which they were introduced?

Name of loan products	Eligibility Criteria	Date on which they were introduced
1)		
2)		
3)		
4)		
5)		
6)		
7)		
8)		
9)		
10)		

3) What has the uptake on the JL loan products been like?

Loan products	Uptake
1)	
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	

4) Do you think the uptake of JL loans are more than IL loans? If yes, could you elaborate why that is so?
   Suggested code: If no, then go to Section-2

Section 2: Estimation of borrowing capacity of a client and the efficacy of the tools

1) What kind of background work do you do before venturing into a new area/village?
   Suggested codes: Village surveys, educating the clients on credit discipline

2) Can you walk us through the different procedures and formalities you follow before giving out a loan?
   Suggested code: Interviews with potential buyers.
   (Also focus on the tools/ instruments that they use for estimation of cash-flow.)

Estimation tools/Instruments
1)
2)
3)
4)
5)
6)
7)
8)

3) When did you/MFI start using these tools/instruments?

Estimation tools/Instruments	Date
1)	
2)	
3)	
4)	
5)	
6)	

7)	
8)	
9)	
10)	

4) Are these estimation tools/instruments different across Joint Liability groups and Individual liability groups? *(Probe further if they say "Yes". Try to get details on how and why they differ across both the groups. Put "Yes" under the required heading and in front of the relevant estimation tool)*

Process of estimation across products and liability group		
Estimation tools	Joint Liability group	Individual liability group
1)		
2)		
3)		
4)		
5)		
6)		
7)		
8)		
9)		
10)		

5) Did the tools/instruments undergo any modifications?

Estimation tools/Instruments	Yes/No
1)	
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	

6) When was the last time this process / tool got tweaked or revised?

Time period when these estimation processes were last changed				
Estimation tool	Joint liability group		Individual liability group	
	Month	Year	Month	Year
1)				
2)				
3)				
4)				
5)				
6)				
7)				
8)				
9)				
10)				

7) Going by the past experience of your organization, how accurate are these processes/tools for estimating a client's borrowing capacity?

(On a scale of 1 to 4, where 1-Not accurate, 2- Needs major changes, 3- Somewhat Accurate, needs minor changes, 4-Perfectly accurate, put a" tick" under the relevant box)

Estimation tools	Joint liability group				Individual liability group			
	1	2	3	4	1	2	3	4
1)								
2)								
3)								
4)								
5)								
6)								

Section-3: Default rate on the loans

1) What is the default rate for the loans given to the clients in the last one year?

Name of the loan product	Default rate under Joint Liability group
1)	
2)	
3)	
4)	
5)	
6)	
7)	

2) Is there any change in the default rate for loans taken after the process got tweaked? *(If yes, what was it before and after)*
Suggestion: Skip this question if there have been no changes in the processes

Loan products	Joint liability group	
	Default rate (Before)	Default rate (After)
1)		
2)		
3)		
4)		
5)		
6)		
7)		

3) Could you specify the reasons that brought about the changes in the default rate for each JL loan product?

Section-4: Loan products and its uses

1) What are the typical uses of the JL loan funds borrowed by your clients?

Loan products	Joint liability			
	Use 1	Use 2	Use 3	Use 4
1)				
2)				
3)				
4)				
5)				
6)				

2) Do your clients use the loans provided by you for their intended purposes?
Code: If no, follow it up with the question "What is the proportion of borrowers who deviate from the intended purposes of loans?"

3) How do you measure/check whether the loans are being used for their intended purposes?
Suggested codes: Frequency of village visits, survey on loan use etc

4) What according to you are the main reasons for this trend *(i.e. clients deviating from the actual usage of loans)?*

5) What are the usual deviations *(i.e. the actual usage of loan)* that you have observed for each loan product in the joint liability group?

Section-5: Other questions

1. How are top-up requests by your clients on their JL loans assessed?

2. Is there a process that helps the MFI gauge the informal loan situation of a client's household?

APPENDIX-3

MFIs that we interviewed

Cashpor

The company was founded in 1996 and is based in Varanasi, India, It provides microfinance to below poverty line women in eastern U.P. and Bihar. It offers income generating loans, emergency loans, Bara loans. It operates only on JLG model.

Janalakshmi

Janalakshmi Financial Services Pvt Ltd is a Bangalore based NBFC-MFI with gross loan portfolio of ₹53, 233 cr as on 31st March 2016. The organization's operation spreads over 16 states / UTs (Haryana, Karnataka, Madhya Pradesh, Maharashtra, Delhi, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Gujarat, Uttarakhand, Pondicherry, Bihar, Chhattisgarh, West Bengal and Jharkhand) with 9,669 branches reaching 3.25 crore clients. It provides loans on both the JLG model as well as the Individual model. The loan products that janalakshmi offers under the JL model are income generation loans and loans for any other use like home improvement, emergency, sanitation etc. The loan products that Janalakshmi provides under the Individual model are Nano loans, Home improvement loans, Jana kisan loans, Jana vidya loans, super nano loans, MSME loan, equipment & machinery financing and long term business loans.

Margdarshak

Margdarshak Financial Services Ltd is a Lucknow based NBFC-MFI with gross loan portfolio of ₹170.85 crore in March 2016. The organization's operation spreads over 5 states (Uttar Pradesh, Bihar and Haryana, Uttarakhand & Himachal Pradesh) with 120 branches. It provides loans on the JLG model. The type of loan products that it offers are Income generation loan, secondary loan (top up loan), educational loan, clean energy/product loan & sanitation loan.

Sonata Microfinance

Sonata Finance Pvt Ltd is headquartered in Lucknow with gross loan portfolio of ₹1026 crore. The organization's operation spreads over 6 states (Uttar Pradesh, Madhya Pradesh, Uttarakhand, Haryana, Rajasthan and Bihar) with 314 branches reaching 586,297 clients. They provide loans on both the JLG model as well as the Individual model. The loan products that they provide under the JL model are income generation loans, emergency loans, sanitation loans, home improvement loans, utility loans and business loans. The loan products they offer as part of IL model is mainly loans related to setting up or improvement of business.

Grameena Koota

Grameen Koota Financial Services Pvt Ltd., is a Bangalore based NBFC-MFI with gross loan portfolio of ₹3025.62 cr. The organization's operation spreads over 5 states (Karnataka, Maharashtra, Tamil Nadu, Madhya Pradesh & Chhattisgarh) with 390 branches reaching 16,32,827 clients. They provide loans on both the JLG and Individual model. The loan products that they offer under JL model are Income generation loans, Emergency loans, Family welfare loans and sanitation loans. The loan products that Grameena koota provides under Individual model are business development loans and Home reconstruction loans.

Sanghamitra Microfinance

Sanghamitra Microfinance Financial Services Ltd is a Bangalore based NBFC-MFI with gross loan portfolio of ₹140.04 crore in March 2015. The organization's operation spreads over 4 states (Karnataka, Maharashtra, Madhya Pradesh, Tamil Nadu) with 98 branches. It provides loans on the JLG model. The type of loan products that it offers are Income generation loan, Home improvement loans and loan for any other purposes.

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