

**MICROFINANCE & LOAN REPAYMENTS:
A STUDY OF IMPACT OF MICROCREDIT
REPAYMENTS ON ECONOMICALLY
WEAKER SECTIONS IN CENTRAL UTTAR
PRADESH, INDIA**

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in

Management

By

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I, hereby, declare that the contents reported in this thesis, entitled **Microfinance & Loan Repayments: A Study of Impact of Microcredit Repayments on Economically Weaker Sections in Central Uttar Pradesh, India**, is an authentic record of my work carried out under the supervision of **Dr. Sankalp Srivastava (Supervisor)** and **Dr. Gaurav Pande (Co-supervisor)**. I have not submitted this work elsewhere for any other degree or diploma of any university or institution.

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“Confidence is the feeling by which the mind embarks on great and honourable courses with a sure hope and trust in itself.”

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PREFACE

Microfinance is the supply of loans, savings, and other basic financial services to the poor. The beginnings of the microfinance movement are most closely associated with the economist **Muhammad Yunus**, who in the early 1970's was a Professor in Bangladesh. In the midst of a country-wide famine, he began making small loans to poor families in neighboring villages in an effort to break their cycle of poverty. Microfinance in India can trace its origins back to the early 1970s when the Self - Employed Women's Association ("SEWA") of the state of Gujarat formed an urban cooperative bank, called the Shri Mahila Sahakari Bank, with the objective of providing banking services to poor women employed in the unorganized sector in Ahmedabad City, Gujarat. The microfinance sector went on to evolve in the 1980s around the concept of SHGs, informal bodies that would provide their clients with much-needed savings and credit services.

(RRY) has been formulated by modifying the Interest Subsidy Scheme for Housing the Urban Poor (ISHUP) piloted in the 11th Plan period with enhanced scope and coverage. RRY is a Central Sector Scheme applicable in all the urban areas of the Country. RRY is an instrument to address the housing needs of the EWS/LIG segments in urban areas as well as to channelize institutional credit to the poorer segments of the society thereby, increasing home ownership in the country. Rajiv Rinn Yojana is effective from October 1, 2013. RRY provides for interest subsidy of 5% (500 basis points) on loans granted to EWS and LIG categories to construct their houses or extend the existing ones. The upper limit for the loan is Rs 5 lakhs for

EWS and 8 lakhs for LIG (interest subsidy would, however, be limited to the first Rs 5 lakhs of the loan amount, in case the loan exceeds this amount). **Under RRY, Economically Weaker Section (EWS) is defined** as households having an average annual income up to Rs. 1,00,000/- while Low Income Group (LIG) is defined as households having an average annual income between Rs.1,00,001/- and up to Rs.2,00,000/-.

Under the new Housing Scheme – Prime Minister’s Awaaz Yojana launched in 2015 with the aim of providing Housing for all by 2022, EWS households are defined as households having an annual income of up to Rs.3,00,000/-.

The study has focused on the repayment problems of Loans to be taken by the clients of **‘For Profit Making Microfinance Institutions (MFIs)’ and Not for Profit Making Microfinance Institutions.** Micro financing has boomed in recent years, though founded as non-profit institutions, the Indian Microfinance industry has been turbocharged by private – equity firms, nearly doubling in the year ended March 31, 2008, delivering \$ **2.5 billion** Loans. Many microfinance lenders have recently registered as For – Profit finance firms with the Reserve Bank of India, giving them wider access to funds but limiting them to ‘reasonable’ interest rates. Those rates are still high – between **20%** and **40%** annually, according to the Consultative Group to Assist the Poor, or CGAP, hosted at the World Bank location. The other factors that are believed to influence repayment problem are varied and include variables such as gender of the borrower, business expertise, amount of loan borrowed, poverty indicator, education and many others. The approach of **‘For Profit Making MFIs’**

and ‘Not For Profit Making MFIs’ will not be sufficient to alleviate poverty at the required rate in order to meet the dire poverty in which millions in India live today.

The researcher has taken **6** Microfinance Institutions i.e. Sonata Finance Pvt Ltd, NEED (Network of Entrepreneurship and Economic Development), Margdarshak Financial Services Ltd, CREATE (Centre for Rural Entrepreneurship and Technical Education), Bhartiya Microcredit and RGMVP (Rajiv Gandhi Mahila Vikas Pariyojna) and the 500 respondents who are the clients of these Microfinance Institutions in his research.

Our analysis was in the form of holistic issues derived after an exposure to MFIs, their employees as well as their clients. The schedules were filled with the respondents who are the clients of different Microfinance Institutions and the questionnaires filled by the management, employees, and field officers of the Microfinance Institutions. However, the aim was to understand the impact of repayments of Loans on economically weaker sections.

In this research, the researcher has used Central Uttar Pradesh region as a population (Universe) size in which 8 districts i.e. **Lucknow, Kanpur Nagar, Kanpur Dehat, Sitapur, Hardoi, Unnao, Barabanki & Raebareli** are taken under **Sampling Frame**.

This research includes both males and females who are the clients of Microfinance institutions and the employees of 6 Microfinance Institutions. The purpose behind the selection of these districts is to reach the people hailing from rural areas and semi - urban areas in order to analyze the real problems of clients faced related to

repayments of the loans. For the purpose of this research, the researcher reached the clients of the selected Microfinance Institutions who are living in these districts of Central Uttar Pradesh. Further, there are two major reasons for specific selection in this study. First, Central Uttar Pradesh has both characteristics of rural and semi-urban features where like other parts of the country, microfinance services have been growing rapidly with increasing cases of outstanding Loans. Second, the location was within the reach of the researchers especially in terms of associated travel and data collection costs since there was no external funding for this research.

In the findings, the researcher describes that the sample consisted of both male and female respondents. Out of the 500 survey respondents, about 64% were male while the remaining 36% were female. About 65% of all survey respondents were in the 26 to 50 years of age group whereas about 13.2% were less than 26 years of age. It was expected that Middle-aged people would have more loan contracts than younger ones and older ones reflecting the family obligations. In terms of education, 62.6% of all survey respondents were primary school dropouts, 28.8% had completed Secondary Education, and about 9% had completed Graduation. It is interesting, however, to note that even completely illiterate people were entrusted with loans. In this study, it was expected that individuals with higher levels of education would have fewer loan contracts as compared to individuals with lower levels. The existence of multiple loans, reasons for existence of multiple loans, and effects on repayment schedules are summarized. Results indicate that about 89.2% of all survey respondents had single loan contracts with MFIs while 10.8% had two or more loan contracts with different

MFIs at the same time. The researcher asked respondents to mention the one major reason for existence of multiple loan contracts. Results show that Family Obligations (44.4%) are the major reasons for the Loan application. During the extensive interviews, the researcher learned that some MFIs provide loans between Rs. 10,000 to Rs. 50,000 equivalent to USD 151 to USD 758. These amounts are too meagre to conduct any meaningful business; as such clients have to take the small loans from different sources to reach their goals, hence 25% of them take multiple loans due to small amount of the loan. Contrary to the expectation, the researcher finds that Gender, Age, Qualification Level and number of Dependants did not significantly affect the number of loan contracts an individual had. Again, as expected, the researcher finds that the lower the level of education among respondents, the more the numbers of loan contracts exist.

Finally, the researcher concludes that from this research report 40% of the Clients admit that High Operating Cost is the main reason for a High interest rate of Microfinance while 30% Microfinance Institutions admit that due to loan Losses there is High rate of interest of the Loans. While checking the economic effects on households related to Loan repayments to the Microfinance Institutions, the researcher finds out that Monthly income of Clients does not have effect on Loan Repayments to Microfinance Institutions. When the researcher finds out the effectiveness of Microcredit for the Clients, he understands that 69% of the Clients are not satisfied with the services of MFIs and when the main cause of dissatisfaction is checked, the researcher comes to conclude that 57% of the Clients are worried due to the High interest rates. When the researcher goes to check that whether

Microfinance Institutions are satisfying the needs of clients or not, he observes that the association between Utilization of Loans and Positive Impact of Business is considered to be extremely significant statistically in our analysis of the data which shows a positive indication for MFIs. That means Utilization of Loan and impact on Business are dependent on each other. Whether the clients of Microfinance Institutions are repaying the Loan on time or not, from the finding of data analysis, the researcher conclude that 63% of the clients are not paying the loan on time while only 37% of the Clients of MFIs are paying loans on time. That is an alarming situation for MFIs, here Clients do not repay the Loans due to many reasons, one of the major reasons is Family Obligation, Business etc., while **late or non-repayment** of Loans is one of the Causes of High Interest Rates of Loan of MFIs according to Microfinance Institutions.

During the study, it was very difficult to win the trust of the respondent in order to monitor each affected factors (different issues of the family) regarding the repayments of Loans to the Microfinance Institutions. The result of this thesis could, therefore, be affected by the circumstance that has somewhat limited our work scope. The study shall be confined within the Central Uttar Pradesh region. Any change in the government policies may affect the findings of the research.

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CHAPTER 1: INTRODUCTION

“Civilization has given us enormous successes: going to the moon, technology. But then this is the civilization that took us to debt, environmental crisis, every single crisis. We need a civilization where we say goodbye to these things. : Dr. Muhammad Yunus – Father of Microfinance”

1.1 The Concept of Microfinance:

Microfinance can be defined as the entire range of financial services provided to the economically weaker sections such as savings, money transfers, investment credit, and housing finance & also includes the need for skill up gradation & entrepreneurial development that would enable them to overcome poverty. Microfinance provides support of credit in small doses along with training & other related services to people who are resources – poor but who are able to undertake economic activities.

1.1.1 Principles of Microfinance

The concept of Microfinance works on the following principles that are as follows:

- The weaker sections of the society are able to initiate savings despite their low – level & sporadic incomes.
- Lack of access to capital assets/credit is a constraint for existing & potential enterprises.

- Self – Employment/ Enterprise formulation is a viable means for poverty alleviation.

1.2 Definitions of Microfinance:

According to James Roth,

“Microfinance is a bit of a catch - all-term. Very broadly, it refers to the provision of financial products targeted at low-income groups. These financial services include credit, savings, and insurance products. A series of neologisms has emerged from the provision of these services, name micro-credit, micro-savings, and micro-insurance”.

NABARD has defined microfinance as follows:

“Microfinance is all about the provision of thrift, credit and other financial services and products of very small amount to the poor in rural, semi - urban and urban areas for enabling them to raise their standard of living”.

1.3 Characteristics of Microfinance:

- (i) Loans are given without Security.
- (ii) Loans issued to those people belonging to BPL (Below poverty line) criteria.
- (iii) Members of the SHG’s (Self Help Groups) fall under the ambit range of microfinance.
- (iv) Normally, the maximum limit of the loan under microfinance is Rs 25, 000/-.
- (v) Period of the issue of short- terms loan is usually up to the term of one year.
- (vi) Repayments of loans are broken up into easy installments.

(vii) Installments made up from both principal amount and interest, which repaid in course of time.

(viii) Significantly higher interest rates on credit as compared to commercial bank rates but lower than unscrupulous loan-shark rates, which reflect the labor-intensive work associated with making small loans and allowing the microfinance intermediary to become sustainable over time.

(ix) Frequent access to the microfinance institution saves the time and money of the client and permits the institution to have a better idea about the clients' financial and social status.

(x) Short processing periods (between the completion of the application and the disbursement of the loan).

(xi) The clients who pay on time become eligible for repeat loans with higher amounts.

(xii) The use of decreasing interest rates over several loan cycles as an incentive for timely repayments. Huge loans are less costly to the MFI, so some lenders provide huge loans at relatively lower rates.

(xiii) No collateral is required contrary to formal banking practices. Instead of collateral, microfinance institution uses alternative methods, like, the assessment of clients' repayment potential by running cash flow analysis, which is based on the stream of cash flows, generated by the activities for which loans are taken.

Today, the need of microfinance is to ensure the survival of poor people having low skills and minimum education who are without any safety net and who are required to earn a livelihood even in resource - poor regions. The goal of

microfinance institution is to ensure that the poor are enabled to meet their fund requirements in emergencies or set up micro enterprises to earn their livelihoods.

1.4 History of Microfinance:

The beginning of the microfinance movement is most closely associated with the economist **Muhammad Yunus**, who in the early 1970's was a Professor in Bangladesh. In the midst of a countrywide famine, he began making small loans to poor families in neighboring villages in an effort to break their cycle of poverty. He started micro credit by giving a loan of \$ 27. In India, the concept of microfinance has existed since the year 1904, when the Cooperative Societies Act was passed for ensuring production credit loans for farmers through primary credit societies. The Syndicate Bank, established in the year 1921, concentrated on raising micro deposits in the form of daily/ weekly savings and sanctioned under social banking in the year 1967. After bank nationalization in the year 1969, microfinance concepts in banking institutions once again came to the fore, when the **Self - Employed Women's Association** ("SEWA") of the state of Gujarat formed an Urban Cooperative Bank, called the Shri Mahila Sahakari Bank, with the objective of providing banking services to poor women employed in the unorganized sector in Ahmedabad city, Gujarat. The microfinance sector went on to evolve in the year 1980s around the concept of **SHGs** (Self Help Groups) and **JLGs** (Joint Liability Groups), informal bodies that would provide their clients with much – needed savings and credit services. The providers of Microfinance are well known as MFI's (Microfinance Institutions). Like other financial institutions, MFI's charge an interest

rate for the loans they give to their clients. This is a way for the MFI to be self – Sustaining so that it can be a stable, long-term provider of finances in its area of operations. A self-sustaining MFI is crucial to the health of the sector and for it to continue to provide microfinance services to its clients. However, because managing many small loans costs more money for any institution than managing one large loan, an MFI typically needs to charge higher interest rates to cover their costs. The volume of transactions is very small, whereas the fixed cost of those transactions is very high. It cannot vary with the size of the loan. The higher a producer has fixed costs in the proportion of his total cost, the element of risk increases in the same proportion. Moreover, if the demand for the product falls or the marginal costs increases, it becomes very difficult to adjust the cost by cutting output. This cut will reduce revenue out of which the client has to pay the principal amount as well as interest on the loan. This needs to be rationalized.

Asia has been leading the global exposure to microfinance: it is estimated that in 2010, 75% of the world's microfinance borrowers (around 74 million borrowers) were based in Asia (Microfinance Information Exchange, 2012). 7 out of every 10 of such borrowers live in India (32 million) or Bangladesh (22 million). Furthermore, over the past decade, India has become the most dynamic country for microfinance. While the number of borrowers in Bangladesh remained broadly stable in the 2000s, after an earlier period of growth in the 1990s, in India the number of borrowers increased five-fold in just six years until 2010. Most households in developing countries suffer from excessive poverty. Microfinance programs have been introduced with the aim of developing microenterprises and coping with poverty among the destitute people of

the developing countries. Under the microfinance program, the financial services have been provided to the low-income households as an efficacious measure of microenterprise development and alleviating poverty in the developing countries. Apprehended in the 1990s, the paradigm of microfinance was advanced to improve access to credit for small producers, landless farmers, and other low-income individuals, particularly women and the vulnerable or the disadvantaged groups.

Table No. 1.1: Microfinance Institutions with purpose and interest rates

S.No.	Name of MFIs	Purpose of Loan	Interest Rate
1.	SHARE	Production / Housing	15 %
2.	Nari Nidhi	Production	12 %
3.	WWF	Production	18 %
4.	RDI	Production / Consumption	24 %
5.	Shanti Dhan	Production / Consumption	13 %
6.	MYRADA	Production / Consumption	24-36 %
7.	SPMS	Production / Consumption	24-60 %

Source: Studying by EDA Rural System, Gurgaon (2005)

1.5 Economically Weaker Sections:

The Constitution of India does not list the right to work among the Fundamental Rights, but one of the Directive Principles of State Policy enjoins upon the State,

"within the limits of its economic capacity and development to make effective, provision for securing the right to work". This does not bother anybody very much, nor has its meaning been fully grasped by many people, judging from the angry comment of a knighted financial magnate that it is everyone's 'duty to work'. The 'right to work' genuinely puzzled the worthy man.

Now, no one may know for sure the state of unemployment in the country. A Study Group headed by **Shri Jayaprakash Narayan** constituted by the Government of India that was asked to look into the condition of the weaker sections of the rural community wanted to upset the apple cart by asking the Government "to guarantee employment to every citizen who is prepared and fit to do manual labour". It wanted the Government not only to undertake this responsibility but also to make a declaration to that effect. Such a guarantee and declaration, the Team felt, would cause "a psychological transformation and lift up the pall of despair and discouragement that overshadows millions of Indian homes. It might indeed prove to be a spark to kindle the energies of a somnolent giant".

Ministry of Housing & Urban Poverty alleviation determines the income ceiling of the urban poor categorized as Economically Weaker Section (EWS) and Lower Income Group (LIG) households. The monthly income ceilings for the Economically Weaker Section (EWS) and Lower Income Group (LIG) households are presently fixed at Rs. **5000/-** and Rs. **5001/ – 10,000/-** (based on 2008 prices and effective since March 2010). Further, the income ceilings have been revised by the Steering Committee of the ISHUP (Interest subsidy scheme for housing the urban poor)

scheme, it has been decided with the approval of competent authority to increase the income limits/ceilings with respect to **EWS** and **LIG** as under:

For **EWS**: Rs. 1, 00,000/- as household income per annum.

For **LIG**: Rs. 1, 00,001/- to Rs. 2, 00,000/- as household income per annum.

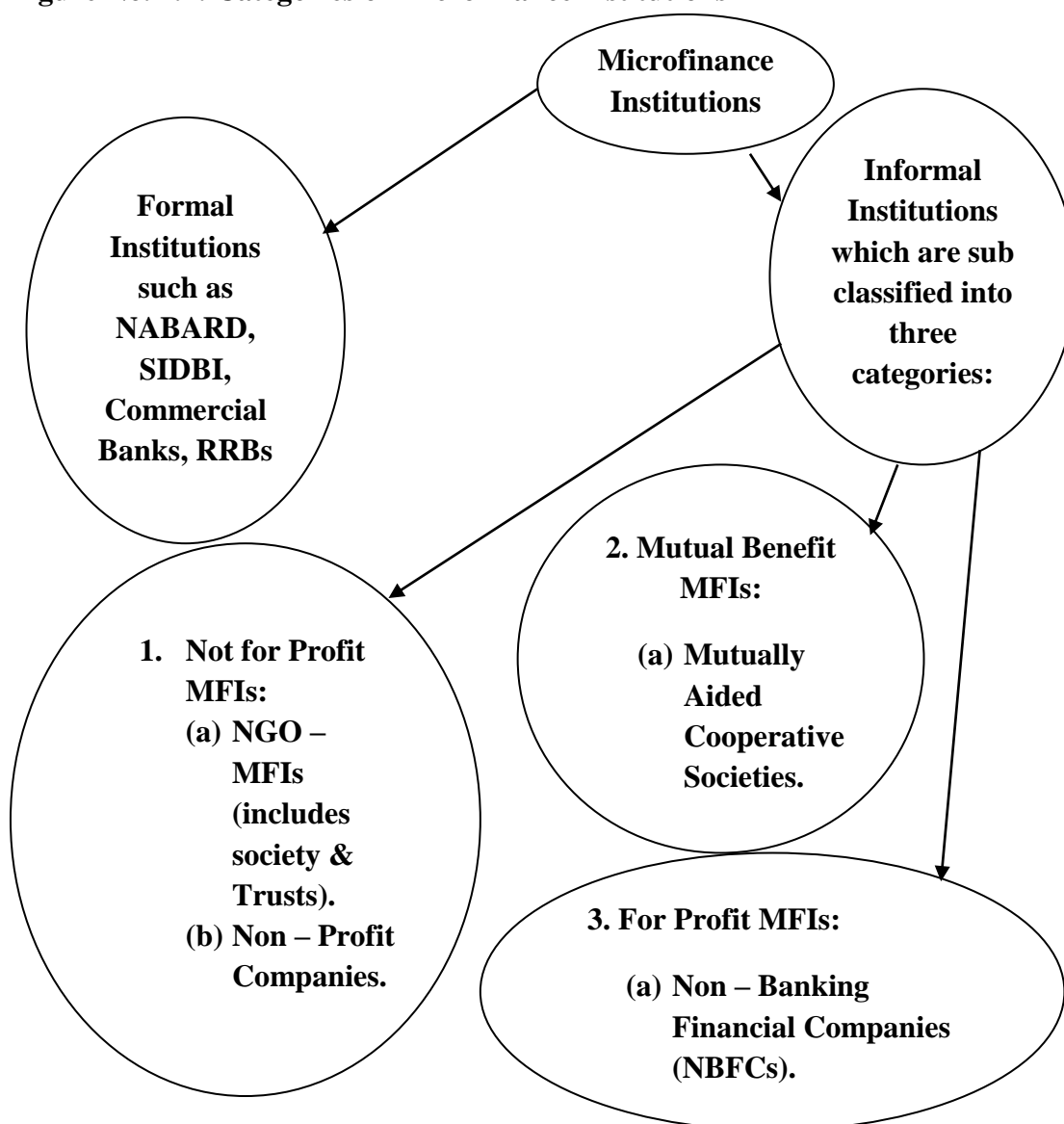
(RRY) has been formulated by modifying the Interest Subsidy Scheme for Housing the Urban Poor (ISHUP) piloted in the 11th Plan period with enhanced scope and coverage. RRY is a Central Sector Scheme applicable in all the urban areas of the Country. RRY is an instrument to address the housing needs of the EWS/LIG segments in urban areas as well as to channelize institutional credit to the poorer segments of the society thereby, increasing home ownership in the country. Rajiv Rinn Yojana is effective from October 1, 2013. RRY provides for interest subsidy of 5% (500 basis points) on loans granted to EWS and LIG categories to construct their houses or extend the existing ones. The upper limit for a loan is Rs 5 lakh for EWS and 8 lakh for LIG (interest subsidy would, however, be limited to the first Rs 5 lakh of the loan amount, in case the loan exceeds this amount). **Under RRY, Economically Weaker Section (EWS) is defined** as households having an average annual income up to Rs. 1,00,000/- while Low Income Group (LIG) is defined as households having an average annual income between Rs.1,00,001/- and up to Rs.2,00,000/-.

Under the new Housing Scheme – Prime Minister’s Awaaz Yojana launched in 2015 with the aim of providing Housing for all by 2022, EWS households are defined as households having an annual income of up to Rs.3,00,000/-.

1.6 Categories of Microfinance Institutions (MFIs) in India:

A number of institutions in Public sector as well as Private sector offer microfinance services in India. They can be broadly categorized as:

Figure No. 1.1: Categories of Microfinance institutions



Source: Regulation of Microfinance Institutions in India.pdf (Cuts C-Cier, 2/2013), pp.2

1.6.1 Formal Microfinance Institutions: This category comprises of Apex Development Financial Institutions such as NABARD, SIDBI, Commercial Banks, Regional Rural Banks and Cooperative Banks that provide microfinance services in addition to their general banking activities and are referred to as microfinance service providers. The category of formal MFI is more active on financial market, and thus more dependent on external financial sources than previous category. There is a higher risk by financial services providing to clients (interest rate fluctuation by external sources). The local rural or family relations play very important role in secure recovery of provided actives to MFIs. The position, authority, reputation of local personalities often substitute guarantee instruments, which are normally used. Mostly they are not reachable for rural people. These are the reasons for the absence of mutual personal liability.

1.6.2 Informal Institutions: These institutions undertake microfinance services as their main activity are generally referred to as Microfinance Institutions (MFIs). While there is no published data on the numbers of private NGOs and MFIs operating in India. As per **Sa – Dhan** – the Association of Community Development Finance Institutions in India, the membership as on 31 March 2008 was 223 but it was estimated that the number of MFIs might be around 950 – 1050. These can be further broadly divided into **three** sub categories of organisational and legal forms that are as follows:

1.6.2.1 Not for Profit MFIs: These are further classified into two parts:

(i) NGO – MFIs: There are a large number of NGOs that have undertaken the task of financial intermediation. The majority of these NGOs (Non - Government Organisations) are registered as Trust or society under the Societies Registration Act, 1860 or similar provisional Act or Indian Trust Act, 1882. The guidelines for NGO – MFI as per Reserve Bank of India as on Nov. 2003 are as follows:

1. NGOs/ Federation of SHGs, which have already undertaken onward lending to transform them into mutually, aided co-operative societies/NBFCs within two years if they intend to continue mobilization of savings and lending activity. If they intend to transform themselves into Section 25 companies, they should repay the deposits collected and continue the lending activity only. RBI may permit a time of 2-3 years as a transitional period to convert into either MACS or NBFCs.

2. The size of the loan to individual members of SHGs not to exceed Rs. 50000/-. The interest charged by NGO to be made public and method of fixation are transparent, it could cover the capacity building and management costs as well. The NGOs to stop accepting further deposits, until they are transformed

3. Those NGOs who opt to transform into section 25 companies to repay the deposits and come out of the deposit portfolio and who opt to continue to

accept deposits to transform themselves into NBFCs or cooperatives and work within relevant rules.

4. Broad guidelines for a rating matrix for NGOs are devised. Each lender to evolve its own rating matrix based on these guidelines. Rating exercise should be repeated annually to avoid slippage. Rating to be done by accredited agencies in case of NGOs with borrowings of above Rs. 2 crores

5. During the recommended transitional period of 2-3 years, NGOs to adopt the accounting/ income recognition standards as applicable to Section 25 Companies. Many banks have already lent to NGOs/ Federations for onward lending. While existing credit limits could be renewed in eligible cases during the transitional period, no fresh limits to be granted.

(ii) Non - Profit Companies as MFIs:

Companies that are formed for the following purpose are known as Section 25 Companies or Association, not for Profit

- For the purposes of promoting commerce, art, science, religion, charity to any other useful object
- With intention to apply its profits or other income for promoting its objects, and
- Which prohibits payment of any dividend to its members,

Section 25 Company is a voluntary association of person formed for promotional activities. Besides establishing a Trust and Society, the other alternative to establishing a Non – Profit organization is Section 25 Company. Section 25 Companies are formed as Public or Private Company having a limited liability under the Companies Act 1956. These companies can be formed with or without share capital, in case they are formed without capital, the necessary funds for carrying the business are brought in form of donations, subscriptions from members and the general public.

Section 25 Companies can be formed only after obtaining the necessary license from the Central Government, which imposes certain terms and conditions while granting the approval. In case the company fails to comply with the terms and condition at any point of time, the license can be canceled.

Section 25 Companies are not required to add the suffix Limited or Private Limited at the end of their name.

Due to their nature of business, the Government of India has relaxed the application of various provisions of the Companies Act on such companies.

In terms of Reserve Bank of India's notification, the NBFC licensed under Section 25 of Companies Act, 1956, can provide credit not exceeding INR 50,000 for a business enterprise and INR 1, 25,000 for meeting the cost of a dwelling unit to any poor person but could not accept public deposits.

1.6.2.2 Mutual Benefit MFIs: These are registered under the Mutually Aided Co – operative Societies (MACS) Act enacted by State Government. It works for enabling

promotion of self – reliant and vibrant Co – operative Societies based on self – help. In terms of notification of Reserve bank of India, a “mutual benefit company” means a company not notified under section 620A of the Companies Act, 1956 (1 of 1956) and carrying on the business of a non-banking financial institution:

- a. on 9th January 1997; and
- b. having the aggregate of net owned funds and preferential share capital of not less than ten lakhs of rupees; and
- c. has applied for issue of certificate of registration to the Bank on or before 9th July 1997; and
- d. is complying with the requirements contained in the relevant provisions of the Directions issued under Section 637A of the Companies Act, 1956 to Nidhi Companies by the Central Government.

1.6.2.3 For Profit MFIs: Non - Banking Financial Companies (NBFCs) is companies registered under Companies Act, 1956 and regulated by Reserve Bank of India. The following conditions are given on the RBI website for the working of such MFIs:

- (i) Minimum net owned funds of INR 5 Crores (for NBFC – MFIs registered in the North - Eastern Region of the country, the minimum NOF requirement shall stand at INR 2 Crores).
- (ii) The income an NBFC – MFI derives from the remaining 15% of assets shall be in accordance with the regulations specified in that behalf.

(iii) An NBFC, which does not qualify, as an NBFC – MFI, shall not extend loans to microfinance sector, which in aggregate exceed 10% of its total assets.

(iv) Not less than 85% of its Net assets are in the nature of “Qualifying Assets”.

For the purpose of (iv) above,

‘Net Assets’ are defined as total assets other than cash & bank balances & money market instruments.

‘Qualifying Assets’ shall mean a loan which satisfies the following criteria:

(a) Loan disbursed by an NBFC – MFI to a borrower with a rural household annual income not exceeding INR 60,000 or semi – Urban household income not exceeding INR 1, 20,000;

(b) Loan amount does not exceed INR 35,000 in the first cycle & INR 50,000 in subsequent cycles;

(c) Total indebtedness of the borrower does not exceed INR 50,000.

(d) Tenure of the loan not to be less than 24 months for the loan amount in excess of INR 15,000 with prepayments without penalty.

(e) Loan to be extended without collateral.

(f) The Aggregate amount of loans, given for income generation, is not less than 75% of the total loans given by the MFIs.

(g) The Loan is repayable on weekly, fortnightly or monthly installments at the choice of the borrowers.

1.7 Legal Framework of Informal Microfinance Institutions:

The legal details of Informal Microfinance Institutions are as follows:

Figure No. 1.2: Informal Microfinance Institutions in India

Legal Forms of MFIs		
Type of MFI	Number	Legal registration
Not for Profit		
NGOs	400-500	Social Registration Act, 1980, Indian Trust Act, 1882
Non-Profit Companies	20	Section 25 of Indian Companies Act, 1956
Mutual Benefit MFIs		
Mutual Benefit MFIs, Mutual Aided Co-operative Societies	200-500	Mutually Aided Co-operative Societies, Act enacted by state government
For Profit MFIs		
Non- Banking Financial Companies	45	Indian Companies Act, 1956, RBI Act, 1934

Source: Nasir Sibghatullah, (2013). Microfinance in India: Contemporary issues and challenges, pp.5

1.8 Microfinance Institutions Timelines and Amendments of guidelines by

Reserve Bank of India:

Table No. 1.2: MFIs Timelines and amendments of guidelines by RBI

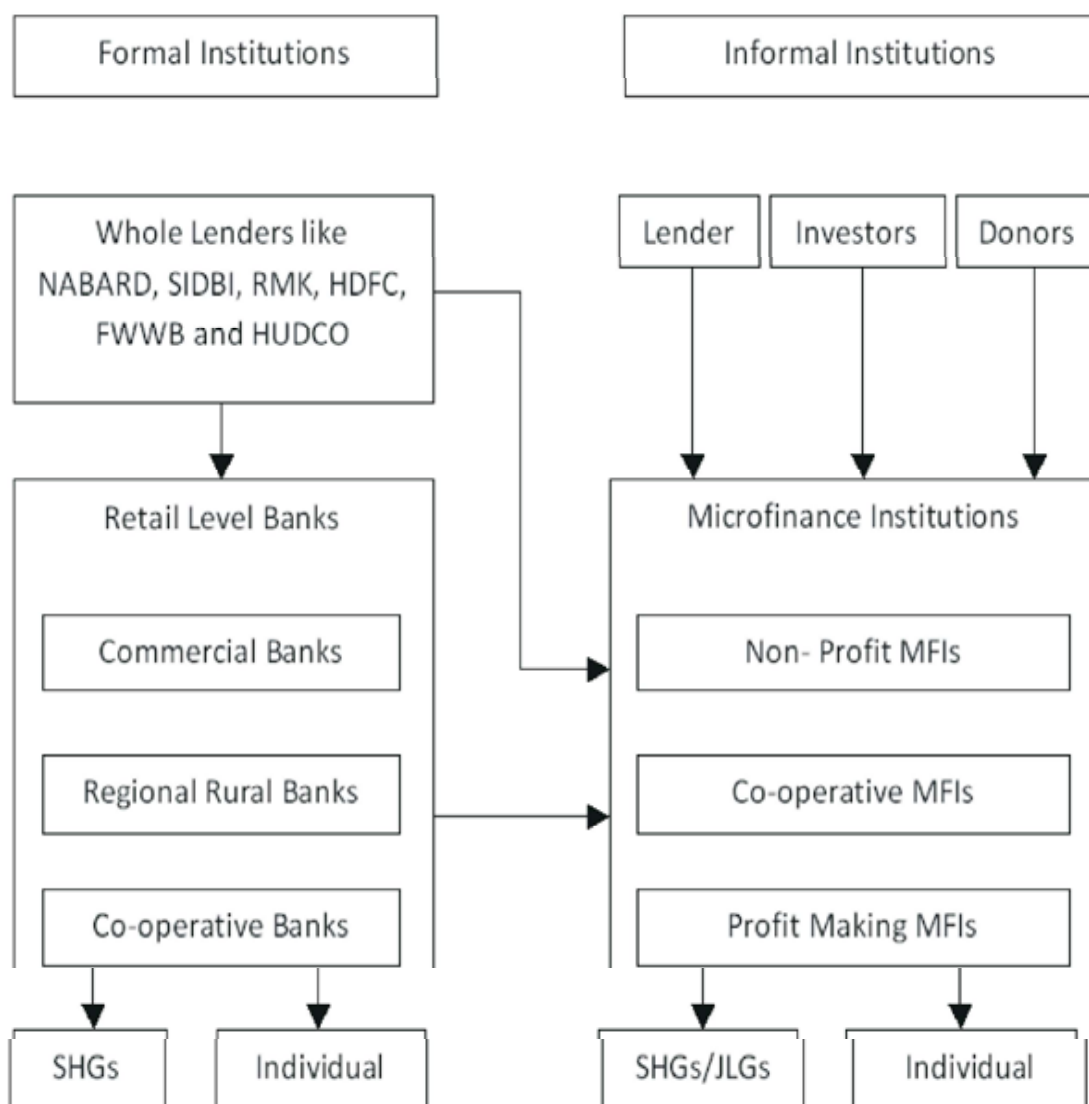
Date	Key developments
May, 2011	Retention of priority sector lending status for bank loans to MFIs, margin cap at 12% and interest rate cap at 26%.
Dec. 2011	<p>RBI introduced the new category of NBFC and termed as ‘Non - Banking Financial Company - Micro Finance Institutions’ (NBFC-MFIs).</p> <p>Some of the key points include:</p> <ul style="list-style-type: none"> • Minimum Net Owned Fund of Rs.5 crore for new NBFC MFIs and for existing NBFC MFIs w.e.f. April 1, 2012. • Capital Adequacy Ratio of 15% (relaxation for AP based MFIs for FY12 and for NBFC MFIs with loan portfolio of less than Rs.100 crore) • Margin cap at 12%, interest rate cap at 26% and pro cessing charges at 1%.
Aug. 2012	<p>Amendment to NBFC MFI guidelines by RBI which included:</p> <ul style="list-style-type: none"> • Registration is compulsory for NBFCs intending to operate as NBFC MFIs by October 2012. • Relaxation in meeting the norm of Minimum Net Owned Fund of Rs.5 crore for existing NBFC MFIs. It has to be met in branches with

	<p>Rs.3 crore NOF by March, 2013 and Rs.5 crore by March, 2014.</p> <ul style="list-style-type: none"> • Removal of interest rate cap and linked to borrowing rate plus fixed Margin.
Jul. 2013	<p>Amendment to NBFC MFI guidelines by RBI which included:</p> <ul style="list-style-type: none"> • Relaxation in margin cap for all NBFC MFIs irrespective of size at 12% till March, 2014. However, from April 2014, margins are capped at 10% for large MFIs and 12% for others.
Nov. 2013	<p>RBI has allowed recognition of industry association of NBFC MFIs as Self-Regulatory Organisations (SRO).</p>
Feb. 2014	<p>Amendment to NBFC MFI guidelines by RBI with respect to the pricing of credit: it would be lower of the two:</p> <ul style="list-style-type: none"> • The cost of funds plus margin • The average base rate of the five largest commercial banks by assets multiplied by 2.75.

Source: Microfinance in India – Sector Outlook by CARE Ratings (2014)

1.9 Hierarchy of Institutional Arrangements for Microfinance Disbursement in India

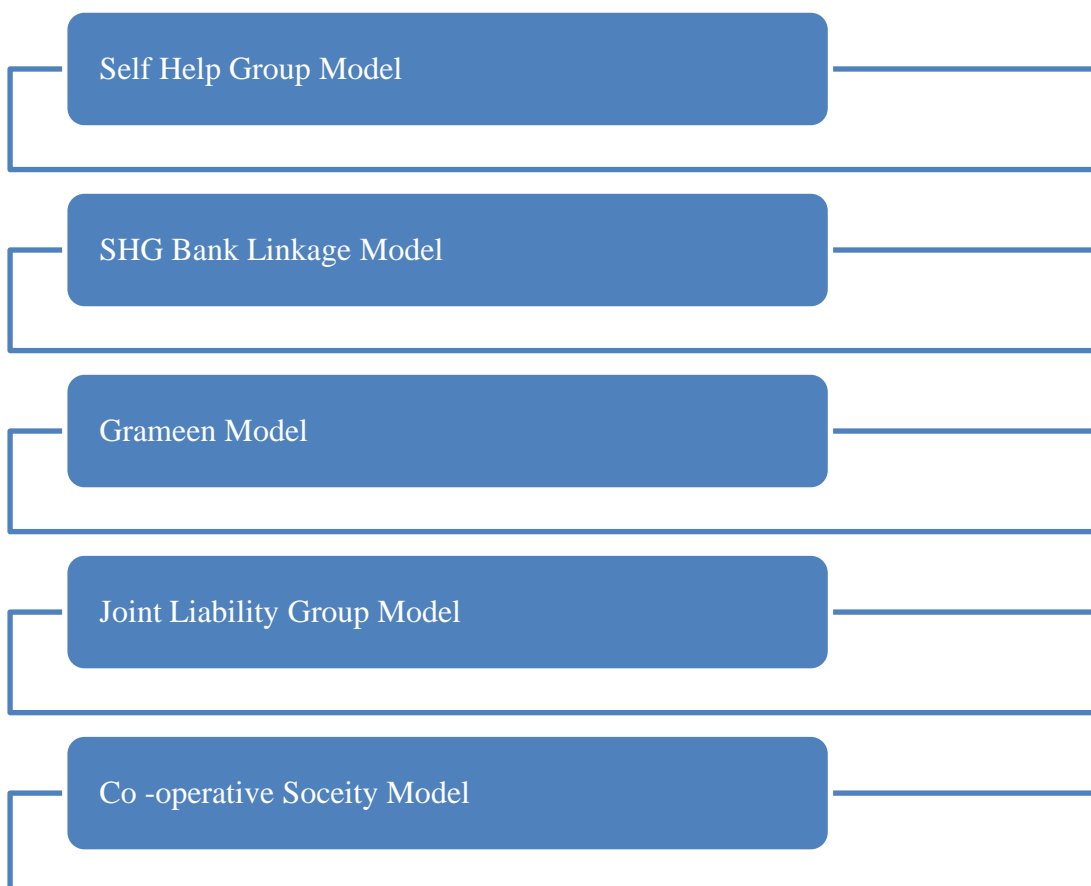
Figure No. 1.3: Hierarchy of Institutional Arrangements for Microfinance Disbursement in India.



Source: Nasir Sibghatullah, (2013). Microfinance in India: Contemporary issues and challenges, pp – 6

1.10 Models of Delivery in Microfinance Industry:

Figure No. 1.4: Models of Delivery in MFIs



Source: *Website- www.authorsstream.com assessed on 25/11/2016*

1.10.1 Self Help Groups:

Self Help Group Model, In SHG Model the members form a group of around twenty people. The group formation process may be facilitated by an NGO or by the MFI or bank itself, or it may evolve from a traditional rotating savings and credit group (ROSCA) or other locally initiated grouping. SHGS Self-help groups are started by

non-profit organizations (NGOs) that generally have broad anti-poverty agendas. Self-help groups are seen as instruments for a variety of goals including empowering women, developing leadership abilities among poor people, increasing school enrolments, and improving nutrition and the use of birth control. Financial intermediation is generally seen more as an entry point to these other goals, rather than as a primary objective.

This can hinder their development as sources of village capital, as well as their efforts to form locally controlled pools of capital through federation, as was historically accomplished by credit unions. An economically poor individual gains strength as part of a group. Besides, financing through SHGs reduces transaction costs for both lenders and borrowers. While lenders have to handle only a single SHG account instead of a large number of small-sized individual accounts, borrowers as part of an SHG cut down expenses on travel (to & from the branch and other places), time is taken in completing paper work and the loss of workdays in canvassing for loans.

1.10.2. SHG Bank Linkage Model:

Many self-help groups, especially in India, under NABARD's SHG-bank-linkage program, borrow from banks once they have accumulated a base of their own capital and have established a record of accomplishment of regular repayments. This model has attracted attention as a possible way of delivery of microfinance services to poor populations that have been difficult to reach directly through banks or other institutions. "By aggregating their individual savings into a single deposit, self-help groups minimize the bank's transaction costs and generate an attractive volume of

deposits. Through self-help groups, the bank can serve small rural depositors while paying them a market rate of interest. NABARD estimates that there are 2.2 million SHGs in India, representing 33 million members that have taken loans from banks under its linkage program to date. This does not include SHGs that have not borrowed. "The SHG Banking Linkage Programme since its beginning has been predominant in certain states, showing spatial preferences especially for the southern region – Andhra Pradesh, Tamil Nadu, Kerala and Karnataka. These states accounted for 57 % of the SHG credits linked during the financial year 2005-2006."

1.10.3. Grameen Model:

The Grameen Bank was started in 1976 by the Nobel Laureate, Professor Muhammad Yunus in Bangladesh. Grameen today has some 2468 branches in Bangladesh, with a staff of 24,703 people serving 7.34 million borrowers from 80,257 villages. Grameen's methods are applied in 58 countries including the United States. Grameen Bank borrowers own 94% of the bank. The government owns the remaining 6%. The Model of Grameen Bank to hold regular and usually weekly meetings which are supervised by a MFI worker who maintains the records, where savings and repayments are collected and handed over to the MFI worker, Organizing contributions to one or a number of group savings funds, which can be used by the group for a number of purposes, usually only with the agreement of the MFI which maintains the group fund accounts, Guaranteeing loans to their individual members, by accepting joint and individual liability, by raising group emergency funds and by accepting that no members of a Group will be able to take a new loan if any members

are in arrears, Arising from the above model, the members appraise fellow-members' loan applications, and ensuring that their fellow-members maintain their regular savings contributions and loan repayments.

1.10.4. Joint Liability Group (JLG):

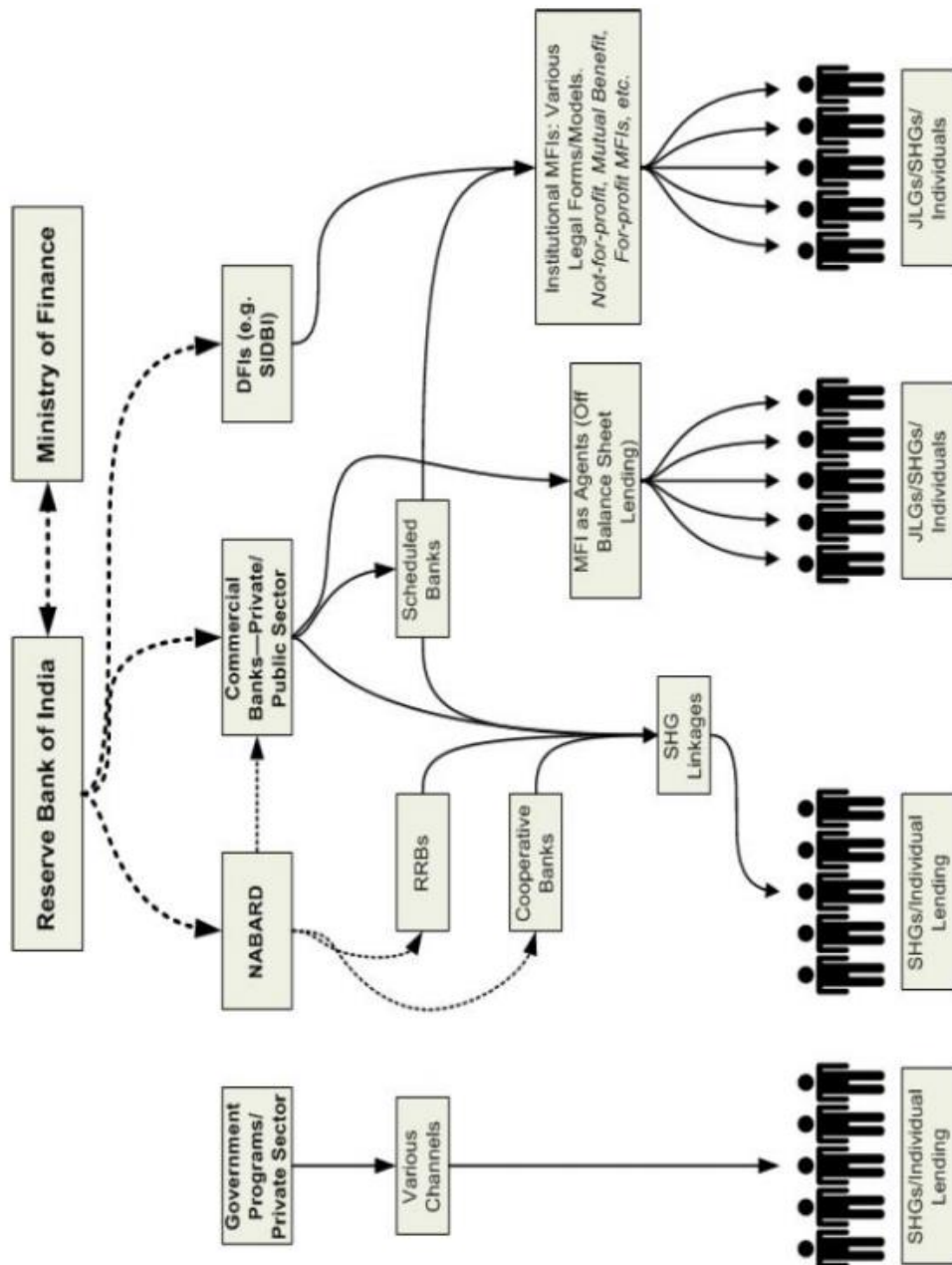
Joint Liability Group (JLG) A joint Liability Group (JLG) is an informal group comprising preferably 4 to 10 individuals coming together for the purpose of availing bank loan either singly or through the group mechanism against the mutual guarantee. The JLG members would offer a joint undertaking to the bank that enables them to avail loans. The JLG members are expected to engage in the similar type of economic activities like crop production. Joint Liability Group Members should be of similar socio - economic status and background carrying out farming activities. The groups must be organized by like-minded farmers and not imposed by the bank or others. The members should be residing in the same village/ area and should know and trust each other well enough to take up joint liability for group/ individual loans.

1.10.5. Cooperative Society:

A Co-operative Society is formed as per the provisions of the Co-operative Societies Act, 1912. At least ten persons having the capacity to enter into a contract with common economic objectives, like farming, weaving, consuming, etc. can form a Co-operative Society. The Characteristics of Co-operative Society: Open membership, Voluntary Association, State control sources of finance, Democratic Management, Service motive, Separate Legal Entity, Distribution of Surplus, Self-help through mutual cooperation.

1.11 Marketplace of Microfinance in India:

Figure No. 1.5: Marketplace of formal and informal microfinance Institutions



Source: website of NABARD, ([http:// www.nabard.org](http://www.nabard.org)) assessed on 25/05/2015

1.12 Area of Research:

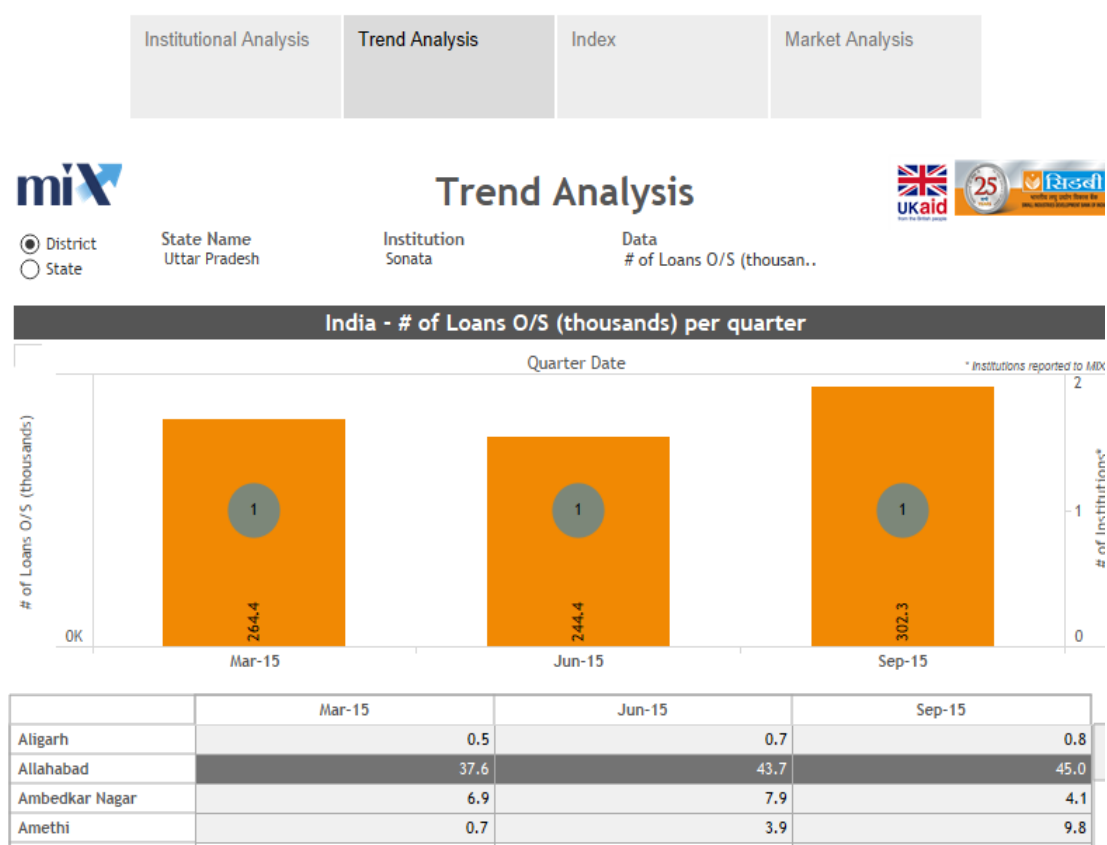
The study has focused on the repayment problems of Loans to be taken by the clients of **‘For Profit Making Microfinance Institutions (MFIs)’ and Not for Profit Making Microfinance Institutions**. Micro financing has boomed in recent years. Though founded as non-profit institutions, the Indian Microfinance industry has been turbocharged by private – equity firms, nearly doubling in the year ended March 31, 2008, delivering \$ **2.5 billion** Loans. Many microfinance lenders have recently registered as For – Profit finance firms with the Reserve Bank of India, giving them wider access to funds but limiting them to ‘reasonable’ interest rates. Those rates are still high – between **20%** and **40%** annually, according to the Consultative Group to Assist the Poor, or CGAP, hosted at the World Bank location. The other factors that are believed to influence repayment problem are varied and include variables such as gender of the borrower, business expertise, amount of loan borrowed, poverty indicator, education and many others. The approach of **‘For Profit Making MFIs’ and ‘Not For Profit Making MFIs’** will not be sufficient to alleviate poverty at required rate in order to meet the dire poverty in which millions in India live today.

The researcher has taken **6** Microfinance Institutions and the respondents are the clients of these Microfinance Institutions in his research and the brief summary of those Institutions are as follows:

1.12.1. SONATA Finance Ltd:

It is a Microfinance Company registered as a non - banking Finance Company (NBFC) under Reserve Bank of India section 45 IA. SONATA has adopted an individual as well as a group lending approach and few other best practices with some minor adjustments to suit local conditions. SONATA lends money to individuals or groups of 10 to 20 women members and designates them as the ultimate guarantor of each of its members. If one member does not repay the loan, no individual in the group is eligible to receive another loan. The operating philosophy of SONATA is to solely focus on providing financial services.

Figure No. 1.6: Outstanding Loans per quarter of Sonata



Source: Mix market report (2015)

Key Factors of our Approach:

- **Social Collateral:** The poorest do not have physical assets that can be used as security or collateral. Instead, borrowers are organized into groups and take collective responsibility for the repayment of the loan of each member of the group.
- **Cashless Operation:** SONATA disburses the loans through bearer cheques, and most of the collection is deposited in SONATA's bank accounts in the Commercial Banks or at the Branch offices of SONATA. This reduces risk while very little cash is floating around.
- **Customized Products:** SONATA has designed loans with small repayments that correspond to wage structures, consumption, and income generating activities to prevent emergency distress sales. The first loan granted is always relatively small and is used to inculcate credit discipline and collective responsibility.
- **Focus on Women:** SONATA works exclusively with women because they are the most marginalized among the poor and because they tend to invest the majority of their income into the household and for their children.

Our Loan Products:

Table No. 1.3: the description of the Loan Products

Loan Product	Loan Amount	Rate of Interest (Reducing Balance Method)	Processing Fee	Tenure
Joint Liability Group	10000-60000	22-23 %	Below- 1%	12-24 Months
Individual Lending	25000-100000	24-25 %	Below- 1%	24 Months
Utility Finance	5000-20000	22-23 %	Below- 1%	6-18 Months
Sanitation Loan	20000-30000	22-23 %	Below- 1%	18-24 Months
Home Improvement Loan	25000-80000	22-23 %	Below- 1%	24-36 Months

Source: Website of the Sonata Finance (P) Ltd, (<http://www.sonataindia.com/>) assessed on 25/05/2015.

1.12.2. NEED (Network of Entrepreneurship and Economic Development):

NEED was established in 1995 with the vision to promote economic development through human empowerment. It is an internationally and domestically respected

NGO and has been recognized to have successfully empowered and facilitated women and children in rural villages to be self-sufficient through entrepreneurship. It currently has 2,100 Self Help Groups (SHGs) consisting of approximately 32,500 members, mostly women, in 2,200 villages. It has succeeded in changing the lives of multitudes of women and men from marginalized communities in one of the most impoverished states in India.

NEED MF was only officially born in 2005. After years of working to plant and restore self-confidence and provide skills for women and men across Uttar Pradesh, NEED saw the undeniable need of capital for these micro-entrepreneurs to grow. With this in mind and armed with his wealth of knowledge and contacts from his many years of experiences in the Indian banking sector, NEED's CEO, Mr. Anil Singh, was determined to help these entrepreneurs to provide this need through the formal financial institutions¹. After all, the Indian government had made rural development and poverty eradication a priority for its banking institutions

However, after a few years of pursuing through the formal institutions, he saw many difficulties that cannot be addressed immediately first is the preconceived notions within these institutions regarding the most marginalized members of Indian society; that is these people are uneducated, mostly illiterate, and irresponsible, and thus loans given to these people have very little chance of being paid back. This, undeniably, led to prejudice, reluctance, sub-standard services and unwillingness to help from these institutions. Secondly, from the viewpoint of the poor themselves, having been frequently disappointed, prejudiced, and exploited, they are skeptical of members of

these institutions. Additionally, illiteracy of the members of this class of society also presents big problems for the bureaucracy of these institutions.

Need MF (Microfinance) credit product:

Table No. 1.4: The description of the credit products

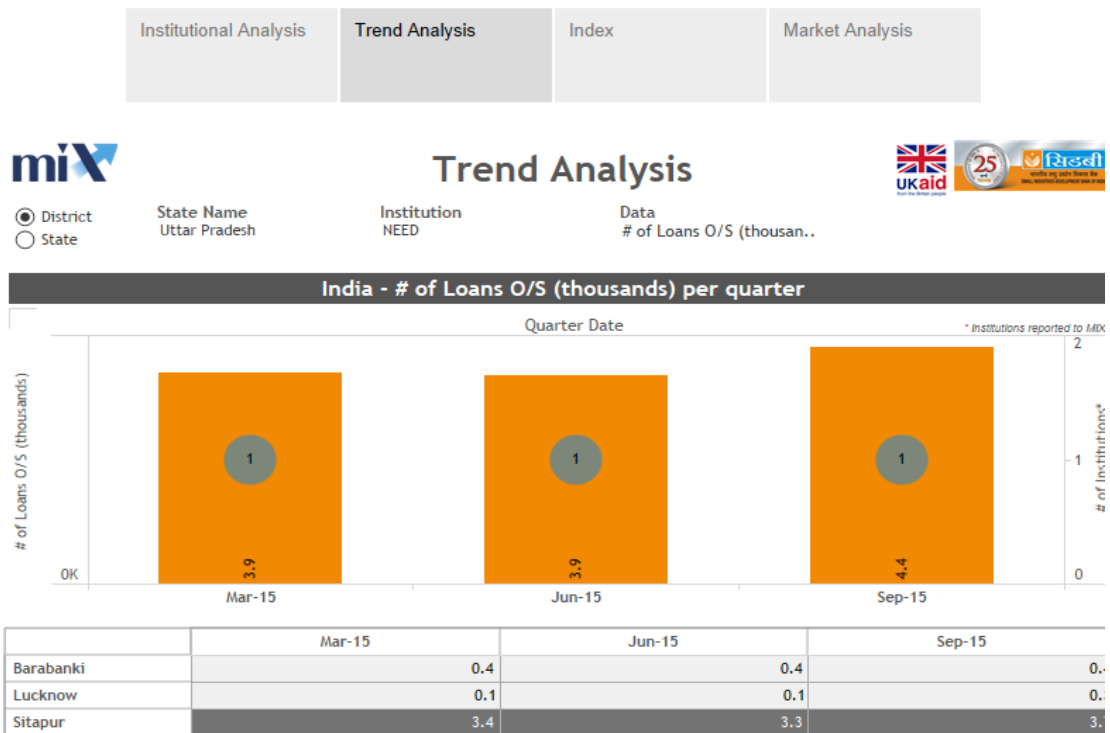
S.No.	Product	Volume Of Credit	Repayment Loan
A	Economic Enterprise		
1	JLG & SHG Loan for livelihoods	1st 5,000-10,000/-. 2nd 15,000-25,000/-, 3rd 30,000-35,000/-	Cash flow based Monthly Repayment
2	Community Producer Company	25,000-50,000/-	Cash flow based Monthly Repayment
3	Individual after completion of 3 cycles of loan with NEED	25,000-30,000/-	Cash flow based Monthly Repayment
B	Social Enterprise		
1	Pregnancy Loan (only through SHG)	5,000/-	Cash flow based Monthly Repayment
2	Housing Loan (only through SHG)	20,000-30,000/-	Cash flow based Monthly Repayment
3	Energy Conservation (only through SHG)	6,000/-	Cash flow based Monthly Repayment

4	Community School financing (only through SHG)	15,000-20,000/-	Cash flow based Monthly Repayment
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Source: Website of the NEED Microfinance Institution, (<http://www.needindia.org.in/micro-credit.html>) assessed on 25/05/2015.

A total interest 10% overall for loan period is applicable to be paid on cash security amount.

Figure No. 1.7: Outstanding Loans per quarter of NEED MFI

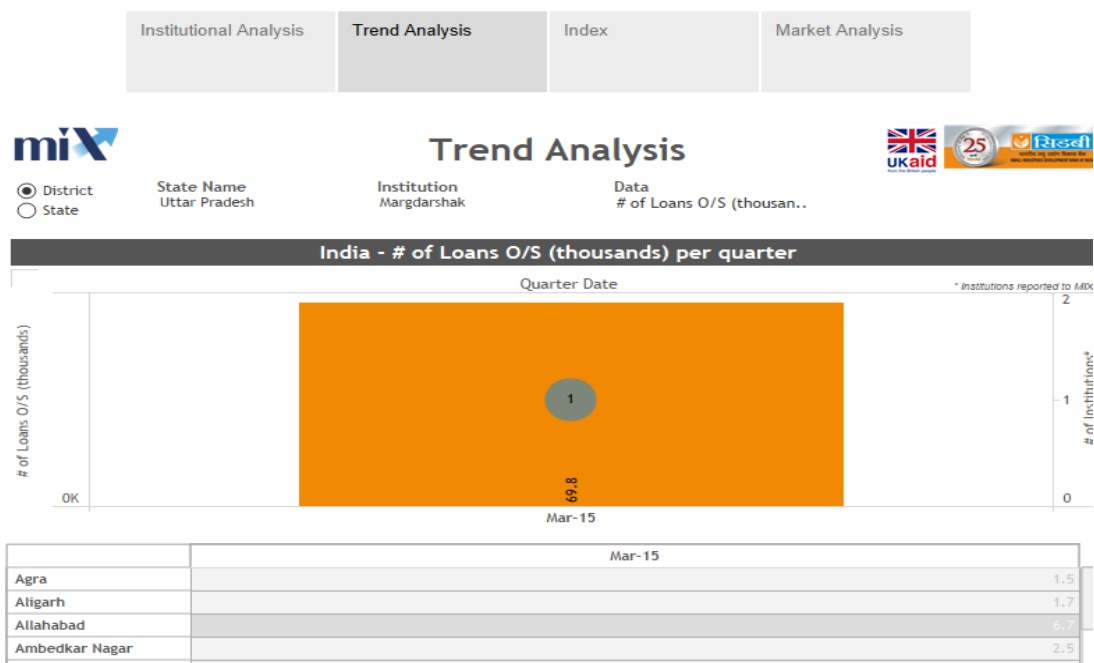


Source: Mix market report (2015)

1.12.3. Margdarshak Financial Services Limited:

Margdarshak Financial Services Ltd (MFSL) is a closely held public limited NBFC-MFI incorporated in 2007. Since then MFSL has shown viable, sustainable and effective growth and expanded its field operations across length and breadth of North India. MFSL provides access to credit and pension products & services to most deprived and vulnerable communities in North India. Adapting industry best Information Technology and client-centered practices MFSL has been engaged in enabling the rural and urban producers in accessing small amounts of capital through group based individual lending methodology. Led by an able set of board and management, the organisation has enabled over 70,000 families in establishing and diversifying business for achieving economic strengthening. MFSL is also a licensed aggregator for NPS-Lite Swavlamban scheme wherein the unorganised segments of the community are provided with pension products approved by PFRDA, India. Till date MFSL extended the benefits of NPS-Lite to over 30,000 individuals. Today MFSL is ranked as the 39th largest MFI in the country in terms of AUM effectively facilitating financial inclusion to its beneficiaries through a network of 48 dedicated and technology enabled branches, spread across the 3 North Indian states of Uttar Pradesh, Bihar and Haryana, covering most potential and virgin area. MFSL has been graded MFR4 by CRISIL in July 2013 reflecting the ability of the organization to conduct its operations in scalable and sustainable manner. MFSL has always believed in the idea of responsible financing and adheres to a strict code of conduct.

Figure No. 1.8: Outstanding Loans per quarter of Margdarshak MFI



Source: Mix market report (2015)

Loan Products:

Table No. 1.5: The description of the credit products

Income Generation Loan:-

Loan Amount	Rs. 15000 - Rs. 35000
Purpose	Petty trading, petty shops & service based activities, Family-based enterprises.
EIR & Duration	<input type="checkbox"/> 26% <input type="checkbox"/> 12 Month-24 Month

Solar & Clean Energy Loan:-

Loan Amount	Rs. 2000 - Rs. 10000
Purpose	Solar and Clean Energy Products
EIR & Duration	<input type="checkbox"/> 26% <input type="checkbox"/> Co-terminus with the existing loan

Cycle Loan:-

Loan Amount	Rs. 3285
Purpose	Cycle
EIR & Duration	<input type="checkbox"/> 26% <input type="checkbox"/> Co-terminus with the existing loan

Source: Website of the Margdarshak Microfinance Institution, (<http://www.margdarshak.org.in/microfinance.php>) assessed on 25/05/2015.

1.12.4. Bhartiya Microcredit:

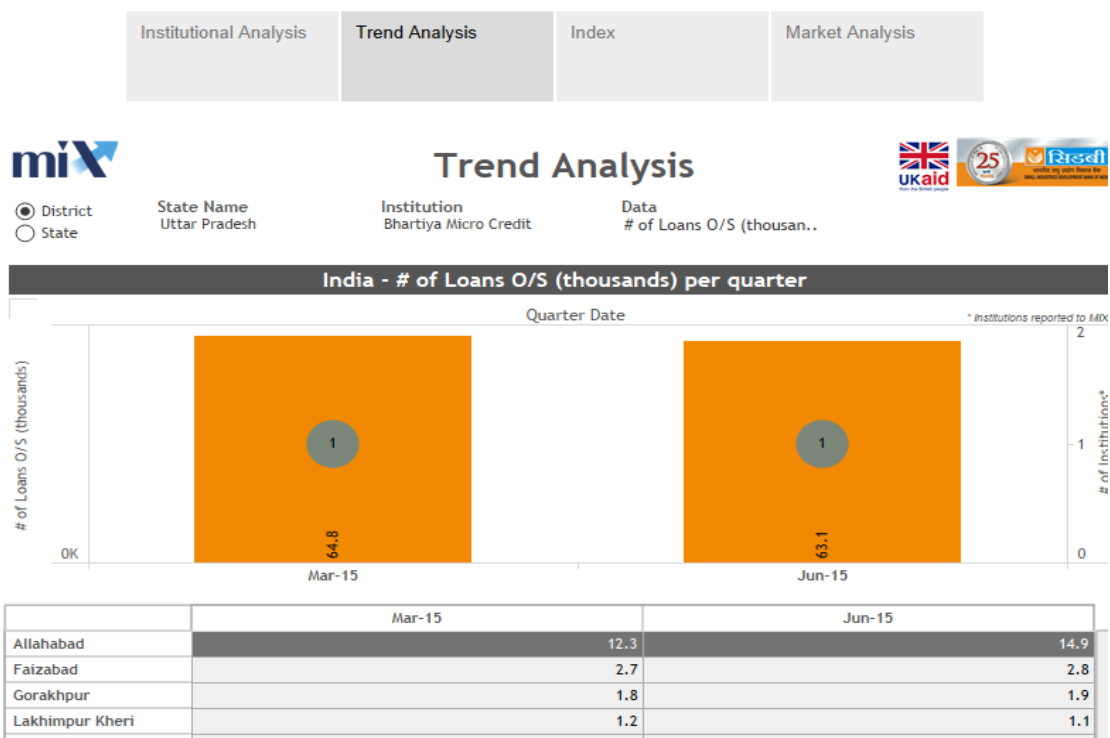
It is a micro-finance company registered & licensed as Non - Profit Making Company (Non - Deposit taking) under section 25 of the Companies Act, 1956 and is exempt from the provisions of Chapter III B of the RBI Act, 1934. As per the new Companies Act, 2013, Section 25 has now become Section 8. It got registered in the year 2007-08. Initially, organization provided financial services to poor rural/semi urban families in Central & Eastern Uttar Pradesh, and Uttrakhand to enable them to augment income-generating activities. It also provides insurance products by

collaborating Insurance Companies to assist in asset development, as well as a complementary loan product for special emergencies. We have expanded our activities in NCR New Delhi, Madhya Pradesh and Andaman & Nicobar Islands by opening branches in New Delhi, Indore, Bhopal and Port Blair, Maharashtra, Bihar and intend to expand our wingspan India in near future. Within a short span of time of less than 8 years the BMC has proved its strength by making a place for itself with in top 100 MFIs' in the country. As an organization dedicated to the socio-economic development of rural/semi urban communities, BMC is also looking to facilitate additional services to its clients through alliances with other organizations in the area of health, education and vocational training.

Presently organization is engaged in microfinance operation and operating through 54 branches. The loan amount is utilized for various income generating activities like small shops, small trade, animal husbandry, pedal rickshaw, rickshaws etc.

The Focus of the organization is to enhance the income of households and improve the status of women in the society. It is important to mention here that income of the households has increased to a certain extent and most of the clients are now entitled to 2nd cycle of loan, therefore, the average loan size will improve by about 30%. However, there is the large portion of the population who are yet to be covered under financial inclusion, therefore much scope to expand.

Figure No. 1.9: Outstanding Loans per quarter of Bhartiya Microcredit MFI



Source: Mix market report (2015)

Loan Products:

Table No. 1.6: The description of the Loan products

Loan Products Being offered by BMC						
S.No	Name of Product	Loan Amount	Tenure	Interest Rate(Declining balance method)	Processing Fee	Insurance
1	IGL (Income Generating Loan)	8000 - 20000	1 or 2 Year (W/F)	26%	1%	300 & 600

2	UBI General Loan	10000 - 15000	1Year (F)	26%	1%	300
4	DPL (Dairy Product Loan) General Loan	8000 - 20000	1 or 2 Year (W/F)	26%	1%	300 & 600
5	IDBI General Loan	20000 - 30000	18 Months (M)	23%	0%	600
6	RL (Rickshaw Loan)	9500 - 15000	1 or 2 Year (W/F)	26%	1%	Including Rickshaw all package
7	YBL General Loan	15000 - 30000	18 Months (M)	26%	1%	300 & 600
8	Sewing Machine	3400 - 7200	6 Months (W)	26%	0%	0
9	Solar Light Loan	2000	6 Months (W)	24%	0%	0

Source: Website of the Bhartiya Microcredit Microfinance Institution, (<http://bmcindia.co/>) assessed on 25/05/2015.

1.12.5. RGMVP (Rajiv Gandhi Mahila Vikas Pariyojna):

Rajiv Gandhi Mahila Vikas Pariyojana (RGMVP) is the flagship poverty reduction programme of the Rajiv Gandhi Charitable Trust (RGCT), which was established to commemorate and take forward the vision of India's former Prime Minister for the country's development. The Rajiv Gandhi Charitable Trust (RGCT), a registered, not-for-profit organisation, was established in 2002 to address the development needs of the underprivileged of the country, especially the rural poor. The Trust's strategic objectives have been shaped by the vision of Shri Rajiv Gandhi, former Prime Minister of India, of implementing programmes that have the sustainable impact and are instrumental in transforming the lives of the poor. RGCT presently works in the poorest regions of Uttar Pradesh, one of the least developed states in the country, and Haryana through two development initiatives: Rajiv Gandhi Mahila Vikas Pariyojana (RGMVP) and Indira Gandhi Eye Hospital and Research Centre (IGEHC).

RGMVP is the largest social mobilization programme for women's empowerment in Uttar Pradesh with its work effecting 42 districts. It organizes women to harness their individual and collective potentials as change agents, enabling them to facilitate poverty reduction by disrupting hierarchy and changing the power relations so that they feel empowered to claim their rightful place as equal citizens in society. IGEHC, the largest provider of quality eye care in Uttar Pradesh, covers 12 districts and provides affordable eye care, especially to poor people, to eliminate avoidable blindness. It also operates in Sohna, Haryana, targeting the backward Mewat region.

In the last 13 years, the Trust has worked tirelessly to help millions of the poorest people to overcome poverty, social exclusion, and mitigating circumstances to lead productive lives. It has supported them in gaining access to social and economic opportunities by facilitating linkages to markets, delivery systems, and rights and entitlements. RGCT's unique models of scaling up and sustainability ensure inclusion of last mile populations into the mainstream. In the process, the Trust has built up teams whose professional competence contributes significantly to the cost-effective and innovative delivery of services to the poor. Internally, the Trust has evolved into a result-oriented, ethical and transparent organisation that seeks to maximize the impact of all available resources and is fully accountable to all its stakeholders.

1.12.6. CREATE Microfinance:

Centre for Rural Entrepreneurship and Technical Education - Create is a non-governmental organization established in 1991. The registration number of the organization is 918/91-92 (21-08-1991). The organization is operational in Uttar Pradesh, India. Centre For Rural Entrepreneurship And Technical Education Create works in the area of Children, Education & Literacy, Environment and natural resource management, Health & Nutrition, HIV/AIDS, Micro Finance (SHGs), Micro Small & Medium Enterprises, Panchayati Raj, Women's Development & Empowerment, etc. The NGO works towards the promotion of sustainable development. Their work is Children, Education & Literacy, Environment and natural resource management, Health & Nutrition, HIV/AIDS, Micro Finance (SHGs), Micro

Small & Medium Enterprises, Panchayati Raj, and Women's Development & Empowerment.

1.13 Indian Microfinance: Major Issues and Challenges:

(i) Comparatively low involvement of Urban Poor:

It has been noted that MFIs pay more attention to rural areas and by enlarging neglect the urban poor. Out of more than 800 MFIs across India, only six are currently focusing their attention on the urban poor. However, the population of the urban poor is quite large, amounting to more than 100 million. With increasing urbanization, this number is expected to rise rapidly in the coming years. In this situation, MFIs need to pay equal attention to the urban poor because they too need financial assistance for various activities.

(ii) Retaining Customer Loyalty:

Retaining customer loyalty is an issue that creates a problem in growing the MFIs. There is about 28% clients' dissatisfaction and withdrawal retention in the MFIs. This occurs because people are not properly informed and educated about services and products provided by the institutions, moreover the current clients has higher default rate.

(iii) Exorbitant Interest rates:

MFIs are charging very exorbitant interest rates, which the poor find difficult to pay. It has been argued that MFIs are private entities and hence need to be financially sustainable. They do not receive any subsidized credit for their lending activities and that is why they need to recover their operational costs from borrowers. In the process, the seminal reason for their existence- and their primary objective is being lost. It is important that these NGOs should be willing to operate at narrow margins and to bear a low effective interest rate so that they can maintain an equilibrium between their dual objectives of commercial viability and empowering the deprived.

(iv) Loan Defaulting:

Loan defaulting is an issue that creates a problem in growth and expansion of the organisation because around 73% loan defaulting is identified in MFIs. Lack of understanding on part of the clients and incorrect management of the loans given to them results in their inability to payback the loans in the prescribed time.

(v) Low level of Literacy:

The level of literacy of the clients is quite low. Therefore, it creates obstacles in the growth and expansion of the organization because of the percentage of illiterate people around 70% in MFIs. The Target population of MFIs is people of rural areas and they have either absolute illiteracy or inadequate level of education.

(vi) Lack of Insurance Services:

Poor people are vulnerable to financial shocks. A small change in their earning patterns due to natural calamities, health problems, the death of earning member, etc can push them into destitution. Therefore, a provision of insurance under the microfinance programmes is very essential to help the poor in cross the poverty line. However, in reality, the current microfinance programme in India is just focused on regular saving and micro-credit. SHG-BLP developed by NABARD is also providing insurance services but the efforts are still at an experimental stage. A research report by Invest India Market Solutions Pvt. Ltd. (IIMS, 2007) indicates that the penetration of life insurance is only 12 percent among the rural poor and 19 percent of the urban low-income population. The penetration ratio for insurance in India was estimated at 4.80 in 2006, whereas for Asia it was 6.60 and for Europe at 8.30. So, in India, the provision of insurance services is at the initial stage and this integral part of the microfinance programme is still neglected.

(vii) Language Barrier:

The Language barrier makes communication with the clients (verbal and written) an issue that creates a problem in growth and expansion of the organisation because the percentage of language barrier has been identified at around 54% in MFIs. As the level of literacy of clients is low, so it is difficult for the MFIs employees to make the clients understand the policy and related details.

(viii) Debt Management

Clients are financially uneducated about the concept of debt management; about 70% of the clients in MFIs are unaware of the fact about how to manage their debt. Because of the lack of education and understanding on the part of the clients, they also cannot correctly manage the loans given to them. So, for this reason, debt management creates a problem in growth and expansion of the organisation.

(ix) High Transaction Costs:

High transaction cost is a big challenge for the microfinance institution. The volume of transactions is very small, whereas the fixed cost of those transactions is very high. It cannot vary with the size of the loan. The higher a producer's fixed costs in the proportion of his total cost, the element of risk increases to the same proportion. Moreover, if the demand for the product dwindles or the marginal costs increases, it becomes very difficult to adjust the cost by cutting output. This cut will reduce revenue out of which he has to pay the principal amount as well as interest on the loan. This needs to be rationalized.

(x) Extensive Outreach to the people:

Unregulated Microfinance Institutions, Lack of Insurance Services & Another problem faced by the microfinance programme is the depth of services provided. Though the outreach of the programme is expanding a large number of people are provided with microfinance services but a number of loans is very small. The average

loans per member in both MFIs and SHGs are between Rs. 3500. This amount is not sufficient to fulfill the financial needs of the poor people. The duration of the loans is also short. The small loan size and short duration do not enable most borrowers to invest it for productive purposes. They, generally, utilise these small loans to ease their liquidity problems.

(xi) Lack of access to Funding:

Another factor contributing to the lack of growth in MFIs is that requisite financial support has not been provided to MFIs by concerned agencies. Around 68% of MFIs response was tilted towards the view that is aloof towards them to meet the fund requirement, as MFIs alone cannot remove the poverty from the country.

(xii) Late Repayments:

Late repayments are an issue that creates a problem in growth and expansion of the organisation because the percentage of late repayments is around 70% in MFIs. This usually occurs because clients are uneducated and they do not know how to manage their debt. They are unaware of the fact that late repayment increases their loan indebtedness.

(xiii) Methods of Loan Recovery:

Loan Recovery particularly indicators such as the poor maintenance of books and accounts, etc. The deterioration in the quality of MFIs is explained by a variety of factors including:

- The intrusive involvement of government departments in promoting groups;
- Inadequate long-term incentives to NGOs for nurturing them on a sustainable basis;
- Diminishing skill sets on part of the MFIs members in managing their groups. In my assessment, significant financial investment and technical support are required for meeting this challenge.

(xiv) Geographical factors:

Around 60% of MFIs agree that the geographic factors make it difficult to communicate with clients of remote areas, which create a problem in growth, and expansion of the organisation. MFIs are aimed to facilitate the BPL (Below poverty Line) population of the country but due to lack of infrastructure in those areas, it becomes difficult to reach them.

(xv) Regional Disparity:

It has been observed that formal financial institutions with the help of SHGs actually run the microfinance programme. As a result, microfinance programme is progressing in those areas of the country where there is tremendous growth of formal financial institutions. Microfinance institutions were expected to reach those areas where the formal banking system failed to reach and the poor people have to depend on the money-lenders in order to meet their financial requirements. However, many big MFIs are activating in those states where the banking network is very strong. In the southern states, such as Andhra Pradesh, Tamil Nadu, Karnataka and Kerala, the spread of SHG with bank linkage programme as well as the MFI programme is very

large. But the north and the north-eastern region are dismally neglected. In southern India the spread of commercial bank branch network is the highest (27.94 percent) and these states cover 48.15 percent of the country's total SHG members and 54.77 percent of the MFI members. Therefore, approximately 50 percent of the total microfinance programme beneficiaries belong to these four south Indian states. In contrast to this, in the north - eastern region of India, bank branch network is very limited and the coverage of microfinance programme is just 2.93 percent. The table also shows the region-wise branch network and the microfinance members covered under SHG-Bank Linkage and MFI model in these different regions. The deserving poor are still not reached: The microfinance delivery models are not exclusively focused on those who are below the poverty line or very poor. However, the programme is progressing slowly but with a slow progress in targeting the bottom poor households. About 50 percent of SHG members and only 30 percent of MFI members are estimated to be below the poverty line.

(xvi) Unregulated Microfinance Institutions:

In India, microfinance is provided by a variety of institutions. These include banks (including commercial banks, RRBs, and co-operative banks), primary agricultural credit societies and MFIs that include NBFCs, Section-25 companies, trusts and societies. But only the banks and NBFCs fall under the regulatory purview of the Reserve Bank of India. Other entities, e.g., MFIs are covered in varying degrees of regulation under their respective State legislations. There is no single regulator for this sector. As a result, MFIs are not required to follow some standard rules and are

not subject to minimum capital requirements and prudential norms. This has weakened their management and governance, as they do not feel it mandatory to adopt some specific systems, procedures and standards. Therefore, there is a need for regulating the varied number of microfinance providers, which are influencing the lives of millions of poor people. The regulation would, therefore, help in improving the growth of MFIs in an orderly approach

1.14 Microfinance and Financial Inclusion:

Financial Inclusion is a paradigm shift from Microfinance to inclusive finance. Financial Inclusion acquires a broader definition as it is not limited to MFIs. It aims at bringing into the mainstream those people who had not the chance of being financially included. Although, the terms of Microfinance & Financial Inclusion are closely interrelated, there is some difference between the two. Until now, through microfinance we have only allowed the people access to micro financial services provided mostly by small agencies. Financial Inclusion aims at bringing the unbanked citizens in the financial mainstream. The existence of microfinance shown that it outreaches to the poor but there remains to be seen how the transaction costs on the large number of small credit can be lowered in order to reduce interest rates. The interest rates are rather steep. About half the Loans are used for daily consumer expenses. Then come the small, urgent expenses (related to health care, purchase of medicine, payment of high cost), the education of the children, small expenses of a social nature etc.

1.15 Definitions:

SHGs (Self Help Groups): It is a small voluntary association of poor people, preferably from the same socio-economic background who pool their small savings regularly at a prefixed amount on a daily or weekly basis and then provides loan to members of those SHGs for a period fixed.

JLGs (Joint Liability Groups): This method is also known as Grameen Model. In this, five-member groups are formed and eight such groups form a Centre. Hence, in a full-capacity Centers there are 40 members (8 x 5). However, over the years, people have experimented with Centers of different sizes and now there are variations of 5-8 groups within a Centre. It is the operational unit for the MFI, which means that MFI deals with a Centre as a whole. According to the rules, if one member ever defaults, all in the group are denied subsequent loans.

Proliferation: It means a rapid increase in the number or amount of something.

Exorbitant: It means going beyond what is reasonable or customary, especially in cost or price.

Usurious Rates: High rates of interest in the repayments

Destitute – Extremely Poor

Efficacious – It means having the power to produce a desired result or effect

Dwindles – To gradually become smaller

1.16 Perspective of the Thesis

Initial access to data was on the organizational level and on the field. The analysis was in the form of holistic issues derived after an exposure to Microfinance Institutions, their employees as well as their clients. The schedules were filled with the respondents who are the clients of different Microfinance Institutions and the questionnaires were filled by the management, employees, and field officers of the selected Microfinance Institutions. However, the aim was to understand the impact of repayments of Loans on economically weaker sections in Central Uttar Pradesh region of India.

CHAPTER 2: REVIEW OF LITERATURE

A large literature in development economics examines the optimal design of credit contracts when clients are unable to provide collateral and there is the limited liability (for an overview see **Ray (1998)**). However, this literature has paid scant attention to a central feature of the typical credit contract offered by microfinance institutions (now on, MFI) {frequent repayment in a group setting (**Armendariz and Morduch 2004**)}. MFIs are increasingly a central source of credit for the poor in many countries. The typical repayment schedule offered by an MFI consists of weekly repayment starting 1-2 weeks after loan disbursement. The weekly repayment amount is usually calculated as the principal and interest due divided by the number of weeks until the end of term and payments are generally collected in a group meeting led by the MFI loan officer. Weekly collection of repayment installments by bank personnel is one of the key features of microfinance that is believed to reduce default risk in the absence of collateral and make lending to the poor viable.

A major criticism of subsidized microfinance systems is their high default rates (**Morduch, 2006; Robinson, 2001**). Repayment problem is one of the critical issues of MFIs that concerns all stakeholders (**Sharma & Zeller, 1997; Marr, 2002; Maata, 2004; Godquin, 2004**) where the high loan default rate is the primary cause of the failure of MFIs (**Yaron, 1994; Woolcock, 1999; Marr, 2002; Maata, 2004**). Based on past literature, the factors effecting repayment performance of MFIs can be divided into four factors namely individual/borrowers factors, firm factors, loan

factors and institutional/lender factors. Several studies (**Greenbaum et al., 1995; Hoque, 2000; Colye, 2000; Ozdemir & Boran, 2004**) show that when a loan is not repaid, it may be a result of the borrowers' unwillingness and/or inability to repay. **Stiglitz and Weiss (1981)** recommend that the banks should screen the borrowers, select the "good" borrowers from the "bad" borrowers, and monitor the borrowers to make sure that they use the loans for the intended purpose. This is important to make sure the borrowers can pay back their loans. **Greenbaum and Thakor (1995)**, suggest looking at a borrower's past record and economic prospects to determine whether the borrower is likely to repay or not.

In order to understand why rates are at those levels, one must look at the factors involved in the interest rate cost structure. Four main factors affect the rates set by MFIs - operation expenses, the cost of funds, loan losses and profits required for growth.

- **Operation expenses:** This element includes recurring annualized expenses such as rent, utilities etc. Included here are donated services like technical assistance and training which the MFI assumes it would have to pay for in the future. Mature, efficient MFIs have operational expenses in the range of **10%-25%** of the average loan portfolio (**Rosenberg, 2002**).
- **Cost of Funds:** This element represents the estimated future market rate of subsidized donor funds to the MFI. This rate is factored in because MFIs expect to borrow funds from commercial institutions as they become independent on donor funds.

- **Loan Losses:** This represents the percentage of loans that must be written off by the MFI. Good operating MFIs experience loan losses ranging from **1 – 2%** while those “above **5%** tend not to be viable” (**Rosenberg, 2002**). Africa and Latin America and the Caribbean have the highest rate of loan losses while Eastern Europe and Central Asia (ECA) and the Middle East and Northern Africa (MENA) have the lowest rates (**Micro Banking Bulletin, Issue No. 17**).
- **Profits required for growth (Capitalization rate):** Expressed as a percentage of an average loan portfolio, this represents an amount above the inflation rate. It is important as it reflects internally generated profits and growth in equity against which an MFI can borrow funds. Rates of 5% - 15% are recommended to support long-term growth (**Rosenberg, 2002**).

There are many Other factors that are believed to influence repayment rate are varied and include variables such as gender of the borrower, business expertise, amount of loan borrowed, MFI specific characteristics, poverty indicator, education and many others (**Oke et al, 2007; Godquin 2004; D’Espallier et al, 2009**). Different models have been created and tested to assess the impact of those different variables on repayment rate and their significance (**Oke et. al, 2007; Godquin 2004; D’Espallier et al, 2009**).

In 2006, the average worldwide microfinance lending rate stood at 24.8 percent (**CGAP, 2009, 7**). In addition, rates above 50 percent up to 80 percent and even 100 percent are not uncommon. In relation to the amounts borrowed, they mostly reflect the high ‘all in’ costs rather than high profits of MFIs (**Sundaresan, 2008, 87**). As

administrative costs for individually tailored microloans are much greater than for normal standardized loans, it is usually inevitable to do micro-lending on a financially sustainable basis without charging interest rates that are substantially higher than what banks normally charge in order to cover the costs. Interest rates should also cover the operating expenses besides refinancing expenditure and consider provisions for potential portfolio risk and inflation. Furthermore, higher interest rates for microloans are justified by the complex and labor-intensive structuring, documentation and provision of the credit, the often remote location of the clients and the frequent meetings with MFI's staff during approval and repayment process. Mexico's microfinance Bank (**Azteca**) has no legal limits on interest rates and little if any government oversight. Interest rates at this bank are between **50%-120%** that is much higher than the average microfinance loan interest rate of **31%**. These exorbitant rates are not stimulating economic development and creating wealth. Borrowers who want to build good credit pay back their loans no matter how much their family needs it at the time and they end up worse off. The loans are creating a debt trap that prohibits the poor from ever getting out of poverty because borrowers cannot afford their interest rates.

An example that prompted a lot of discussions was the case of the **For-Profit MFI Compartamos** in Mexico, who went public in 2007, as first microfinance bank. At that time, Compartamos listed shares for over US\$1 billion and earned huge profits by charging their customers interest rates of at least 79 percent per year. It argued that they could reach more people by making such profits and were criticized as loan sharks for their usurious rates.

In India also, the problems with **For-Profit MFIs & Not For Profit Making MFIs model** speedily emerged, as the excessively high interest rates and often unpleasant and undesirable coercive methods that were used to ensure repayment showed that these new ‘modern’ institutions were no different from the rapacious traditional moneylenders that were supposed to be displaced by the more supposedly acceptable norms of institutional finance. As it happens, most MFIs charge interest rates of anywhere between **30%** and **60%** per year, with added charges and commissions and penalties for delayed payment. The rates are therefore not dissimilar to the rates charged by traditional moneylenders and other informal lenders in rural India. **Sriram (2010)** has also pointed to another aspect of this transformation that has more in common with the various other methods of the ‘get rich quick’ capitalism of the past decade in India. In a study, that examines in detail the ‘transformation’ of four prominent MFIs in India (**SKS Microfinance Ltd, Share Microfin Ltd, Asmitha and Spandana**), he noted that in some cases this was also associated with the private enrichment of the promoters through various means.

The microfinance crisis in Andhra Pradesh provides almost a textbook example of what can go wrong in allowing the proliferation of relatively less-regulated MFIs in a boom that occurs under the benign gaze of the government.

Arunachalam (2011) has pointed to a number of causes for this crisis, which are closely related to the very functioning of the sector in both for-profit and not-for-profit variants. In particular, the explosion of multiple lending and borrowing was a prime cause, and this was positively encouraged by MFI lenders. Poor households took on multiple loans from different sources, often only for the purpose of repaying

one of the lenders, and this was fed by the combination of aggressive expansion in the number of clients and strict enforcement of payments.

Priyadarshee and Ghalib (2011) describe a process whereby the MFIs not only offered multiple loans to the same borrower household without following due diligence but also collaborated with consumer goods companies to supply consumer goods such as televisions as part of their credit programmes. These pure consumption loans exacerbated the already worsening indebtedness of poor households and some of them started defaulting in repayment. Several MFIs then resorted to openly coercive methods for loan recovery. Extreme repayment pressure forced borrowers to approach moneylenders to borrow at exorbitant rates of interest simply to repay the MFIs. When the situation became impossible, and no fresh loans were accessible, some of these borrowers committed suicide and the issue attracted widespread media coverage.

The Andhra Pradesh state government blamed the MFIs for fuelling a frenzy of over indebtedness and then pressuring borrowers so relentlessly that some took their own lives. It immediately brought in regulations to control their activities, particularly measures to prevent the forcible recovery of loans from poor borrowers. The Andhra Pradesh Microfinance Institutions (Regulation of Money Lending) Ordinance, 2010 was implemented with effect from 15 October 2010. The ordinance mandated all MFIs to register themselves with the government authority while specifying the area of their operations, the rate of interest and their system of operation and recovery. The ordinance also specified stiff penalties for 'coercive action' by MFIs while recovering their loans. In addition, it prohibited them from

extending multiple loans to the same borrower and limited the total interest charged to the extent of the principal amount. This generated an acute crisis in the MFIs, which was then aggravated by a wave of defaults across the state; this has since made most of their functions financially unviable. The lack of confidence among borrowers that many MFIs will continue to exist has further reduced the incentive to repay, thus leading to a stalemate. A report in 2011 (**Economic Times, 2011**) quoted the high-flying Chairman of SKS Microfinance Ltd, Vikram Akula, as saying that the loan recovery rate in Andhra Pradesh had dropped to **10%**; he resigned from that post shortly afterward. In addition, this is perceived to have altered the behaviour of MFIs in other states, making them even less willing to lend to poor borrowers because of the higher transactions costs and risks involved. In other words, the perceived advantages of microfinance in terms of providing viable financial services to poor clients appear to disappear once they are regulated to prevent irresponsible lending and the coercive extortion of repayments.

According to **Ghate (2008)**, approximately 75 million households in India are poor and about 22 percent of these poor households are currently receiving microfinance services. In order to run the groups successively and to achieve higher repayment rates, they generally select the non-poor people as programme beneficiaries. The study finds that the core poor are often not accepted in group lending programmes by other group members because they are seen as a bad credit risk. In spite of the various institutional barriers, various psychological problems relating to the poor people restrict them to join the programme. The extreme poor often lack self-confidence so they hesitate to join a group where they have to deal

with the other group members, bank officials and other promoting institutions. The core poor are generally too risk averse to borrow for investment in the future. They will, therefore, benefit only to a very limited extent from microfinance schemes.

More than subsidies, the poor need access to credit. The absence of formal employment makes them 'non – bankable'. This forces them to borrow from local moneylenders at exorbitant interest rates (**Tiwari and Fawad, 2004**). Many studies and papers looked at the transaction cost aspects of microfinance from sustainability perspective as well as the perspective of clients. Interest rate issue in microfinance is sometimes the most hypothetical debate with fewer inquiries on the actual situations. Policymakers and sector experts often suggest that MFI's increase interest rates eliminate reliance on subsidies. This argument makes sense if the poor are interest rate insensitive, then MFI's can achieve sustainability without reducing the poor's access to credit. It is commonly argued that since poor borrow from moneylenders at very high rates, they do not price sensitive.

Fernando (2006), CGAP (2005) and M-Cril (2009) have all stated that rate ceiling will reduce the creditworthiness of MFI's, reducing their ability to borrow from the market to finance their operations, and prompting a decline in the supply of credit. Unfortunately, these arguments are based on certain assumptions rather than strong evidence or theoretical backing to criticise the rate ceilings. The case quoted are those of Vietnam and China where interest rate ceilings have been a major characteristic of the market and where the market has recorded with the disappointingly low rate of outreach growth, despite the existence of massive

subsidies to microcredit (**Fernando, 2006**). Many papers on these issues have also mentioned an important fact that high rates of interest can be affordable to those who generate the sufficiently high surplus of funds on microcredit. Therefore, microcredit is not an advisable source of fund for farming activities. Some microfinance organizations calculate the repayment rate incorrectly:

$$\text{Repayment Rate} = \frac{\text{Amount received (including prepayments and past due amounts)}}{\text{Amount due (excluding past due amounts)}}$$

This formula overstates the amount received by the prepayments and past due amounts received. This is why repayment rates can sometimes be greater than 100%. This does not provide useful information about the performance of the outstanding portfolio. It is important that components that are included in the numerator also be included in the denominator.

Two formulae are suggested:

$$\text{On-Time Repayment Rate} = \frac{\text{Amount received on time - prepayments}}{\text{Total amount due}}$$

Or

$$\text{Repayment Rate} = \frac{\text{Amount received (current and past due) less prepayments}}{\text{Total amount due plus past due amounts}}$$

These formulae remove the effect of prepayments and show the actual rate of received payments against expected payments either on time or taking into account past due amounts. Repayment rates can be useful for cash flow projections as they indicate, based on experience, what percentage of the amount due to a micro-finance organization can be expected to be received.

The global average interest and fee rate is estimated at **37%**, with rates reaching as high as **70%** in some markets. **McFarquhar, Neil (April 13, 2010)**. The reason for the high-interest rates is not primarily cost of capital. Indeed, the local microfinance organizations that receive zero-interest loan capital from the online microlending platform Kiva charge average interest and fee rates of **35.21%**. **(Kiva.org. Retrieved October 10, 2009)** Rather, the principal reason for the high cost of microcredit loans is the high transaction cost of traditional microfinance operations relative to loan size. Microcredit practitioners have long argued that such high interest rates are simply unavoidable. The result is that the traditional approach to microcredit has made only limited progress in resolving the problem it purports to address: that the world's poorest people pay the world's highest cost of small business growth capital. The high costs of traditional microcredit loans limit their effectiveness as a poverty-fighting tool. Borrowers who do not manage to earn a rate of return at least equal to the interest rate may actually end up poor because of accepting the loans

(Assadi 2006) In 1997, India experienced its best-publicised spell of farmer suicides – a reaction to a number of agricultural hardships that led to the irreversible

indebtedness of small and marginal farmers. Rising costs of cultivation, degenerating input quality, rapidly decreasing prices of farm products, and a lack of formal credits for small farmers, driving them to alternative and much more expensive lending sources, were some of the major determinants of the crisis. Between 1997 and 2006, more than 250,000 Indian farmers committed suicide among others, due to bad harvests and their inability to keep up with debt repayment schedules.

Rajesh and Ravi (2011) states in their paper, despite the role of microfinance, is very good in poverty alleviation but the unethical and extortionist practices by MFIs led to arguably a draconian measure in its home turf Andhra Pradesh halting the industry in its tracks.

Robinson (2001) is probably right in observing that commercial microfinance is not meant for core poor or destitute but is rather aimed at economically active poor. He opines that providing credit to people who are too poor to use it effectively helps neither borrower nor lender and would only lead to increasing debt burden. He suggests that this segment should not be the target market for financial sector but of state poverty and welfare programs.

Hishigsuren, (2004) there are studies show that Microfinance doesn't reach the poorest of the poor. Rather they are reaching the marginally poor or nonpoor. Besides most MFIs have no clear rules and criteria to target the poorest of the poor.

Ghatak et al (2012) also made use of this data to examine the Welfare effects of Profit status and market power of MFIs. They created economic models based on the interest rates charged to borrowers and the social capital that borrowers put at risk by defaulting on loans. Separate simulations were then run under a variety of conditions, including a monopolist for-profit lender, a competitive marketplace, and a large non-profit lender. Their findings indicate that in the monopoly scenario, the lender could exploit the borrowers' social capital to raise interest rates and lower their welfare.

New York Times news (Polgreen and Bajaj, 2010) stated that institutions in India are lending microcredit's to borrowers without evaluating their ability to repay and without a background check. The repayment of microloans has therefore decreased whereby borrowers are forced to resort to moneylenders in order to repay old loans. The collapse of the microfinance industry in India is near and there are several cases where suicide is the people's answer when they have not been able to repay their microloans.

(Polgreen and Bajaj, 2010) The problem regarding reckless lending of microfinance institutions has pointed towards women like Durgamma Dappu, a widowed laborer who took a loan from a private microfinance company because she wanted to build a house. She had never had a bank account or earned a regular salary but was given a 200\$ loan anyway, which she struggled to repay. She took an additional loan from a different company, then another loan, until she was nearly 2000\$ in debt. This

woman had no choice but escape from her village, leaving her family little choice but to forfeit her tiny plot of land and her dreams. The event describes how default risk can cause greater poverty that is if not resolved in time.

Tadele Haileslasie Rao P. Madhu Sudana (2014) he has analyzed that Ethical behavior in business practices determines success or failure of an organization and it is not an exception to MFIs. It was unique and significant in terms of the severity of the crisis. The industry hasn't taken any lesson from Microfinance crisis happened in other countries in previous years. Finally, this paper offers concluding comments regarding effective finally; this paper offers concluding comments regarding effective Microfinance crisis practices that have emerged in the literature.

Barua, (2012) the amount of loans provided to the members of SHGs were so small that it can't help the members to fight against poverty. There is the failure of SHGs, but not the failure of self-help.

Banerjee et al. (2010) investigated the propensity for an individual to start a business with their loan. This particular report found the distribution of loans from Spandana clients to be: 30% to start a business, 22% to buy a durable for household consumption, 30% to repay an existing loan, 15% were used for durable consumption, and 15% to buy non-durables for household consumption.

Bannerjee et al. (2009) identify two important loan use dimensions for further study: spending on durables vs. non-durables and investing in income generating opportunities. Such spending on items that will only be consumed points to the same problem of loaning to borrowers who are already poor. If borrowers are still attempting to meet their basic needs, the probability of the borrowers spending on a business and thereby increasing their future income is less likely. Consuming instead of investing leads to a reduced ability to repay loans. Another interesting aspect of this data is that while 30% of loans were used to start a business, another 30% were used to repay an existing loan, further leading to the implication that loans not used in income generating activities could lead to a cycle of borrowing and greater debt.

Selvarajan and Elango (2004) observed that some groups charge 24 percent interest to the members and it is obvious that the high rate of interest is very much oppressive causing hardships to the poverty-stricken groups.

Datar and Prakash (2004) found throughout the country SHGs are successful in covering non-bankable credit needs but not so in income generating activities. A majority of the women does not have the cultural moorings to become entrepreneurs; they lack requisite skills, infrastructural facilities, and finance. Training is inadequate and there is no linkage between training and credit or credit and marketing. There is no integration with local economy as there is little demand for such products.

Dhara and Nita (2005) studied Self Help Groups in Hoogly district of West Bengal and found the members cannot be said to be hard decision makers and the empowerment is only at elementary level since they are not confident to carry out activities on their own. Members are not aware of the banking procedure and leaders are finding it difficult to maintain account books.

(Morduch 1999) One of the key determinants of the observed success of microfinance lies in the existence of high repayment rates. Most microfinance programmes usually report loan repayment rates of above 95%, often even as high as 100% – not least since this is what is nowadays expected from them and can serve as a door-opener to donor funding. To reach the objective of near to perfect loan recovery, organizations working in the microfinance sector have been using various techniques – most of which do not relate to the special features of microfinance services outlined above (i.e. group lending, joint liability, small and frequent installments, doorstep policies and dynamic incentives). In case a customer is not able to repay an installment, one of the first measures (especially practiced with SHGs) is to charge a fine. The amount of this fine is often decided by the groups themselves and can range from Rs. 1 to 80. In the case of continued delay, pressure is exerted. This can take several forms but usually starts with the group's leader or MFI staff visiting the defaulting borrower. Such a visit can already have the desired effect since other village members become aware of the borrower's inability to repay, which strongly influences his or her socio-economic status as well as other credit opportunities in society.

Tripathy and Jain (2008) studied Self Help Groups in Haryana and Orissa and concluded that micro finance has a negligible income impact on asset less rural poor, the deprived and disadvantaged.

Sinha (2006) studied 214 SHGs in Andhra Pradesh, Karnataka, Orissa and Rajasthan and concluded that

- SHG members contribute to women's election in Panchayat Raj but do not appear to inform what they can achieve if elected.
- 26 SHGs have taken up issues of social justice (i.e.12 percent of 214 SHGs) such as drunken husband, violence, dealing with dowry, prevention of child marriage, bigamy.
- Leaders obtained more loans to the tune of 25 to 30 percent – both in terms of frequency and amount borrowed.
- Default rate was 28 percent (high in A.P.); 38 percent of very poor members have more over due, in Andhra Pradesh defunct groups emerging as an indicator of loan default.

CHAPTER 3: RESEARCH FRAMEWORK AND METHODOLOGY

The thesis defined the role of microfinance and the impact of microcredit repayments on economically weaker sections of the society in **chapter 1 & chapter 2**. The definition emphasized on the principles of microfinance and the different categories of the Microfinance Institutions in India with special reference to **For – Profit Making MFIs and Not for profit making MFIs**. Further, it is discussed in brief about the working of these MFIs and emphasis on the various problems faced by its clients related to repayments of the loans. This chapter develops the research framework and questions; and explains the methodology adopted to address the research questions.

3.1 Introduction:

In common parlance, research refers to a search for knowledge. Research simply put, is an endeavor to discover answers to problems (intellectual and practical) through the application of scientific method. Research = Re + Search. That is search after search and search. The purpose of such repeated search is to thoroughly understand the problem, issue, or phenomenon and find the apt and effective solution to the problem or strategy to deal with the issue or the phenomenon. Such solution or strategy adds to our stock of knowledge in dealing with the problem or the issue.

According to Webster's International Dictionary gives a very inclusive definition of research "as careful, critical inquiry or examination in seeking facts or principles, diligent investigation in order to ascertain something". The 20th Century Chamber

Dictionary defines research as a careful search or systematic investigation towards increasing the sum of knowledge.

Francis G, Cornell defines research as "the activity of collecting information in an orderly and systematic fashion"

3.2 Purpose of Research:

The purpose of an individual research project is a part of the research design. According to the University of Tennessee at Knoxville, the purpose statement in a research proposal lays the foundation for the logic behind the research and the personal reason to conduct the research. This includes a gap in the current literature and previous experience in the field. The purpose of this research is to discover an answer to questions through the application of scientific methods. The research intentions, which are taken in this research, are as follows:

- (a) To know the purpose of borrowing the microcredit.
- (b) To test the hypothesis of an interrelationship between variables such as monthly income & Loan repayments.
- (c) To find out the effects on the household economy while repayment of the Loans.
- (d) To test the hypothesis about the utilization of Loan and the impact of it on business.

3.3 Research Problem:

According to the **Stanford Social Innovation Review (2007)** "Research showing that microfinance clients have been known to **scrimp on food, sell their furniture,**

borrow from loan sharks, and take second jobs to pay off their loans; that husbands, sons, and fathers-in-law often take control of women's loans; and that, overall, microfinance fails to find its way to the world's poorest people.”

In this research, the above problem is further elaborated by analyzing the impact of microcredit repayments of the Loans on the economically weaker sections of the society in central Uttar Pradesh. A lot of literature has been done in this area of microfinance but not in respect of the impact of microcredit repayments on economically weaker sections and with reference to the region of Central Uttar Pradesh, India.

The study of this research becomes more significant because it deals with the real economic problems faced by the poor and the findings of this study must work as a revelation for the Microfinance institutions to perform useful measures in client's perspective.

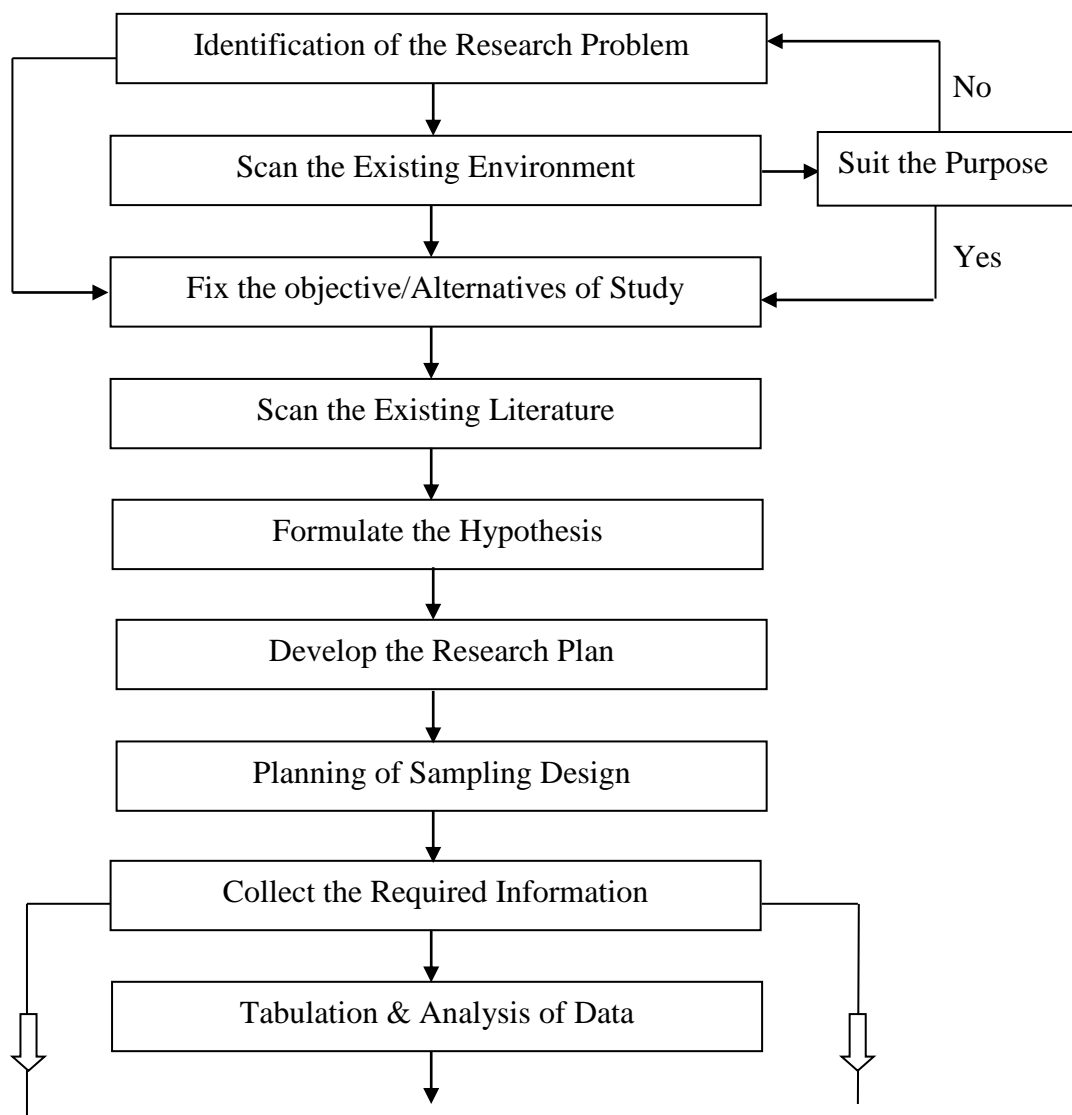
3.4 Research Process:

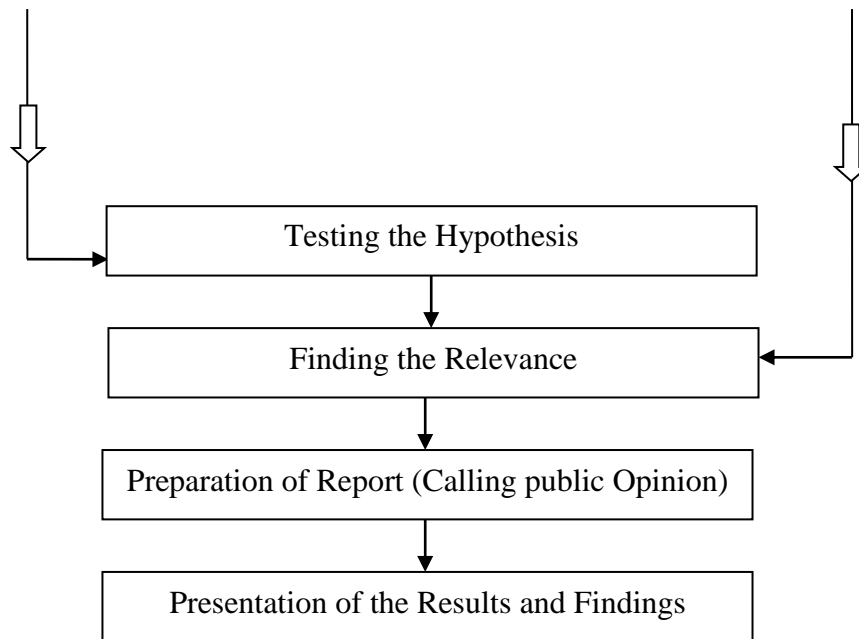
The Research process is not an overnight phenomenon; rather it consists of or passes through a series of steps. Effective research involves certain steps or process. The real research starts soon after identification of the research problem. In order to make the process of research clear and well defined, a researcher or a research team before going to do research should follow some steps.

In this study, the researcher has followed the steps involved in the research. In the initial phase, the concept of microfinance, history of microfinance and legal forms of the microfinance institutions are discussed which is followed by the description of the

microfinance institutions taken in the study. In the second phase, the review of the literature has been done in order to formulate the hypothesis and find out the actual work done by the other researchers and which area is needed to be covered further. In the third phase, the research methodology has been adopted to accomplish the objectives and in the last phase, the data analysis and the interpretation are done in order to find the necessary conclusion. The following figure depicts the diagrammatic view of the following steps:

Figure No. 3.1: Steps of Research



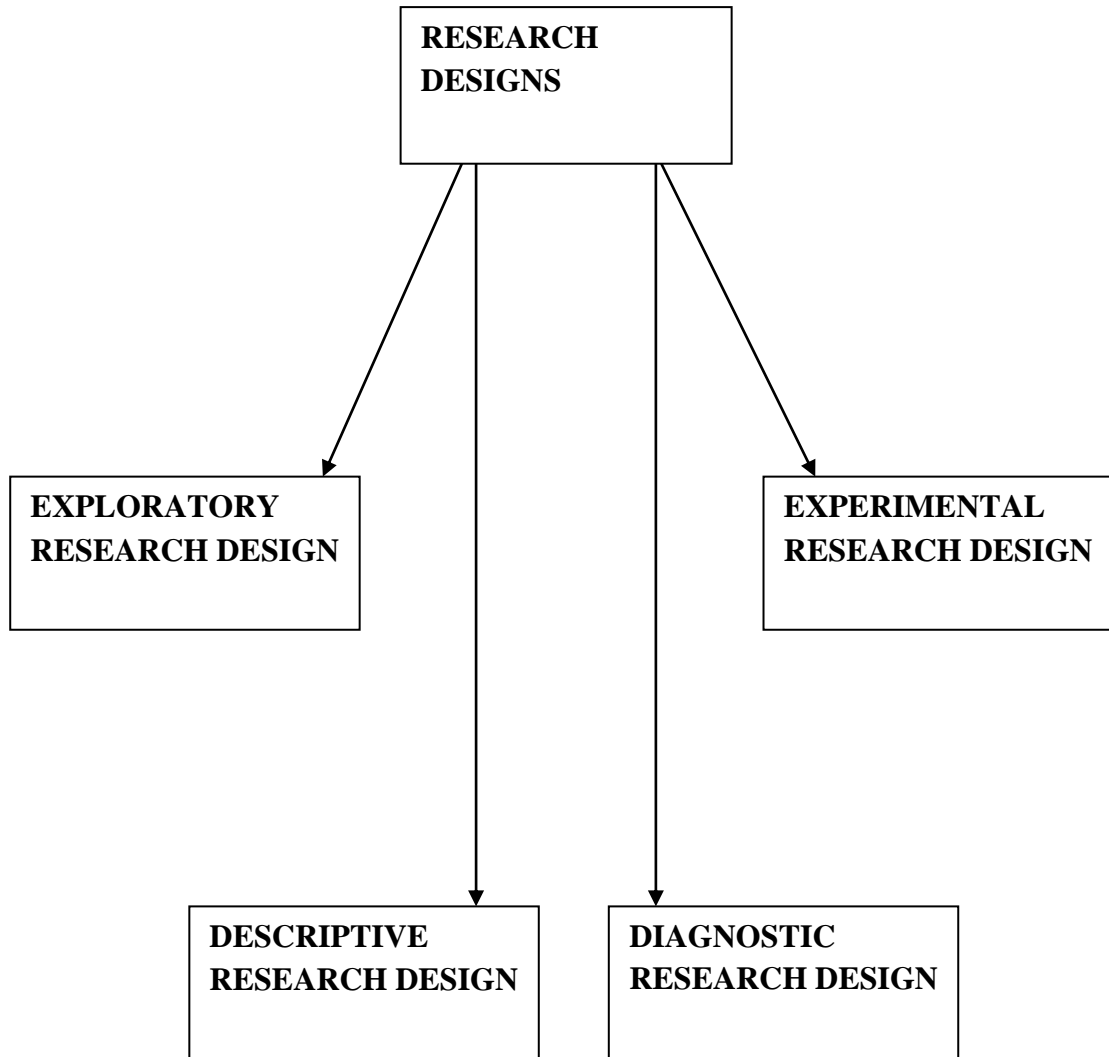


Source: Prasand Sarangi, 2010, Research Methodology, Taxman Publication. pp. 39

3.5 Research Design:

A research design is utilized to structure the research, to indicate that all the major elements of the research have been designed to work together. There are numerous types of research designs that one may decide to use. Burns and Grove define a research design as “a blueprint for performing a study with maximum control over factors which could interfere with the validity of the finding”. The research design is followed as per the requirement of the research. The research design is broadly classified into four major categories, which are as follows:

Figure No. 3.2: Classification of Research Design



Source: Prasad Sarangi, 2010, Research Methodology, Taxman Publications pp. 35

In this study, exploratory research design and the subcategory of descriptive research design i.e. statistical research design has been used for further analysis and interpretation.

3.5.1 Exploratory Research Design:

Exploratory research studies are often seen as the initial step in the continuous research process. Whenever a researcher starts research work, the researcher has to come across this type of research design. This type of research design is the mandatory stage in each research process, hence, is a preliminary phase and is essential in order to obtain a proper definition of a problem. In this, the major emphasis of the researcher is on the discovery of new ideas. This type of study is particularly helpful in breaking broad and vague problem into smaller, more precise sub-problem statements, hopefully in the form of a specific hypothesis.

In this research, the researcher has emphasized on the principles of microfinance and the different categories of the Microfinance Institutions in India with special reference to **For - Profit Making Microfinance Institutions (MFIs) and Not for Profit Making Microfinance Institutions**. Further, it is discussed in brief about the working of these MFIs and emphasized on the various problems faced by its clients related to repayments of the loans to the microfinance institutions. The literature has been mentioned about the working and the repayments of the loans. The hypothesis has been formulated for getting the specific area of the microfinance industry.

3.5.2 Descriptive Research Design:

It is a scientific method, which involves observing and describing the behaviour of a subject without influencing it in any way. In many scientific disciplines, especially in social science and management, there is extensive use of this method to obtain a

general overview of the subject. The two basic types of research designs are generally used in descriptive research studies. They are

(i) Case research design

(ii) Statistical or Quantitative research design

Case research design: It is the most widely used formal design. This involves collecting empirical data, generally from only one or a small number of cases. It usually provides rich details about those cases of a predominantly qualitative nature. A case study generally aims to provide insight into a particular situation and often stresses on the experiences and interpretations of those involved. It may generate new understandings, explanations or hypothesis.

Statistical or Quantitative research design: It is all about quantifying relationships between different variables. Variable are things like weight, performance, time and treatment. One will measure variables on a sample of subjects, which can be tissues, animals or humans and can express the relationship between variables using effect statistics, such as correlations, regression, relative frequencies etc. The main advantage of those results can be generalized owing to wider samples used and conclusions are based on statistical techniques.

In this research, the researcher has used the Chi - Square test in order to find out whether Microfinance Institutions are fulfilling the needs of clients or not and test the hypothesis, the researcher also used the regression analysis to study the effects of Age, Gender, Number of Dependant and Education level on multiple loan contracts.

Further, the relationship between variables taken in this research has been analyzed such as income of the respondents and the amount of the Loans.

3.6 Research Objectives:

The study has been undertaken with the following objectives:

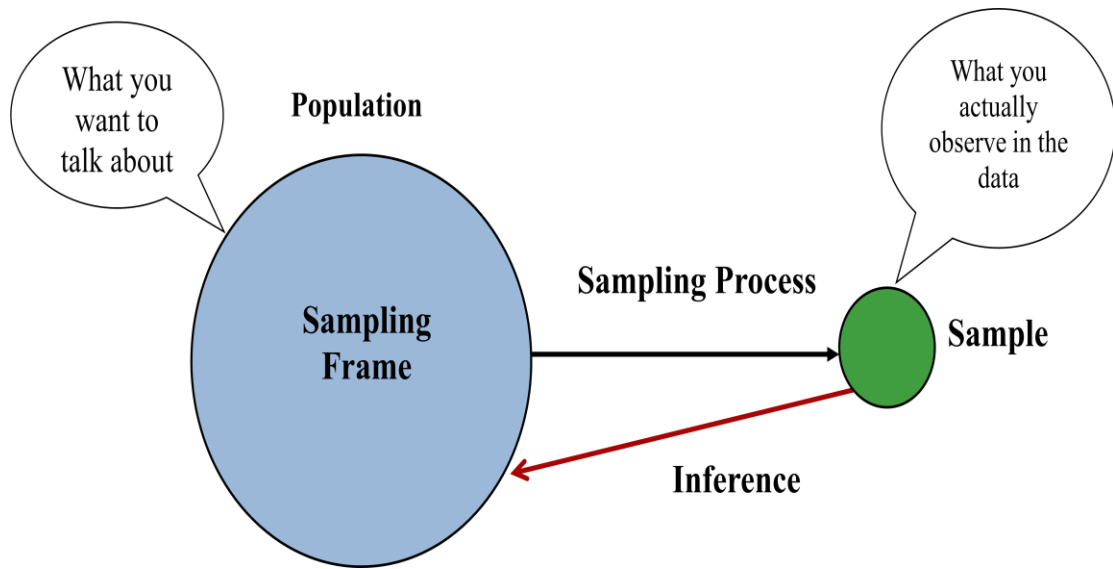
- (i) To find out the causes of high interest rates of Loans of Microfinance Institutions.
- (ii) To find out the economic effects on a household of Loan repayments to the Microfinance Institutions.
- (iii) To evaluate the effectiveness of microcredit for the clients.
- (iv) To find out whether Microfinance Institutions are satisfying the needs of clients or not.
- (v) To find out whether the clients of Microfinance Institutions are repaying the Loan on time or not.
- (vi) To study the effect of Age, Gender, Number of Dependant and Education Level on Multiple Loan Contracts.

3.7 Sampling Design:

It is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. Sample Design also leads to a procedure to tell the number of items to be included in the sample, i.e. the size of the sample. Hence, sample design is determined before the collection of data. Among various types of sample design

techniques, the researcher should choose samples, which would be reliable and appropriate for his research study.

Figure No. 3.3: Process of Sampling



Source: By presentation of luthra Swati and Meenal santani, assessed on 12th November, 2016 (<http://www.slideshare.net/swatiluthra5/sampling-ppt/>)

In this research, the researcher has used Central Uttar Pradesh region as a population (Universe) size in which 8 districts i.e. **Lucknow, Kanpur Nagar, Kanpur Dehat, Sitapur, Hardoi, Unnao, Barabanki & Raebareli** are taken under **Sampling Frame**.

Once the universe has been defined, information that is as precise as possible has to be sought according to its dimensional and spatial and temporal distribution in order to construct the sampling frame, this being the basis on which to develop the sampling design. It is not feasible to study the entire universe in terms of area and population. This research includes both males and females who are the clients of Microfinance

institutions and the employees of 6 Microfinance Institutions. The purpose behind the selection of these districts is to reach the people hailing from rural areas and semi - urban areas in order to analyze the real problems of clients faced related to repayments of the loans. Mostly the number of clients of the selected Microfinance Institutions for the purpose of this research is living in these districts of Central Uttar Pradesh. Further, there are two major reasons for specific selection in this study. First, Central Uttar Pradesh has both characteristics of rural and semi-urban features where like other parts of the country, microfinance services have been growing rapidly with increasing cases of outstanding Loans. Second, the location was within the reach of the researcher especially in terms of associated travel and data collection costs since there was no external funding for this research.

3.8 Sample Size:

The sample size of **500** respondents who are the clients of the selected Microfinance Institutions and the **10** employees of 6 Microfinance Institutions are included in this research. In order to make it feasible, this sample size has been selected from the people belonging to rural areas and semi - urban areas of the selected 8 districts of Central Uttar Pradesh region and the reason behind selecting only 10 employees is as follows:

- There are only 6 microfinance institutions which are fully operational, so the people in the top management are very limited.
- The local moneylenders are excluded as they are not the part of the population under this study.

3.9 Sampling Technique:

Convenience sampling (also known as availability sampling) is a specific type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate in the study. Convenience sampling is a type of sampling where the first available primary data source will be used for the research without additional requirements. In other words, this sampling method involves getting participants wherever you can find them and typically wherever is convenient.

In this research, the researcher has used this technique to collect the data by approaching the clients of Microfinance Institutions and the employees of the Microfinance Institutions at his convenience. The employees of the Microfinance Institutions provide the list of the clients in the selected districts under this research.

3.10 Formulation of hypothesis:

In order to bring proper analysis of the research problem the following hypothesis for the fulfillment of objectives has been taken as follows:

- **To find out the economic effects on a household of Loan repayments to the Microfinance Institutions.**

Ho: Loan Repayment and Monthly Income of Clients is Independent.

Ha: Loan Repayment and Monthly Income of Clients is Dependent.

- **To find out whether Microfinance Institutions are satisfying the needs of clients or not**

Ho: Utilization of Loan and Impact on Business is independent on each other

Ha: Utilization of Loan and Impact on Business is dependant on each other

- **To study the effect of Age, Gender, Number of Dependant and Education Level on Multiple Loan Contracts**

Ho: $\beta_i = 0$ (Regression Coefficients are insignificant)

Ha: $\beta_i \neq 0$ (Regression Coefficients are significant)

3.11 Collection of Data:

There are two methods used for collecting the data, which are as follows:

3.11.1 Primary Data:

Primary data is original research that is obtained through the first-hand investigation, while secondary data is research that is widely available and obtained from another party. Primary data includes information collected from interviews, experiments, surveys, questionnaires, focus groups and measurements. According to **Creswell (2003) and Kumar (2011)** “the choice of study location and data collection depending upon among other things the resources available and the demographic characteristics of the study population”. As such, we did not find any threats or limitations on data quality associated with the study location.

For the collection of the data, the two techniques of primary data had been used which are as follows:

1. Interview Schedule:

The close - ended schedule has been designed to consist of two parts- basic information related to the respondents and the information related to the loans and repayments. The schedule contains a series of **32** questions out of which **8** questions are related to basic information of the respondents, **20** questions are related to information of loans and repayments and **4** questions were related to the level of satisfaction of the respondent and the product knowledge on five points Likert Scale. The pilot study is conducted on 50 respondents in order to evaluate the feasibility, time, cost, adverse events, and affect size (statistical variability) in an attempt to predict an appropriate sample size. Further, the personal visits have been made with the 500 respondents who were the clients of selected Microfinance Institutions in Central Uttar Pradesh region. During the interaction with the respondents, the researcher asked the questions as per the purpose of fulfillment of objectives of this research. The respondents were asked to explain their personal insights about the real impacts felt while repaying the loans to the microfinance institution. A lot of socialization was done to make the interviews interactive for participants to disclose their actual problems.

2. Questionnaire:

The open - ended structured questionnaire has been prepared to contain 8 questions to be asked of the employees of the selected Microfinance Institutions in this research. The employees answered the questions and provide their opinions about the relevant information related to the objectives of the research.

3.11.2. Secondary Data:

Secondary data refers to data that was collected by someone other than the user. Common sources of secondary data for social science include censuses, information collected by government departments, organisational records and data that was originally collected for other research purposes.

In this research, the sources of data are the websites of the microfinance institutions, research paper journals, publications of the various government agencies, books, etc. related to this area of research. The secondary sources were extremely helpful in this research because they bring out the actual research done in the area of microfinance and provide the clear vision of this research.

Chapter 4: DATA ANALYSIS TECHNIQUES

4.1 Introduction:

Once the data was collected, the researcher did the processing and classification of the data including editing, coding, tabulation of data and construction of charts. Further, for the analysis of the data, the researcher has used the different research techniques as per the requirement of the justification of the objectives. **For the first, third and fifth objective – the Bar Graph and the Pie Chart method has been used. For the second and fourth objective – the Chi Square test has been used and lastly, for the sixth objective – the multiple regression analysis has been done in order to bring the relevant findings.** The researcher has used Microsoft Excel and SPSS 14 (Statistical Package for the Social Sciences) for quantitative calculations in this research. The brief description of the following research tools and techniques used in this research are as follows:

4.1.1 Bar Graph:

It is a chart uses bars to show comparisons between categories of data. The bars can be either horizontal or vertical. Bar graphs with vertical bars are sometimes called vertical bar graphs. A bar graph will have two axes. One axis will describe the types of categories being compared, and the other will have numerical values that represent the values of the data. It does not matter which axis is which, but it will determine what bar graph is shown. If the descriptions are on the horizontal axis, the bars will

be oriented vertically, and if the values are along the horizontal axis, the bars will be oriented horizontally.

4.1.2 Pie Chart:

It displays data, information, and statistics in an easy-to-read 'pie-slice' format with varying slice sizes telling you how much of one data element exists. The bigger the slice, the more of that particular data was gathered. Pie charts are best used for applications when you want to show percentages, or the proportion of parts to a whole, for a small number of parts where little differences do not matter much. Small differences can be displayed on a carefully made pie chart, but the average reader will skip over them unless they are labeled in an obvious way. Many sectors can be displayed, but they again require careful labeling and can give the reader an 'information overload' effect that counteracts the visually friendly character of your pie graph.

4.1.3. Chi - Square Test Analysis:

The Chi-Square statistic is most commonly used to evaluate Tests of Independence when using a cross tabulation (also known as a bi - variate table). Cross tabulation presents the distributions of two categorical variables simultaneously, with the intersections of the categories of the variables appearing in the cells of the table. The Test of Independence assesses whether an association exists between the two variables by carefully examining the pattern of responses in the cells; calculating the Chi-Square statistic and comparing it against a critical value from the Chi-Square

distribution allows the researcher to assess whether the association seen between the variables in a particular sample is likely to represent an actual relationship between those variables in the population.

The calculation of the Chi-Square statistic is quite straightforward and intuitive:

$$\chi^2 = \sum \frac{(f_o - f_e)^2}{f_e}$$

Where f_o = the observed frequency (the observed counts in the cells)

and f_e = the expected frequency if NO relationship existed between the variables

As depicted in the formula, the Chi-Square statistic is based on the difference between what is actually observed in the table and what would be expected if there was truly no relationship between the variables.

4.1.4. Multiple Regression Analysis:

Multiple regression is an extension of simple linear regression. It is used when we want to predict the value of a variable based on the value of two or more other variables. The variable we want to predict is called the dependant variable (or sometimes, the outcome, target or criterion variable). The variables we are using to predict the value of the dependant variable are called the independant variables (or sometimes, the predictor, explanatory or regressor variables). For example, you could use multiple regression to understand whether exam performance can be predicted based on revision time, test anxiety, lecture attendance and gender. Alternately, you could use multiple regression to understand whether daily cigarette consumption can

be predicted based on smoking duration, an age when smoking, smoker type, an income and gender started.

4.2 Respondent profile is explained by taking the following parameters:

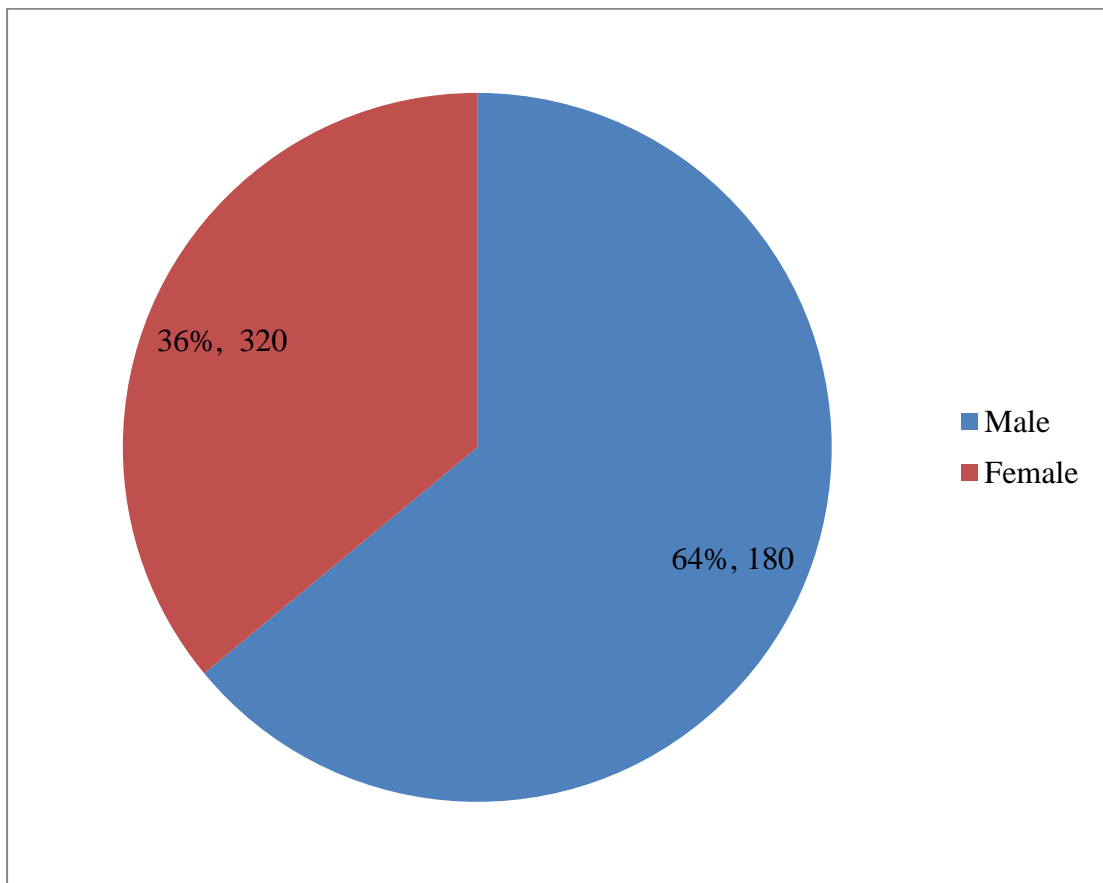
a. **Gender:** It is classified into

- Male
- Female

Table No 4.1: Frequency table showing gender distribution

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	320	64%	64%	64%
Female	180	36%	36%	100%
Total	500	100%	100%	

Figure No. 4.1: Chart showing gender distribution



Interpretation: The above table & pie chart shows that out of 500 respondents 64% i.e. 320 of the respondents are males and 36% i.e. 180 are females.

Inference: From the above table & pie chart, it can infer that as a sample both the male and female respondents are included.

Statistical Estimation:

Assume P_0 = Males and q_0 = Females then,

$P_0 = 320/500$ i.e. 0.64 and $q_0 = 180/500$ i.e. 0.36

Standard Deviation (S.D) = $\sqrt{p_0 * q_0/n}$

= $\sqrt{0.64 * 0.36/500} = 0.0214$

Range (R) = $P \pm Z * S.D.$

$R (+) = 0.64 + 1.96 * 0.0214$

$R (+) = 0.6819$ or 68.19%

$R (-) = 0.64 - 1.96 * 0.0214$

$R (-) = 0.5980$ or 59.80%

Out of every 500 respondents selected randomly from the population, there is 95% chance that anywhere from 59.80% to 68.19% respondents are males.

b. Age: It is classified into:

10 - 25

26 - 50

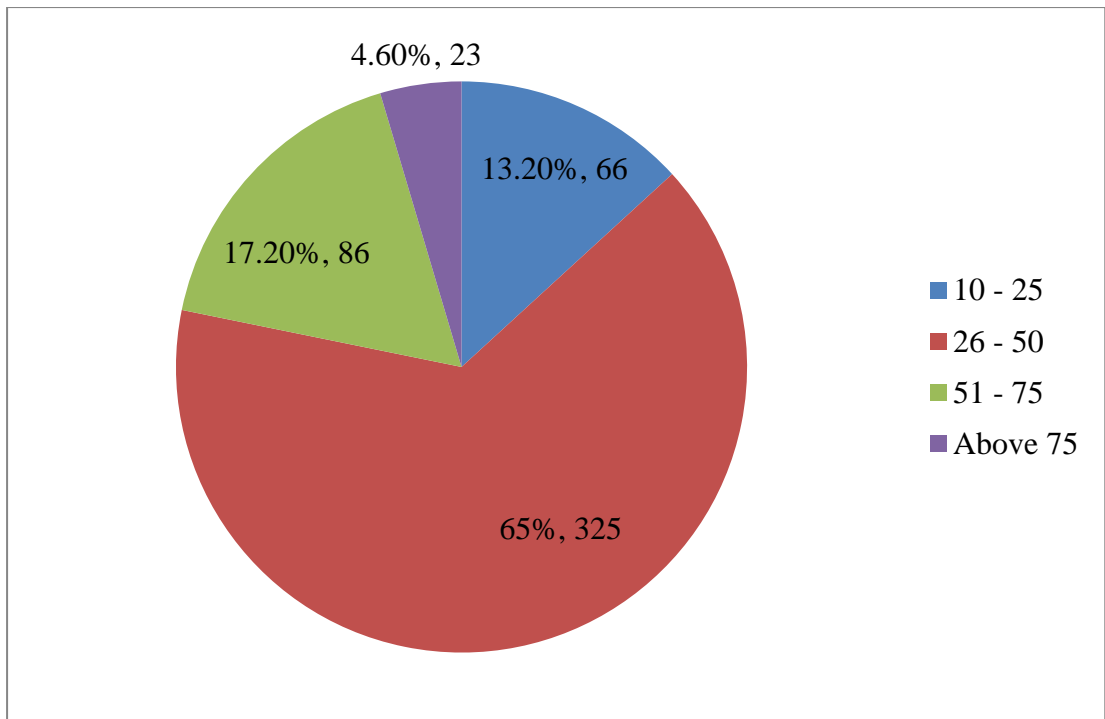
51 - 75

Above 75

Table No. 4.2: Frequency table showing age distribution of Respondents

Age (Round off)	Frequency	Percent	Valid Percent	Cumulative Percent
10 - 25	66	13.2%	13.2%	13.2%
26 - 50	325	65%	65%	78.2%
51 - 75	86	17.2%	17.2%	95.4%
Above 75	23	4.6%	4.6%	100%
Total	500	100%	100%	

Figure No. 4.2: Chart showing age distribution of respondents



Interpretation: The above table & pie chart shows that out of 500 respondents, 13.2% respondents i.e. 66 belong to the age group of 10 -25 years, 65% respondents i.e. 325 belong to the age group of 26 -50 years, 17.2% respondents i.e. 86 belong to the age group of 51 -75 years and only 4.6% respondents i.e. 23 belong to the age above 75 years.

Inference: From the above table & pie chart, it can infer that as a sample different age group within the population is considered.

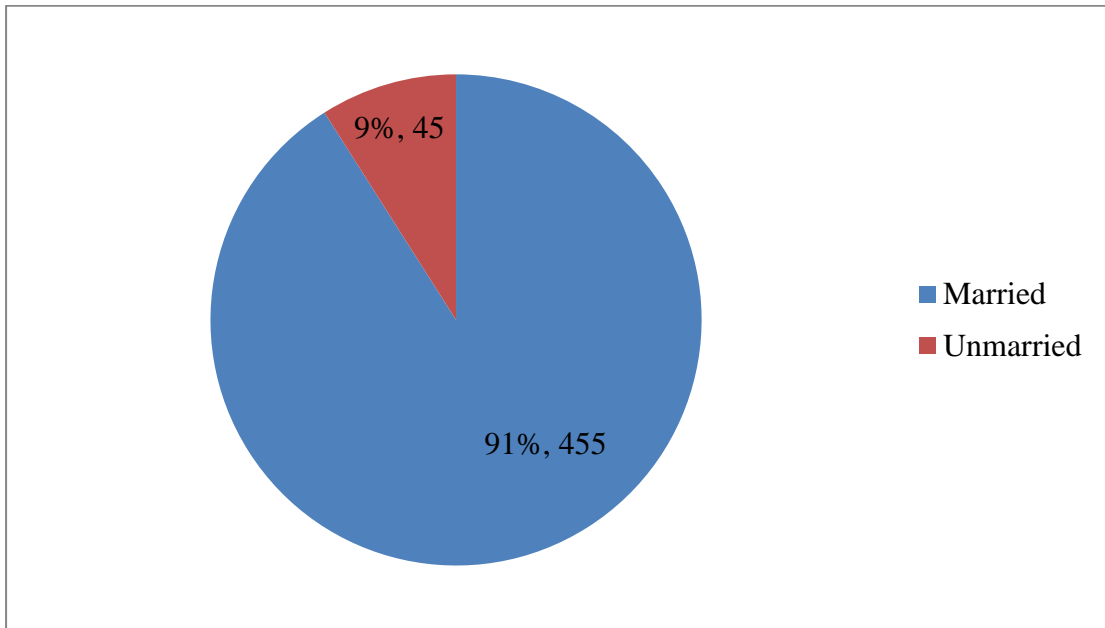
c. **Marital Status:** It is classified into

- Married
- Unmarried

Table No. 4.3: Frequency table showing Marital Status of Respondents

Marital Status	Frequency	Percent	Valid Percent	Cumulative Percent
Married	455	91%	91%	91%
Unmarried	45	9%	9%	100%
Total	500	100%	100%	

Figure No. 4.3: Chart showing Marital Status of the Respondents



Interpretation: The above table & pie chart shows that out of 500 respondents, 91% respondents i.e. 455 are married and 9% respondents i.e. 45 are unmarried.

Inference: From the above table & pie chart, it can infer that both married persons and unmarried persons are considered.

Statistical Estimation:

Assume $P_0 = \text{Married}$ and $q_0 = \text{Unmarried}$ then,

$P_0 = 455/500$ i.e. 0.91 and $q_0 = 45/500$ i.e. 0.09

Standard Deviation (S.D) = $\sqrt{p_0 * q_0/n}$

= $\sqrt{0.91 * 0.09/500} = 0.0127$

Range (R) = $P \pm Z * \text{S.D.}$

$R (+) = 0.91 + 1.96 * 0.0127$

R (+) = 0.9348 or 93.48%

R (-) = 0.91 – 1.96 * 0.0214

R (-) = 0.8852 or 88.52%

Out of every 500 respondents selected randomly from the population, there is 95% chance that anywhere from 88.52% to 93.48% respondents are married.

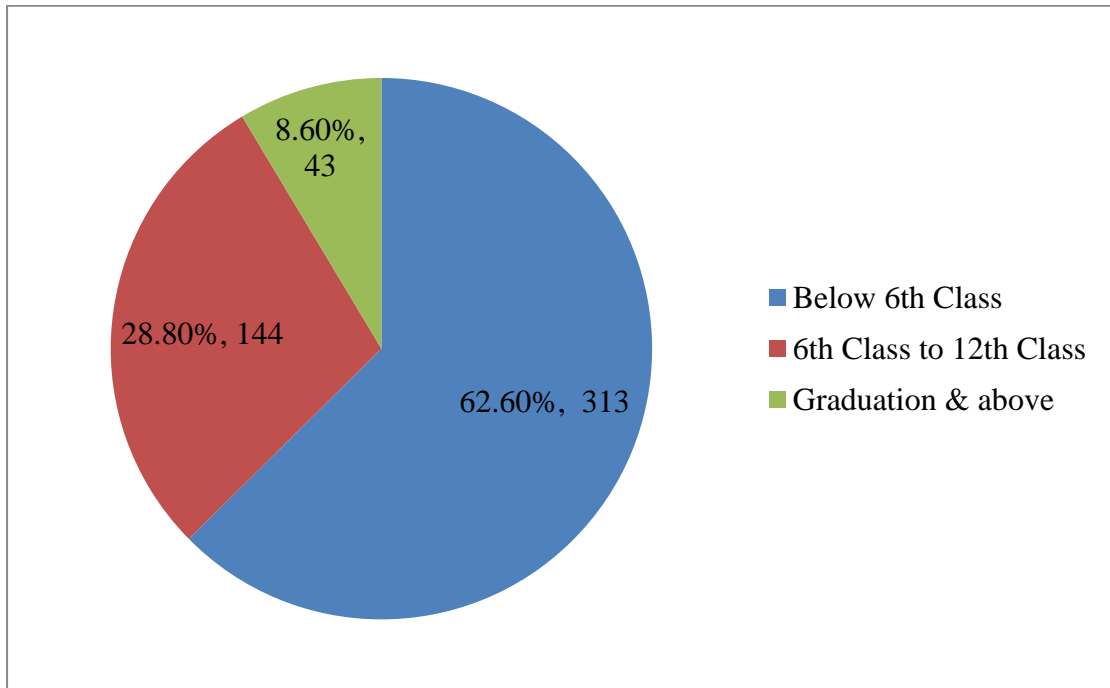
d. Education Status: It is classified into:

- Below 6th Class
- 6th Class to 12th Class
- Graduation & above

Table No. 4.4: Frequency table showing Education Status of Respondents

Education Status	Frequency	Percent	Valid Percent	Cumulative Percent
Below 6 th Class	313	62.6%	62.6%	62.6%
6 th Class to 12 th Class	144	28.8%	28.8%	91.4%
Graduation & above	43	8.6%	8.6%	100%
Total	500	100%	100%	

Figure No. 4.4: Chart showing Education Status of Respondents



Interpretation: The above table & pie chart shows that out of 500 respondents, 62.6% respondents i.e. 313 have the education level up to 5th class standard, 28.8% respondents i.e. 144 have the education level between 6th class standard - 12th class standard and only 8.6% respondents i.e. 43 have the education level up to graduation or above.

Inference: From the above table & pie chart, it can infer that as a sample different levels of education are considered.

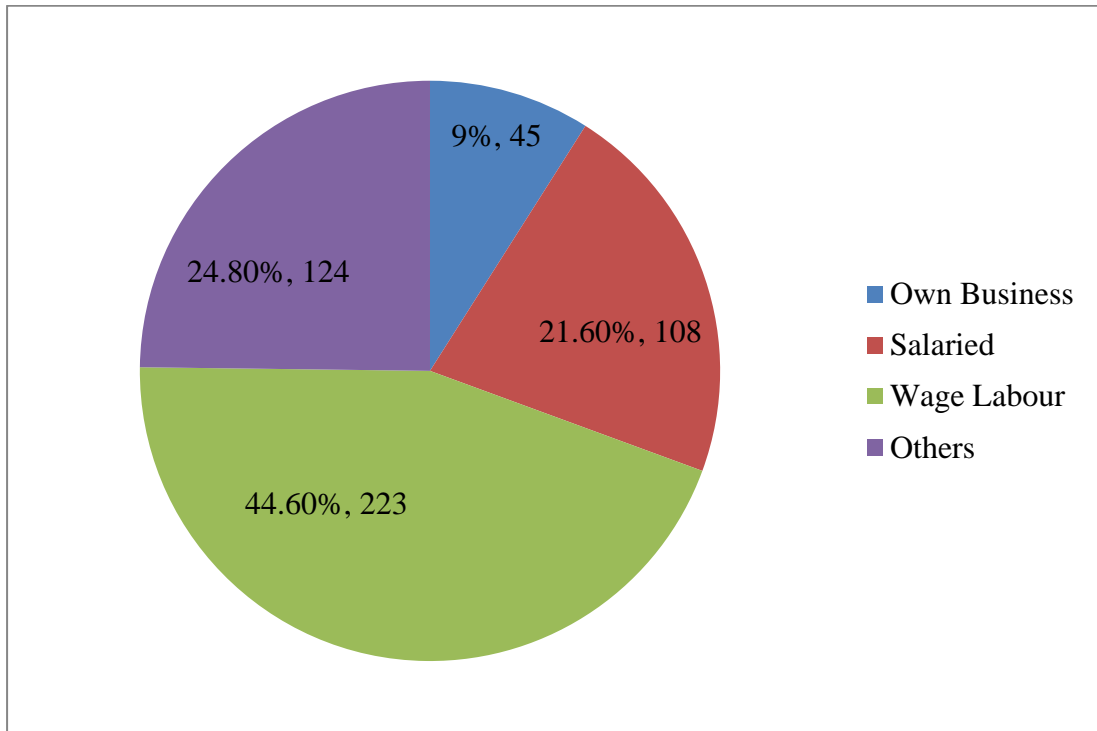
e. Occupation: It is classified into

- Own Business
- Salaried
- Wage Labour/Job work
- Others

Table No. 4.5: Frequency table showing Occupations of Respondents

Occupation	Frequency	Percent	Valid Percent	Cumulative Percent
Own Business	45	9%	9%	9%
Salaried	108	21.6%	21.6%	30.6%
Wage Labour	223	44.6%	44.6%	75.2%
Others	124	24.8%	24.8%	100%
Total	100%	100%	100%	

Figure No. 4.5: Chart showing occupations of respondents



Interpretation: The above table & pie chart shows that out of 500 respondents, 9% respondents i.e. 45 are doing their own business, 21.6% respondents i.e. 108 are performing salary based job, 44.6% respondents i.e. 223 are dependent on daily wages and 24.8% respondents i.e. 124 are doing others varieties of work for their livelihood.

Inference: From the above table & pie chart, it can infer that as a sample person of different occupations are considered.

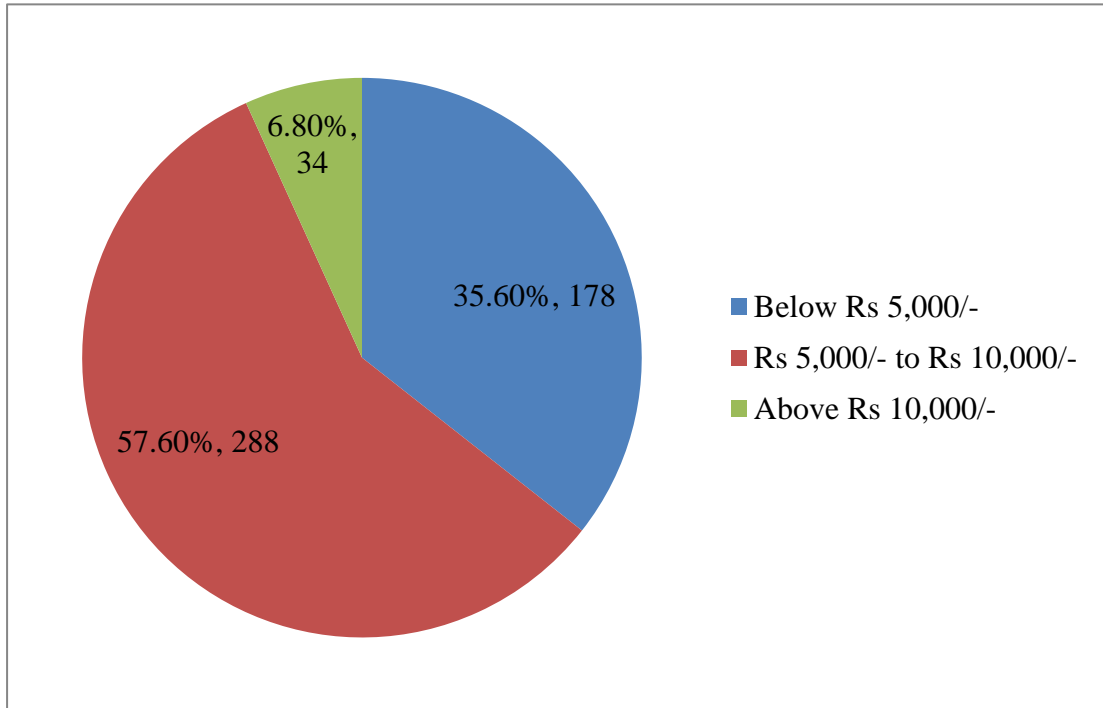
f. Monthly income of the respondents: It is classified into

- Below Rs. 5,000/-
- Rs 5,000/- to Rs 10,000/-
- Above Rs 10,000/-

Table No. 4.6: Frequency table showing the distribution of monthly income of the respondents

Income	Frequency	Percent	Valid Percent	Cumulative Percent
Below Rs 5,000/-	178	35.6%	35.6%	35.6%
Rs 5,000/- to Rs 10,000/-	288	57.6%	57.6%	93.2%
Above Rs 10,000/-	34	6.8%	6.8%	100%
Total	500	100%	100%	

Figure No. 4.6: Chart showing the distribution of monthly income of the respondents



Interpretation: The above table & pie chart shows that out of 500 respondents, 35.6% respondents i.e. 178 have level of income below Rs 5,000/-, 57.6% respondents i.e. 288 have level of income between Rs 5,000/- to Rs 10,000/- and 6.8% respondents i.e. 34 have level of income above Rs 10,000/-

Inference: From the above table & pie chart, it can infer that the persons earning to the different level of income are considered.

g. Total number of Members of the family: It is classified into

1 - 2 members

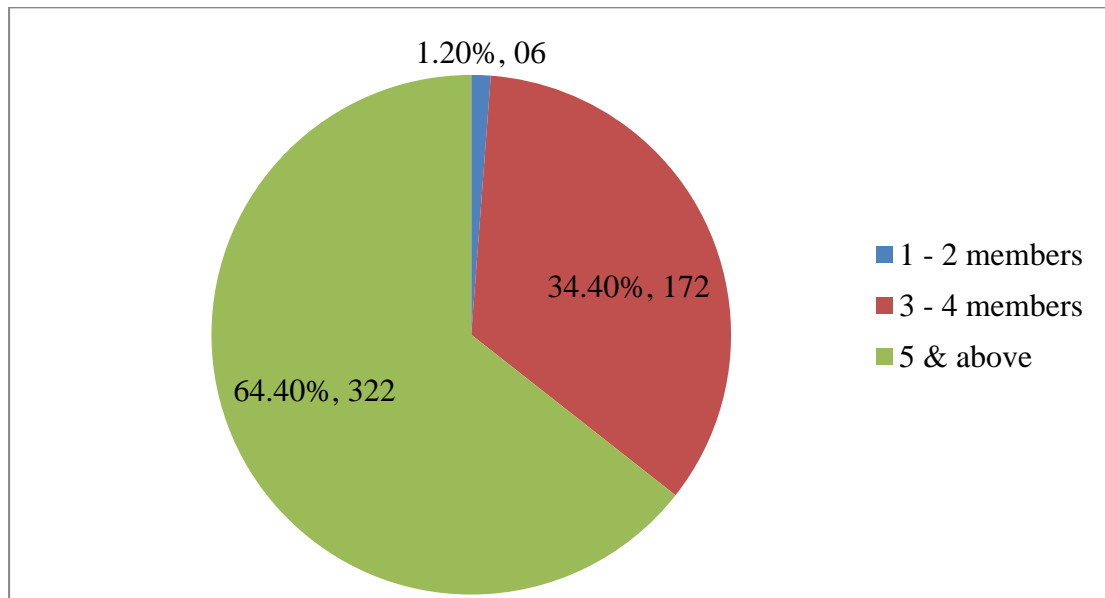
3 - 4 members

5 & above

Table No. 4.7: Frequency table showing total number of members in the family of the respondents

Number	Frequency	Percent	Valid Percent	Cumulative Percent
1 - 2 members	06	1.20%	1.20%	1.20%
3 - 4 members	172	34.40%	34.40%	35.60%
5 & above	322	64.40%	64.40%	100%
Total	500	100%	100%	

Figure No. 4.7: Chart showing total number of members in the family of the respondents



Interpretation: The above table & pie chart shows that 1.20% respondents i.e. 06 have 1 - 2 members in the family, 34.40% respondents i.e. 172 have 3 - 4 members in the family, 64.40% respondents i.e. 322 have 5 & above members in the family.

Inference: From the above table & pie chart, it can infer that the number of members in the family of the respondents is considered.

h. Total number of Dependants in the family: It is classified into

1 - 2 members

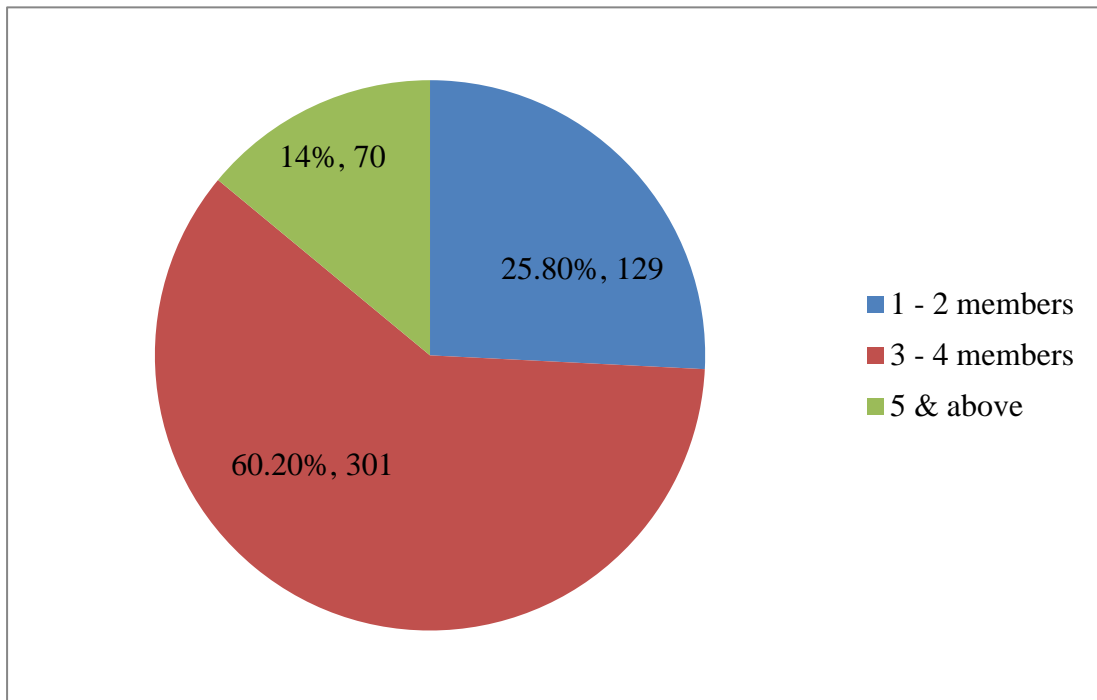
3 - 4 members

5 & above

Table No. 4.8: Frequency table showing total numbers of Dependants in the family of the respondents

Number	Frequency	Percent	Valid Percent	Cumulative Percent
1 - 2 members	129	25.8%	25.8%	25.8%
3 - 4 members	301	60.2%	60.2%	86%
5 & above	70	14%	14%	100%
Total	500	100%	100%	

Figure No. 4.8: Chart showing total number of dependants in the family of the respondents



Interpretation: The above table & pie chart shows that 25.8% respondents i.e. 129 have 1 - 2 dependants in the family, 60.2% respondents i.e. 301 have 3 - 4 dependants in the family, 14% respondents i.e. 70 have 5 & above dependants in the family.

Inference: From the above table & pie chart, it can infer that the number of dependants in the family of the respondents is considered.

4.3 Existence of multiple Loans, reasons and effects:

a. **Number of Loans from MFI's:** It is classified into

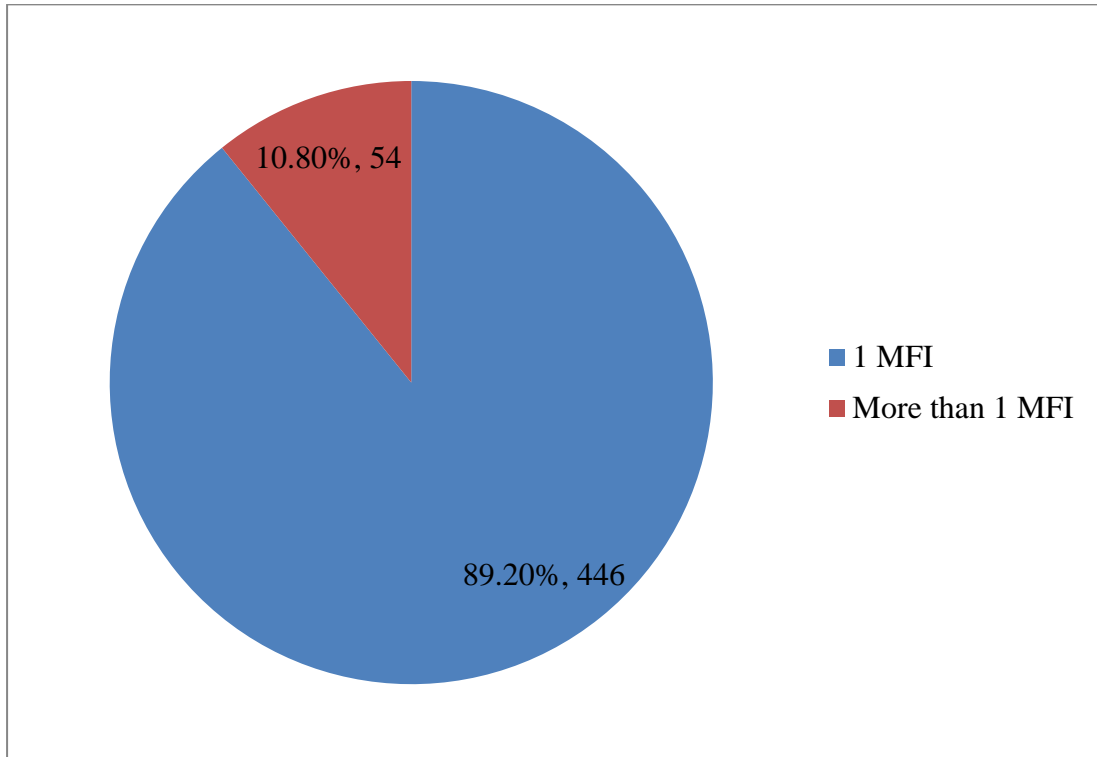
1 MFI

More than 1 MFI

Table No. 4.9: Frequency table showing the number of loans from Microfinance Institutions or moneylenders.

Number	Frequency	Percent	Valid Percent	Cumulative Percent
1 MFI	446	89.2%	89.2%	32%
More than 1 MFI	54	10.8%	10.8%	100%
Total	500	100%	100%	

Figure No. 4.9: Chart showing the number of loans from Microfinance Institutions or moneylenders.



Interpretation: The above table & pie chart shows that out of 500 respondents, 89.2% respondents i.e. 446 have borrowed loan from 1 Microfinance Institution and 10.8% respondents i.e. 54 have borrowed loan from more than 1 Microfinance Institution.

Inference: From the above table & pie chart, it can infer that the numbers of microfinance institutions for borrowing loans are considered.

Statistical Estimation:

Assume $P_0 = 1$ MFI and $q_0 =$ more than 1MFI,

$P_0 = 446/500$ i.e. 0.892 and $q_0 = 54/500$ i.e. 0.108

Standard Deviation (S.D) = $\sqrt{p_0 * q_0/n}$

= $\sqrt{0.892 * 0.108/500} = 0.0138$

Range (R) = $P \pm Z * S.D.$

$R (+) = 0.892 + 1.96 * 0.0138$

$R (+) = 0.9190$ or 91.90%

$R (-) = 0.892 - 1.96 * 0.0138$

$R (-) = 0.8650$ or 86.50%

Out of every 500 respondents selected randomly from the population, there is 95% chance that anywhere from 86.50% to 91.90% respondents have borrowed loan from 1 Microfinance Institution.

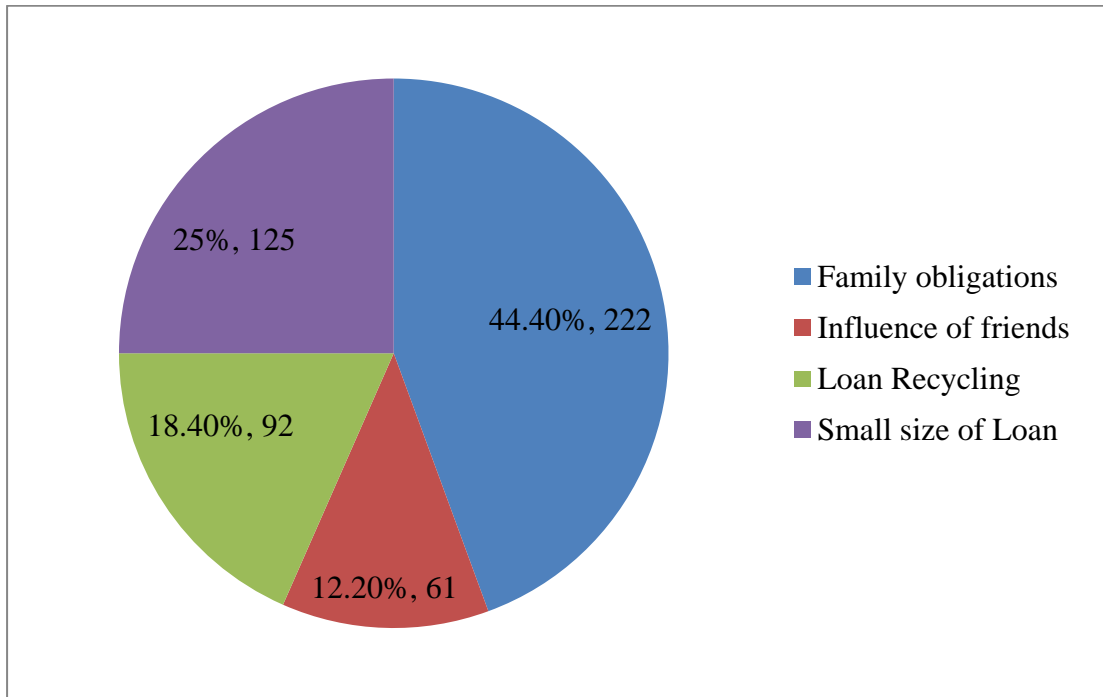
b. Reasons for multiple Loans: It is classified into

- Family obligations.
- Influence of friends
- Loan Recycling
- Small size of the Loan

Table No. 4.10: Frequency table showing the reasons for multiple loans

Reasons	Frequency	Percent	Valid Percent	Cumulative Percent
Family obligations	222	44.4%	44.4%	44.4%
Influence of friends	61	12.2%	12.2%	56.6%
Loan Recycling	92	18.4%	18.4%	75%
Small size of Loan	125	25%	25%	100%
Total	500	100%	100%	

Figure No. 4.10: Chart showing the reasons for multiple loans



Interpretation: The above table & pie chart shows that out of 500 respondents, 44.4% respondents' i.e. 222 have family obligations for multiple Loans, the friends for multiple loans influence 12.2% respondents' i.e. 61, 18.4% respondents' i.e. 92 have the reason of loan recycling and 25% respondents' i.e. 125 have borrowed small sizes of the loans.

Inference: From the above table & pie chart, it can infer that the respondents' have different reasons for multiple loans.

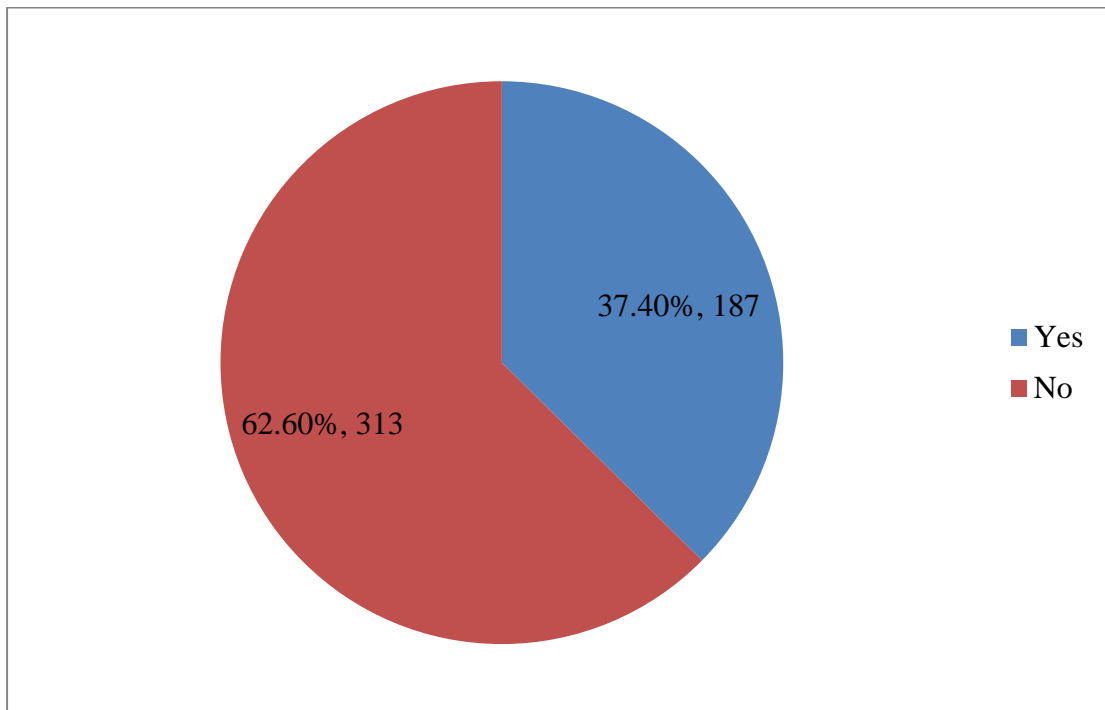
c. **Incidence of Late repayments:** It is classified into

- Yes
- No

Table No. 4.11: Frequency table showing the Incidence of Late Repayments

Incidence of Late repayments	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	187	37.4%	37.4%	37.4%
No	313	62.6%	62.6%	100%
Total	500	100%	100%	

Figure No. 4.11: Chart showing the Incidence of Late Repayments



Interpretation: The above table & pie chart shows that out of 500 respondents, 37.4% respondents i.e. 187 are repaying the loans lately and 62.6% respondents i.e. 313 are repaying the loans on time.

Inference: From the above table & pie chart, it can infer that the respondents are considering based on the timing of the repayments of loans.

Statistical Estimation:

Assume $P_0 = \text{Yes}$ and $q_0 = \text{No}$ then,

$P_0 = 187/500$ i.e. 0.3740 and $q_0 = 313/500$ i.e. 0.6260

Standard Deviation (S.D) = $\sqrt{p_0 * q_0/n}$

= $\sqrt{0.3740 * 0.6260/500} = 0.0216$

Range (R) = $P \pm Z * \text{S.D.}$

$R (+) = 0.3740 + 1.96 * 0.0216$

$R (+) = 0.3956$ or 39.56%

$R (-) = 0.3740 - 1.96 * 0.0216$

$R (-) = 0.3524$ or 35.24%

Out of every 500 respondents selected randomly from the population, there is 95% chance that anywhere from 35.24% to 39.56% respondents are repaying the loans lately.

d. Reasons for late repayments: It is classified into

Family obligations.

Improper use of loan amount

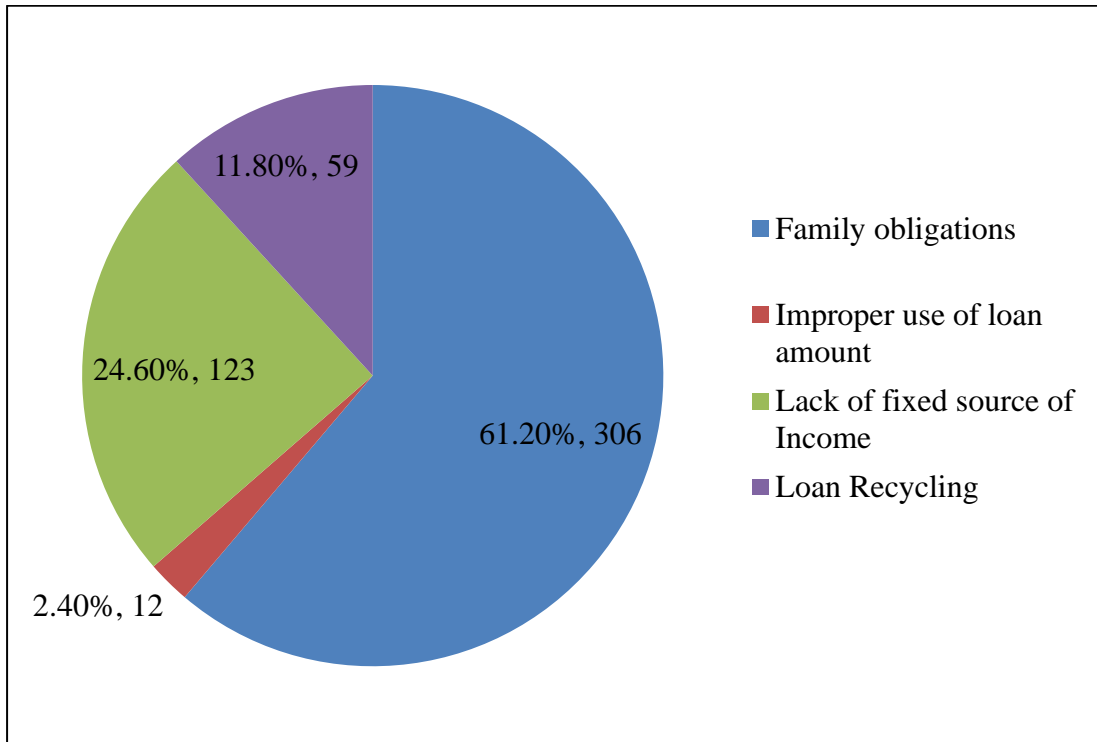
Lack of fixed source of income

Loan recycling

Table No. 4.12: Frequency table showing the Reasons for Late Repayments

Reasons	Frequency	Percent	Valid Percent	Cumulative Percent
Family obligations	306	61.2%	61.2%	61.2%
Improper use of loan amount	12	2.4%	2.4%	63.6%
Lack of fixed source of Income	123	24.6%	24.6%	88.2%
Loan Recycling	59	11.8%	11.8%	100%
Total	500	100%	100%	

Figure No. 4.12: Chart showing the Reasons for Late Repayments



Interpretation: The above table & pie chart shows that out of 500 respondents, 61.2% respondent's i.e. 306 have family obligations, 2.4% respondents i.e. 12 have the reason for late repayment is improper use of loan, 24.6% respondents i.e. 123 have lack of fixed source of income and 11.8% respondents i.e. 59 have the reason of Loan recycling.

Inference: From the above table & pie chart, it can infer that the respondents have their different reasons for late repayments.

4.4 The description of responses to the questions asked the employees of Microfinance Institutions:

1. The purpose of the borrowing of Loans.

Graph No. 4.1: Bar graph showing the purpose behind the borrowings of Loans.

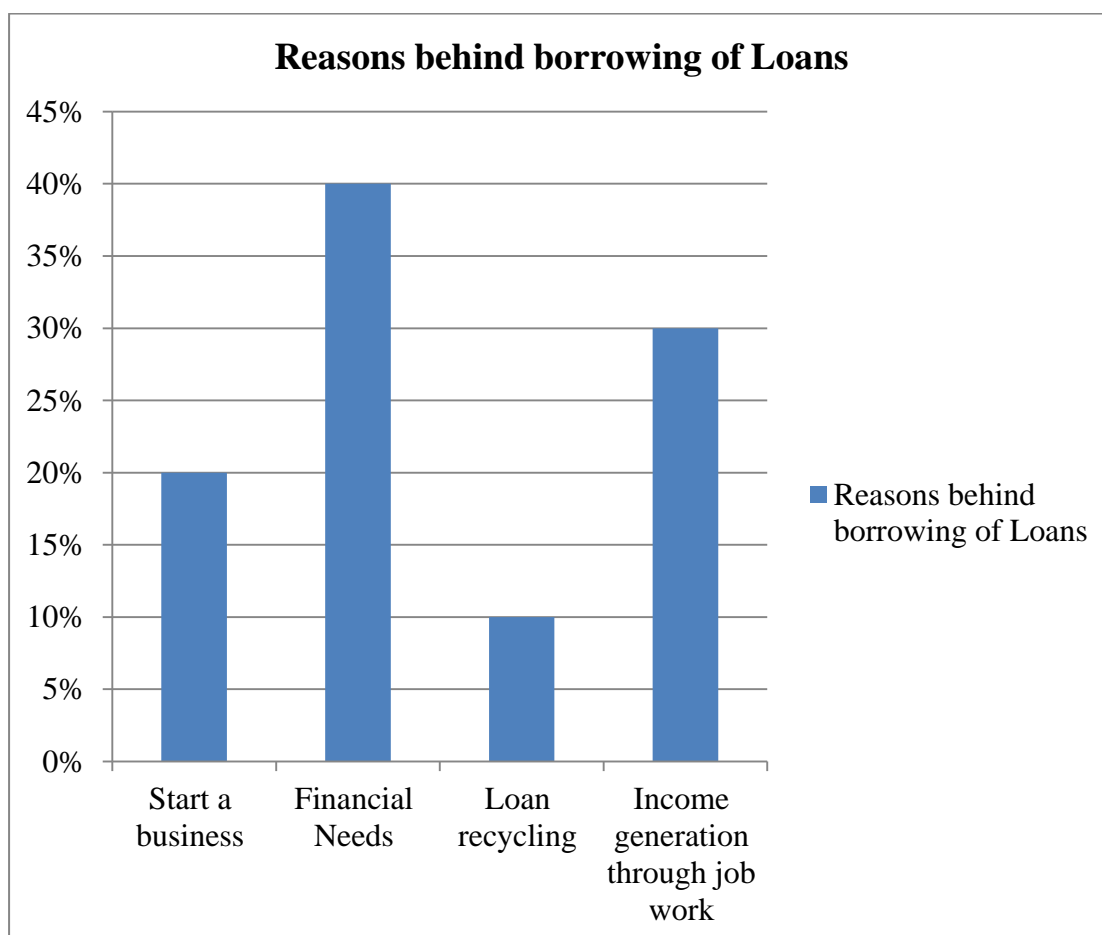
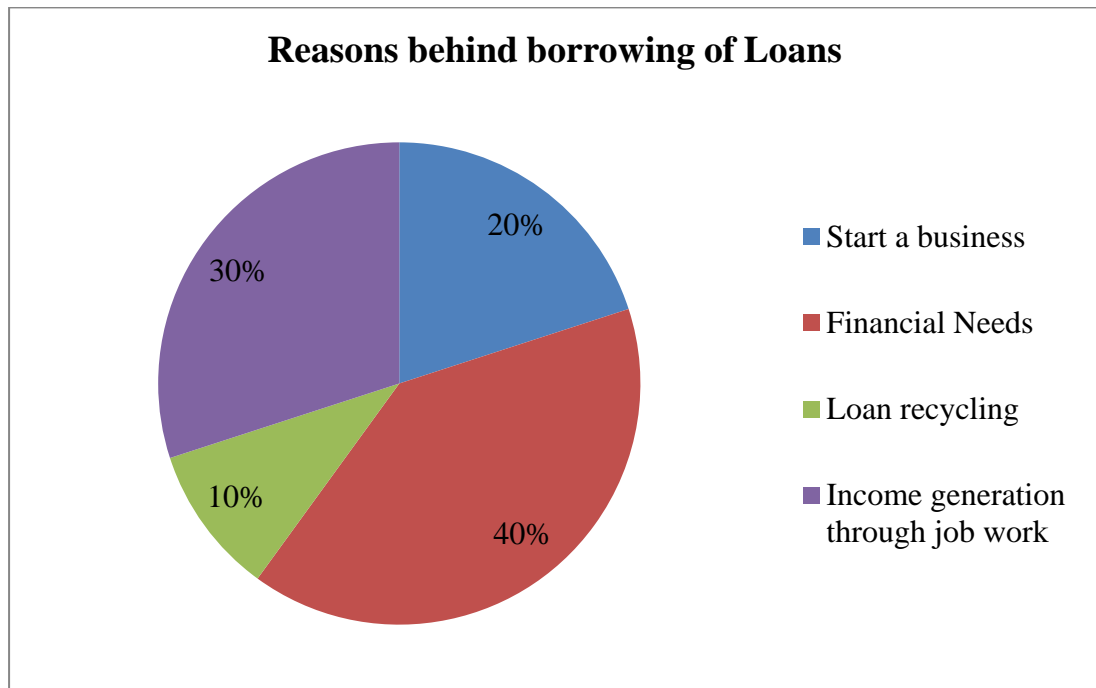


Figure No. 4.13: Chart showing the purpose behind the borrowing of Loans



Interpretation: The above graph & pie chart shows that about 40% of the people are taking microcredit due to financial needs, 30% access to microcredit due to income generation through job work, 20% need microcredit in order to start a business and 10% people are forced to take microcredit due to Loan recycling.

Inference: From the above graph and pie chart, it can infer that the reasons behind the borrowing of loans are considered.

2. The basis to decide the amount of loan borrowed.

Graph No. 4.2: Bar graph showing the basis to decide the amount of loan borrowed.

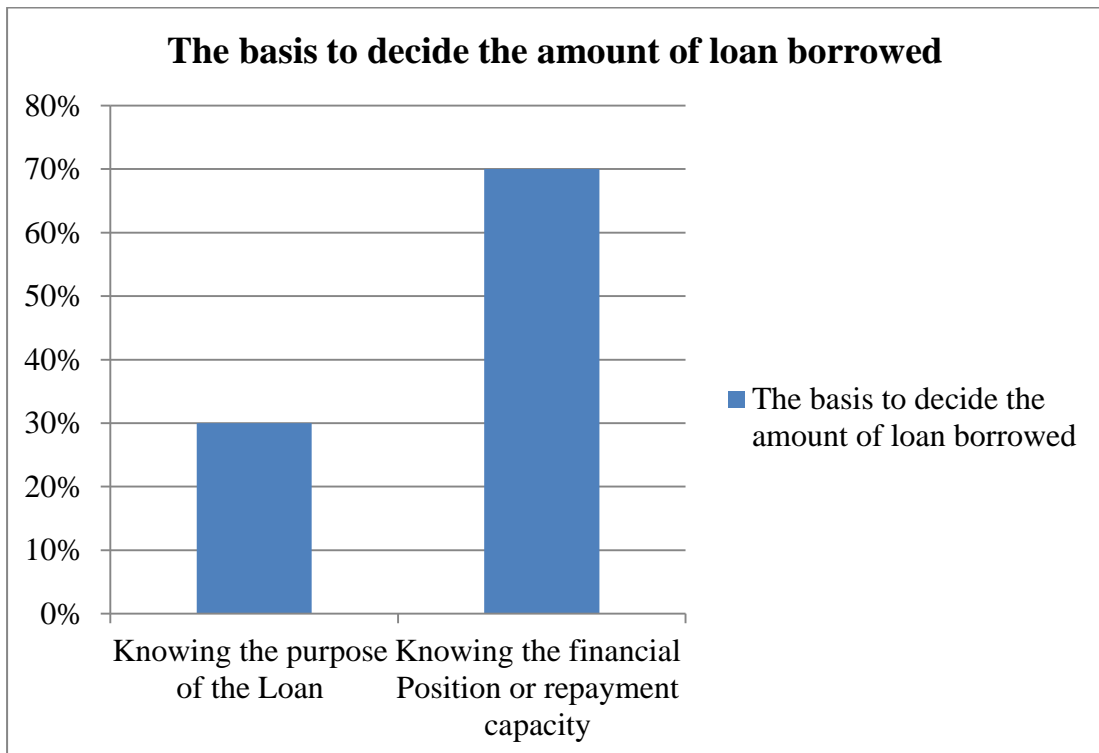
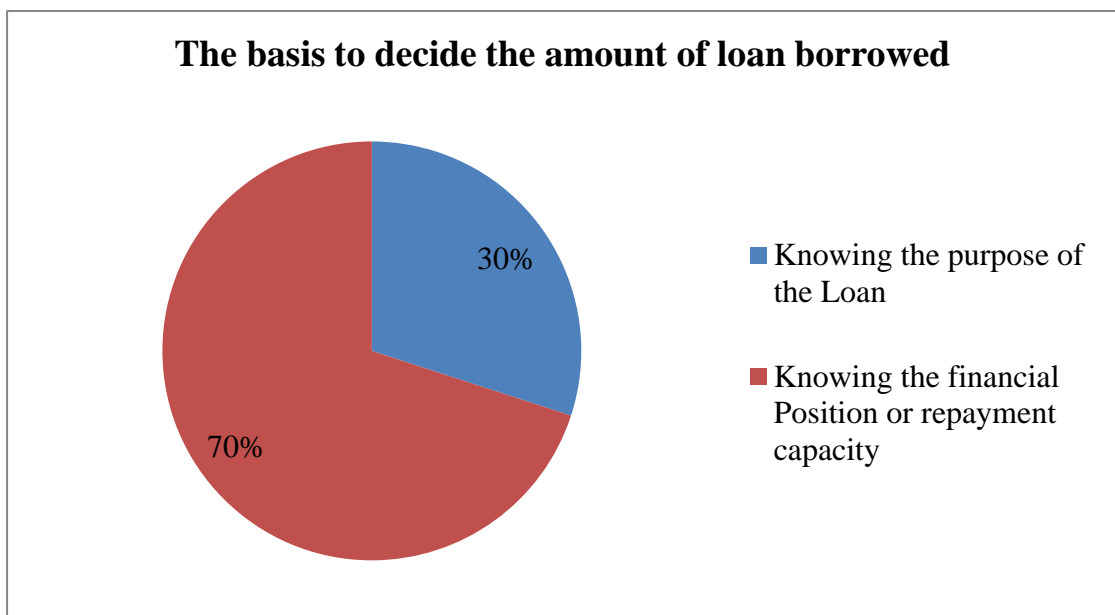


Figure No. 4.14: Chart showing the basis to decide the amount of loan borrowed



Interpretation: The above graph & pie chart shows that about 70% employees told that they decide the amount of microcredit by knowing the financial position or repayment capacity and 30% employees told that they decide the amount of loan by knowing the purpose of the Loan.

Inference: From the above graph and pie chart, it can infer that the criteria for providing the loans are considered.

Statistical Estimation:

Assume P_0 = Knowing the purpose of the Loan and q_0 = Knowing the financial position or repayment capacity,

$$P_0 = 7/10 \text{ i.e. } 0.70 \text{ and } q_0 = 3/10 \text{ i.e. } 0.30$$

$$\begin{aligned} \text{Standard Deviation (S.D)} &= \sqrt{p_0 * q_0/n} \\ &= \sqrt{0.70 * 0.30/10} = 0.1449 \end{aligned}$$

$$\text{Range (R)} = P \pm Z * \text{S.D.}$$

$$R (+) = 0.70 + 1.96 * 0.1449$$

$$R (+) = 0.9840 \text{ or } 98.40\%$$

$$R (-) = 0.70 - 1.96 * 0.1449$$

$$R (-) = 0.4159 \text{ or } 41.59\%$$

Out of every 10 respondents selected randomly from the employees of microfinance institution, there is 95% chance that anywhere from 41.59% to 98.40% provide Loans by knowing the purpose of the Loan.

3. Whether the installments of Loan are repaid on time or not.

Graph No. 4.3: Bar graph showing that whether the installments of Loan are repaid on time or not

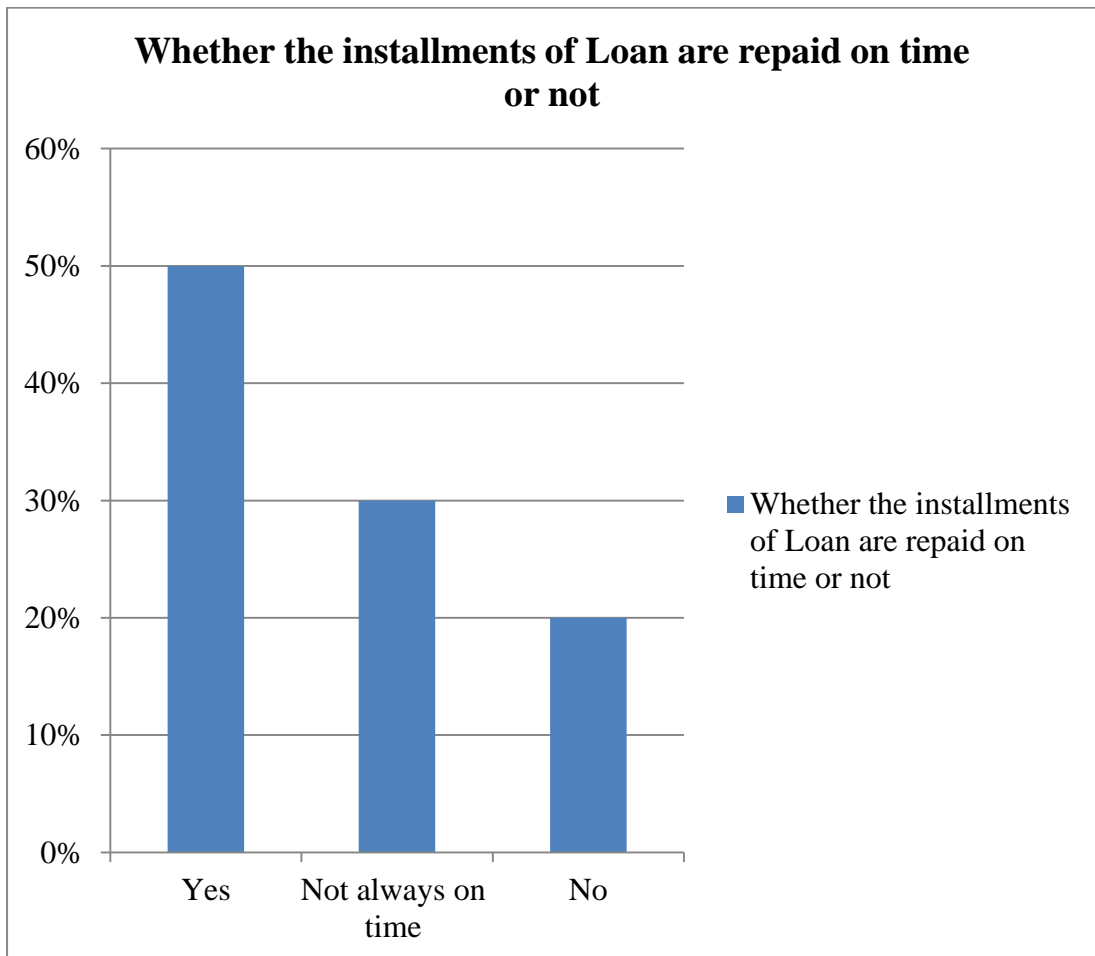
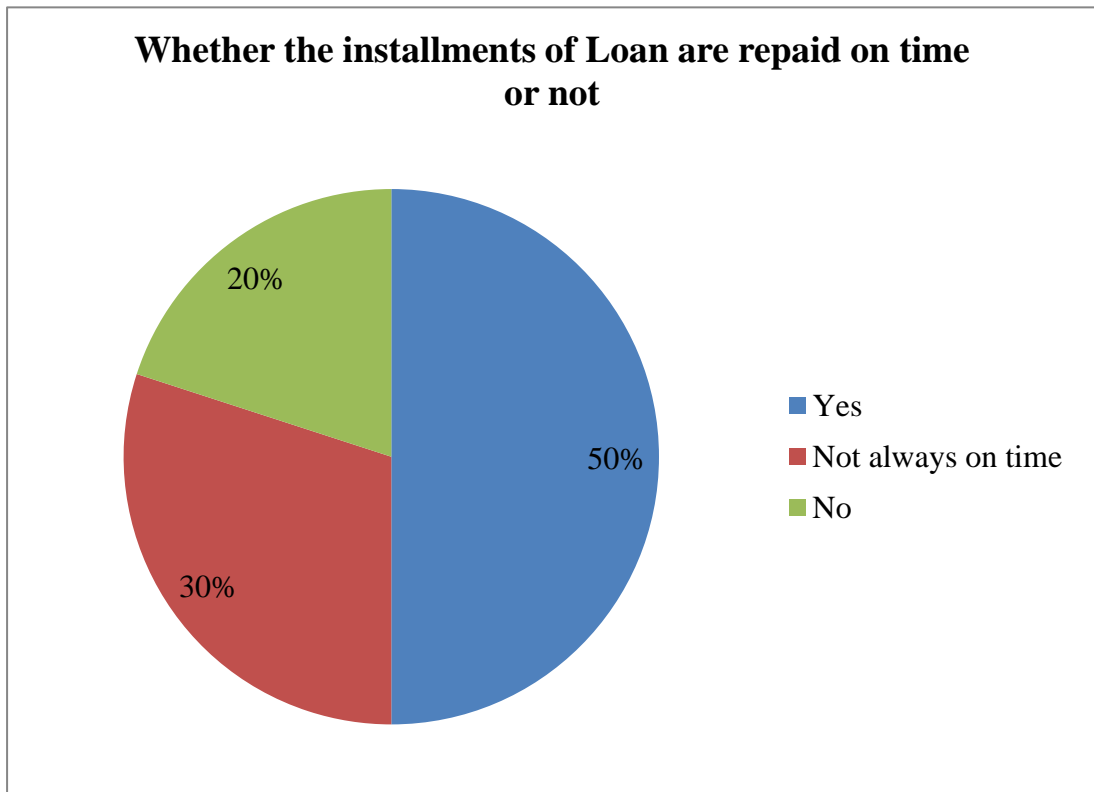


Figure No. 4.15: Chart showing that whether the installments of Loan are repaid on time or not



Interpretation: The above graph & pie chart shows that about 50% employees told that they get the installments of the loan on time, 30% employees told that they get installments not always on time and 20% employees told that they do not get the installments of microcredit on time.

Inference: From the above graph and pie chart, it can infer that the timing of the repayments of the Loans is considered.

4. Whether Loans are borrowed through Self Help Group's or directly

Graph No. 4.4: Bar graph showing that whether Loans are borrowed through Self Help Group's or directly

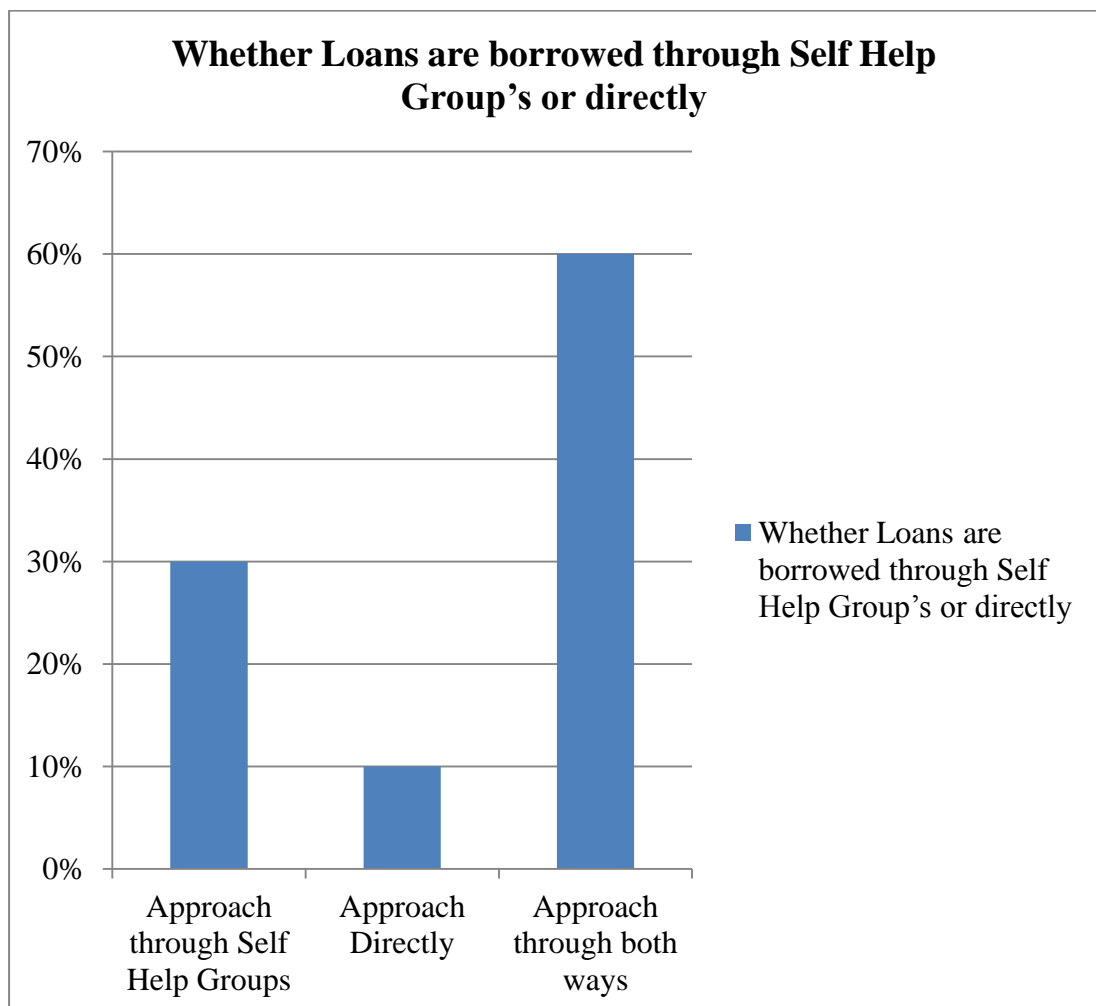
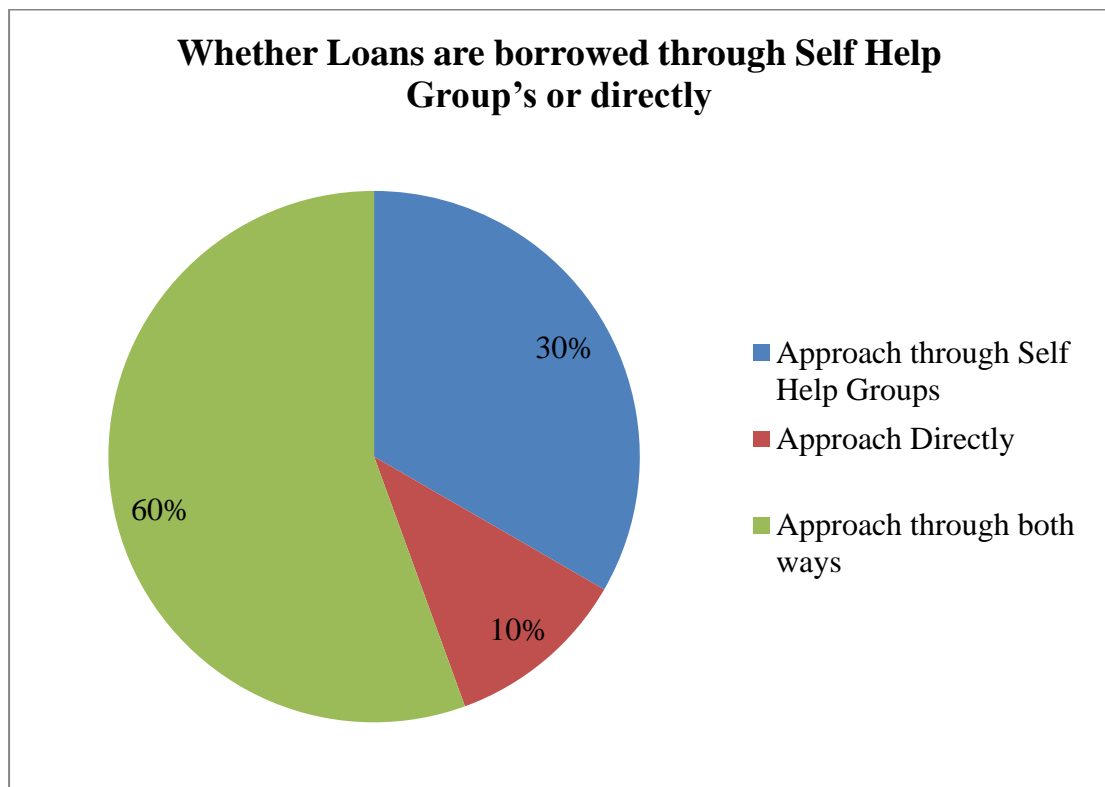


Figure No. 4.16: Chart showing that whether Loans are borrowed through Self Help Group's or directly



Interpretation: The above graph & pie chart shows that about 60% employees told that they provide microcredit through directly or through Self Help groups (in both the ways) to the people, 30% employees provide microcredit only through Self Help groups and only 10% employees provide microcredit directly to the people.

Inference: From the above graph and pie chart, it can infer that the ways of providing loans to the people are considered.

5. The group of people to whom Loans are provided.

Graph No. 4.5: Bar graph showing the group of people to whom Loans are provided

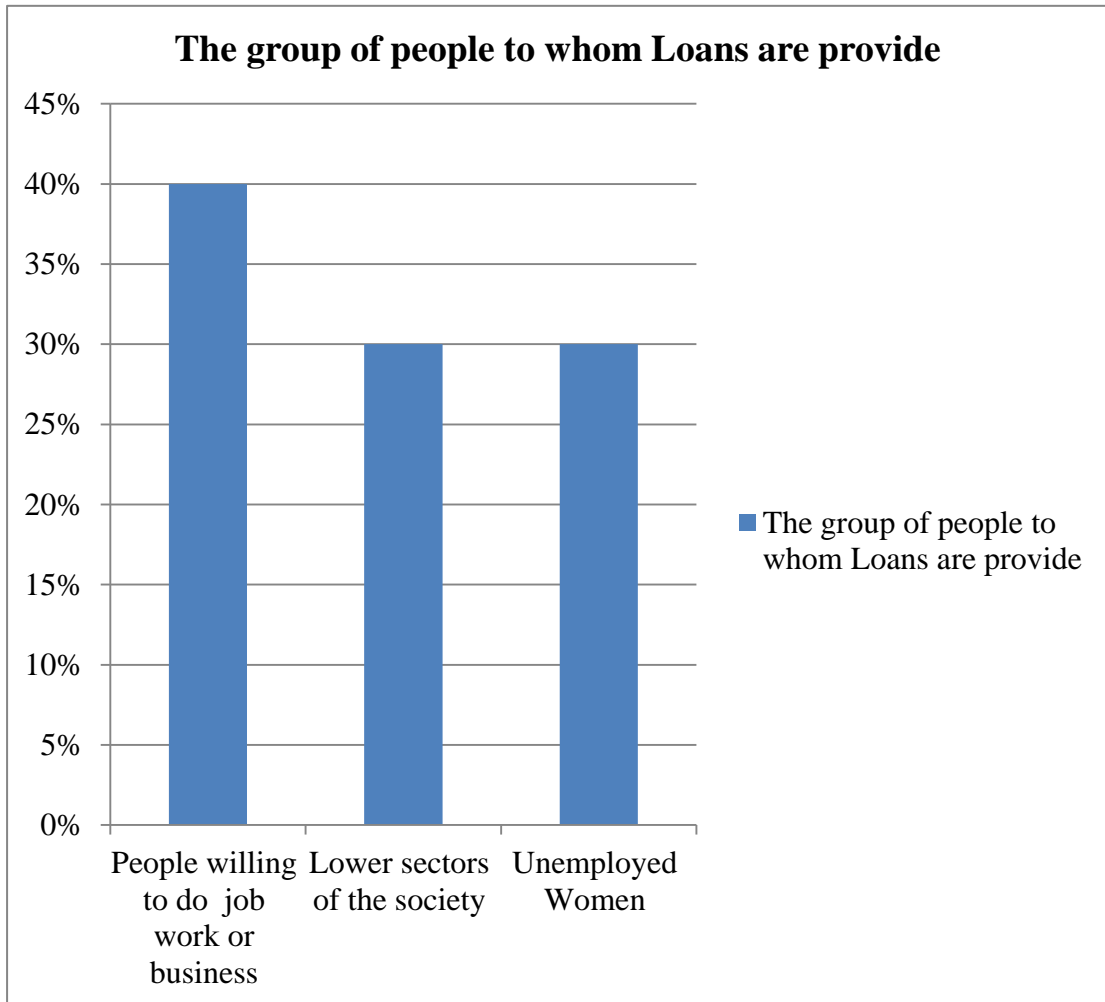
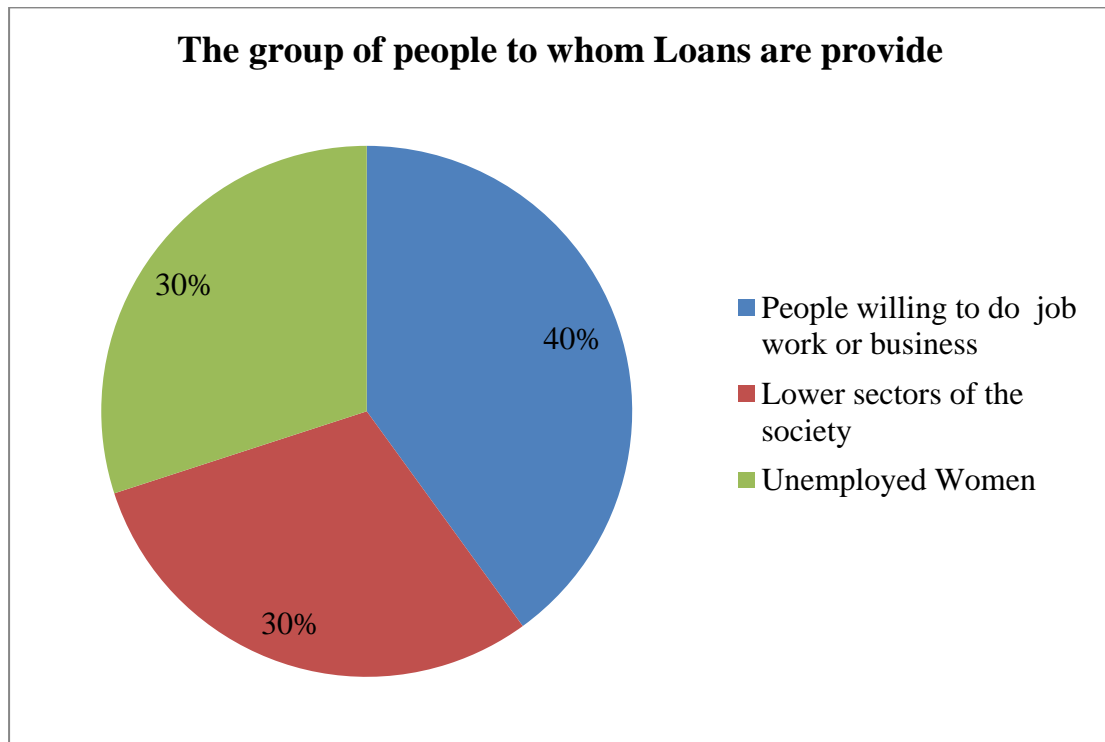


Figure No. 4.17: Chart showing the group of people to whom Loans are provided



Interpretation: The above graph & pie chart shows that about 40% employees told that they provide microcredit to the people who are willing to work or do business, 30% employees told that they provide microcredit to the lower sectors of the society and 30% employees told that they provide microcredit to the unemployed women.

Inference: From the above graph and pie chart, it can infer that the category of people is considered to provide micro credit.

6. Whether the collateral/guarantee for Loans are taken or not.

Graph No. 4.6: Bar graph showing that whether the collateral/guarantee for Loans is taken or not.

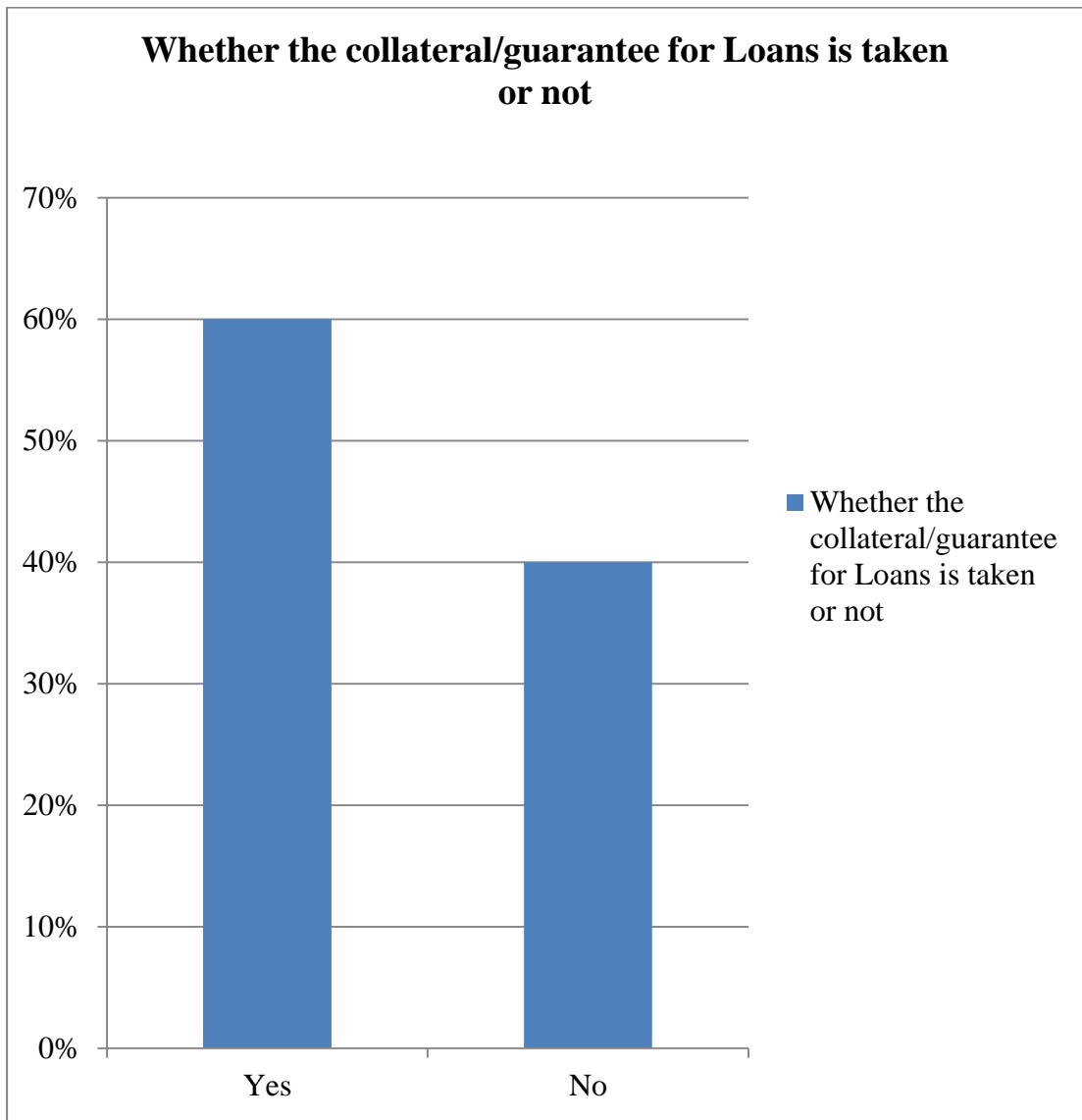
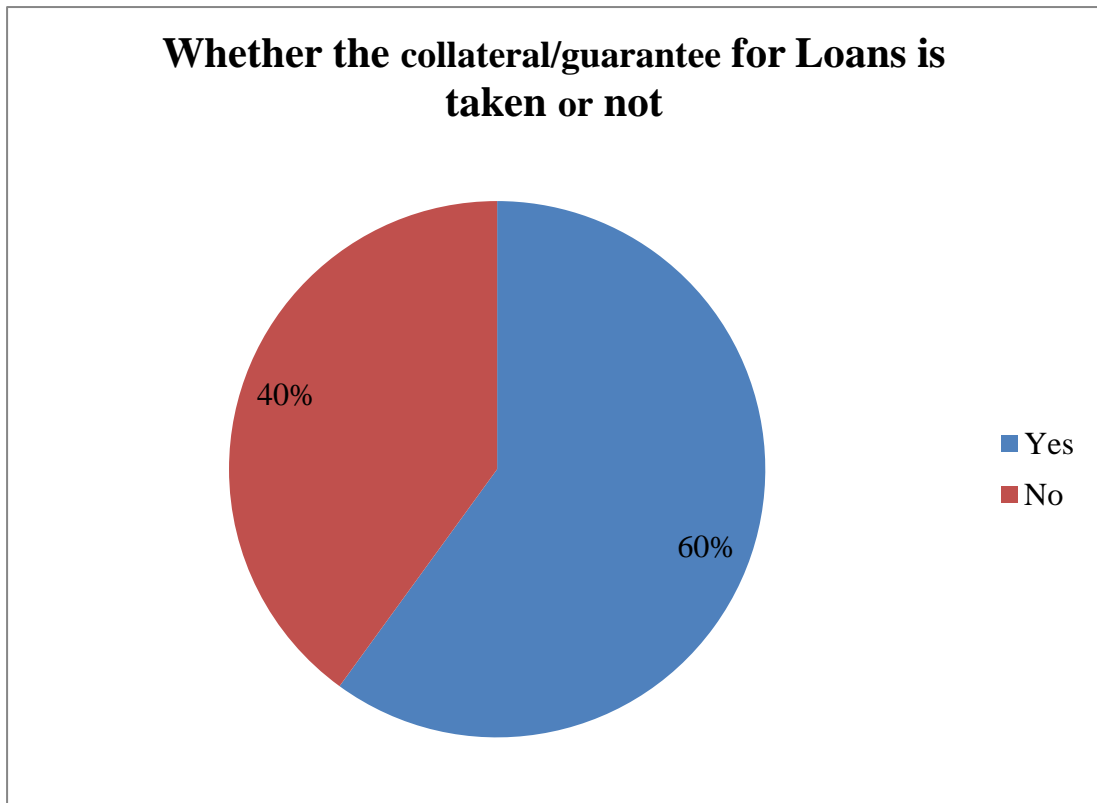


Figure No. 4.18: Chart showing that whether the collateral/guarantee for Loans is taken or not



Interpretation: The above graph & pie chart shows that about 60% employees told that they take the collateral or guarantee for the disbursed microcredit and 40% employees told that they do not take any collateral or guarantee for the microcredit.

Inference: From the above graph and pie chart, it can infer that whether the collateral security is taken or not while providing the loan considered.

7. The ways to approach for Loans to the people.

Graph No. 4.7: Bar graph showing the ways to approach for loans to the people

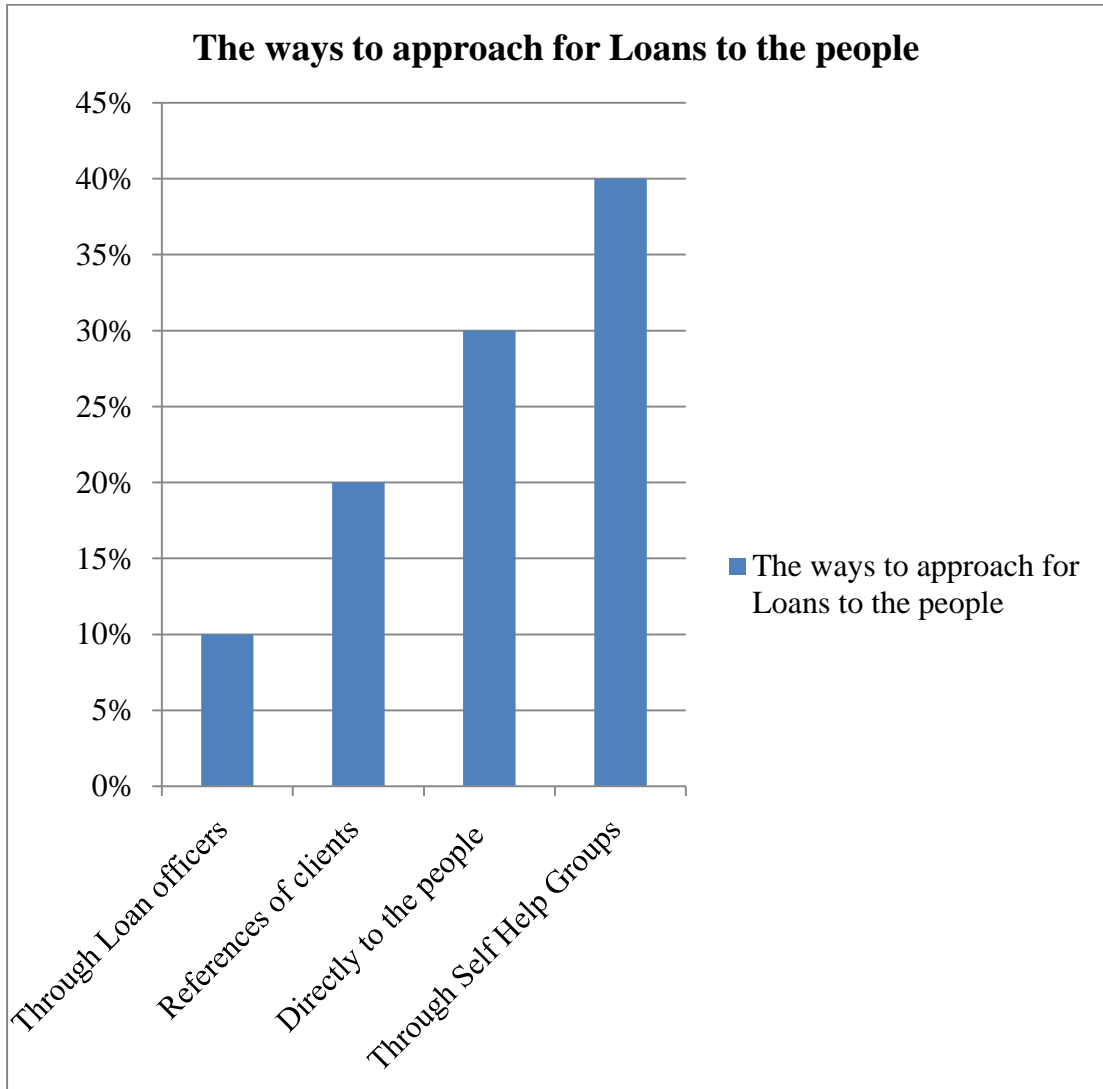
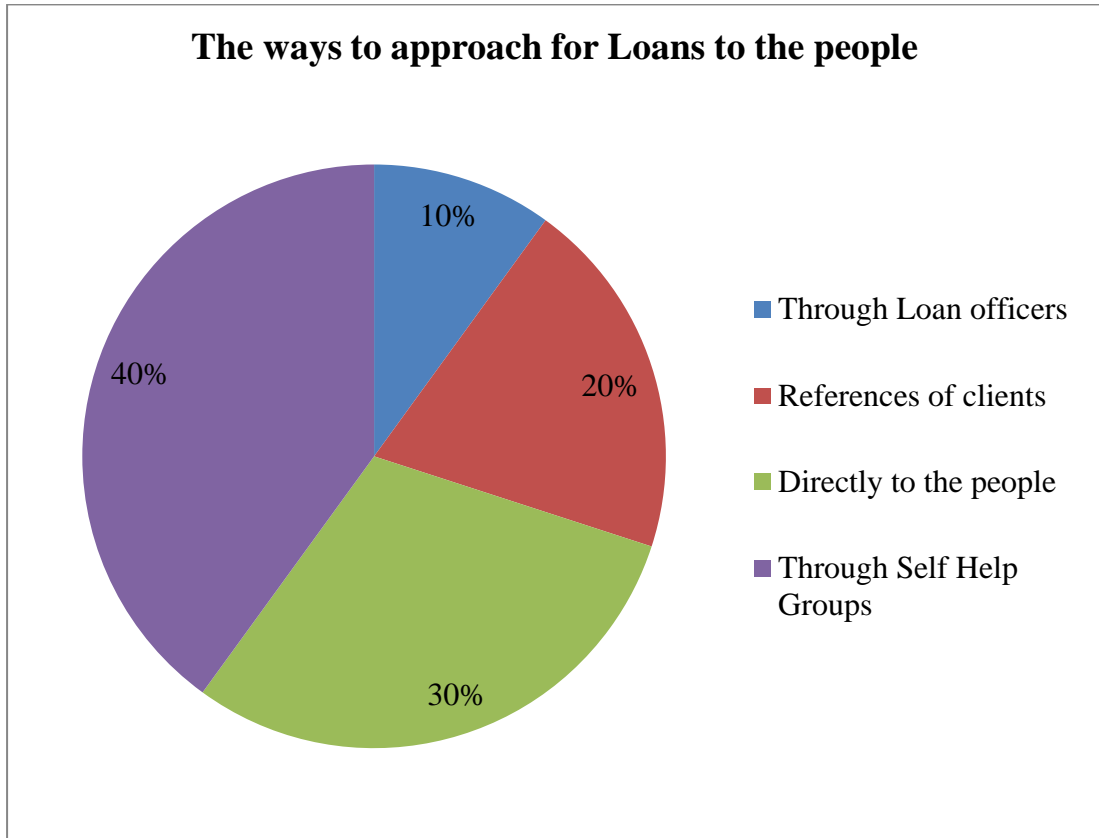


Figure No. 4.19: Chart showing the ways to approach for loans to the people



Interpretation: The above graph & pie chart shows that about 40% employees told that they approach the people for microcredit through Self-help groups, 30% employees told that they approach directly to the people, 20% employees told that they approach through the references of the clients and only 10% employees told that they approach through the Loan officers at rural areas for microcredit to the people.

Inference: From the above graph and pie chart, it can infer that the ways to approach for loans to the people are considered.

4.5 Research Objective - Wise Analysis:

1. To find out the causes of high interest rates of Loans of Microfinance Institutions

Graph No. 4.8: Bar graph showing the causes of high interest rates

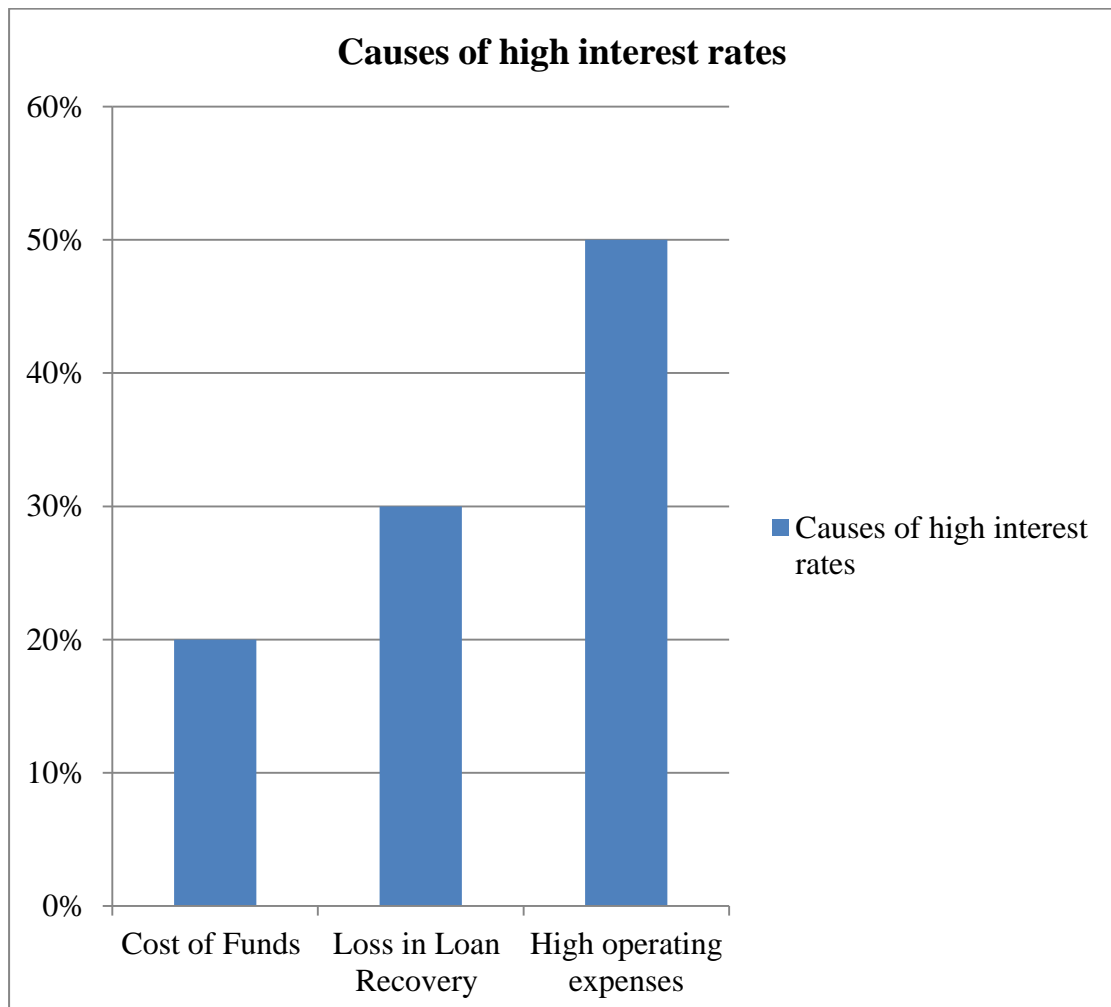
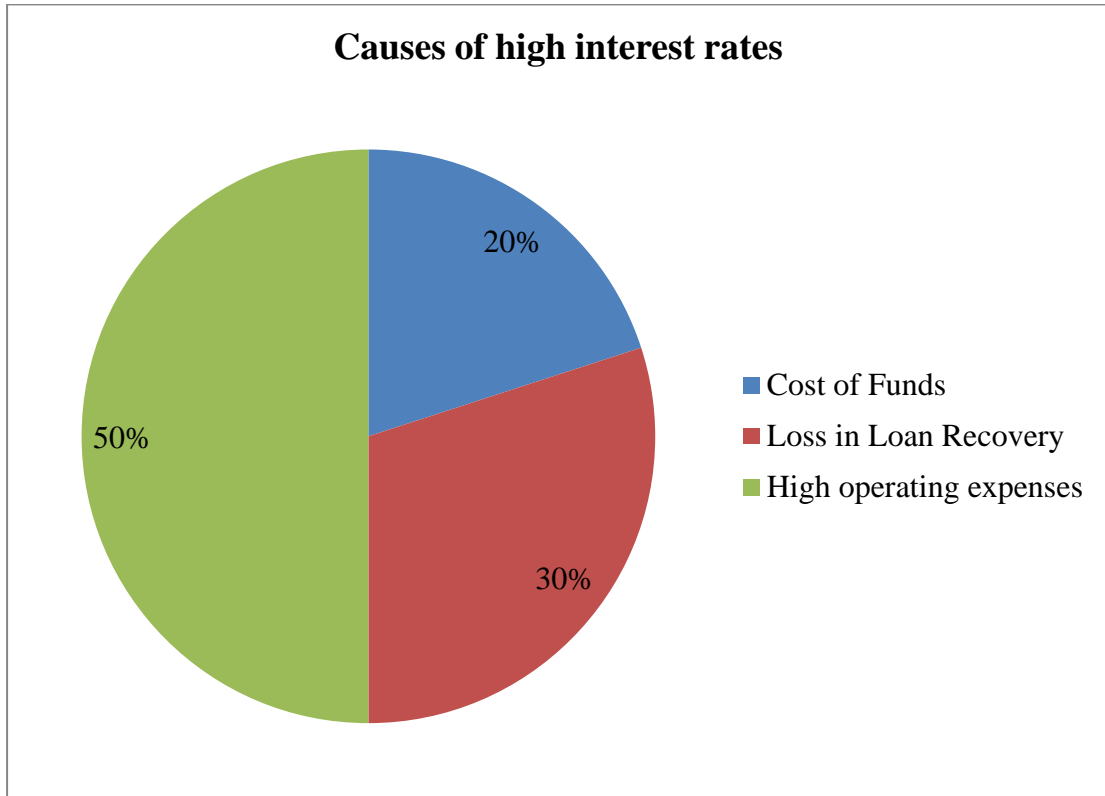


Figure No. 4.20: Chart showing the causes of high interest rates



Interpretation: The above graph & pie chart shows that out of 10 microfinance, 4 of them i.e. 40% of them admit that High Operating Cost is the main reason for High interest rate of Microfinance while 30% microfinance companies admit that Due to loan Losses there is a High interest rate. 20% of microfinance Companies says that these interest rate Reasonable, while 10 % says that microfinance companies are more accessible than banks

Inference: From the above graph and pie chart, it can infer that the different causes of high interest rates are considered.

Statistical Estimation:

Assume P_0 = High operating expenses and q_0 = other reasons,

$P_0 = 5/10$ i.e. 0.50 and $q_0 = 5/10$ i.e. 0.50

Standard Deviation (S.D) = $\sqrt{p_0 * q_0/n}$

= $\sqrt{0.50 * 0.50/10} = 0.1581$

Range (R) = $P \pm Z * S.D.$

$R (+) = 0.50 + 1.96 * 0.1581$

$R (+) = 0.8098$ or 80.98%

$R (-) = 0.50 - 1.96 * 0.1581$

$R (-) = 0.1901$ or 19.01%

Out of every 10 respondents selected randomly from the employees of microfinance institution, there is 95% chance that anywhere from 19.01% to 80.98% have the high operating cost as the major cause of high interest rate.

2. To find out the economic effects on household of Loan repayments to the Microfinance Institutions.

The following Hypothesis has been taken for this objective-

Ho: Loan Repayment and Monthly Income of Clients is independent.

H1: Loan Repayment and Monthly Income of Clients is dependent.

Table No. 4.13: Calculation of Chi Square test

Monthly Income	Loan repayment		Total
	Yes	No	
Below 5000	75	103	178
5000-10000	101	187	288
above 10000	11	23	34
Total	187	313	500

Observed(O)	Expected(E)	(O-E)	(O-E) ²	(O-E) ² /E
75	66.572	8.428	71.03118	1.066983
103	111.428	-8.428	71.03118	0.637463
101	107.712	-6.712	45.05094	0.418254
187	180.288	6.712	45.05094	0.249883
11	12.716	-1.716	2.944656	0.231571
23	21.284	1.716	2.944656	0.138351
	500		238.0536	2.742504

Df = (Number of Row – 1)*(Number of Column – 1) = (3-1)*(2-1) =2

So Chi Square test Statistics Value= 2.742504

While Chi Square Critical value for Degree of Freedom 2 and level of significance 0.05

P value = The P-Value is 0.25379.

The result is not significant at $p < 0.05$.

Interpretation: The above table shows that monthly income is independent on Loan repayment; it means monthly income is not one of the Key factors for late repayment.

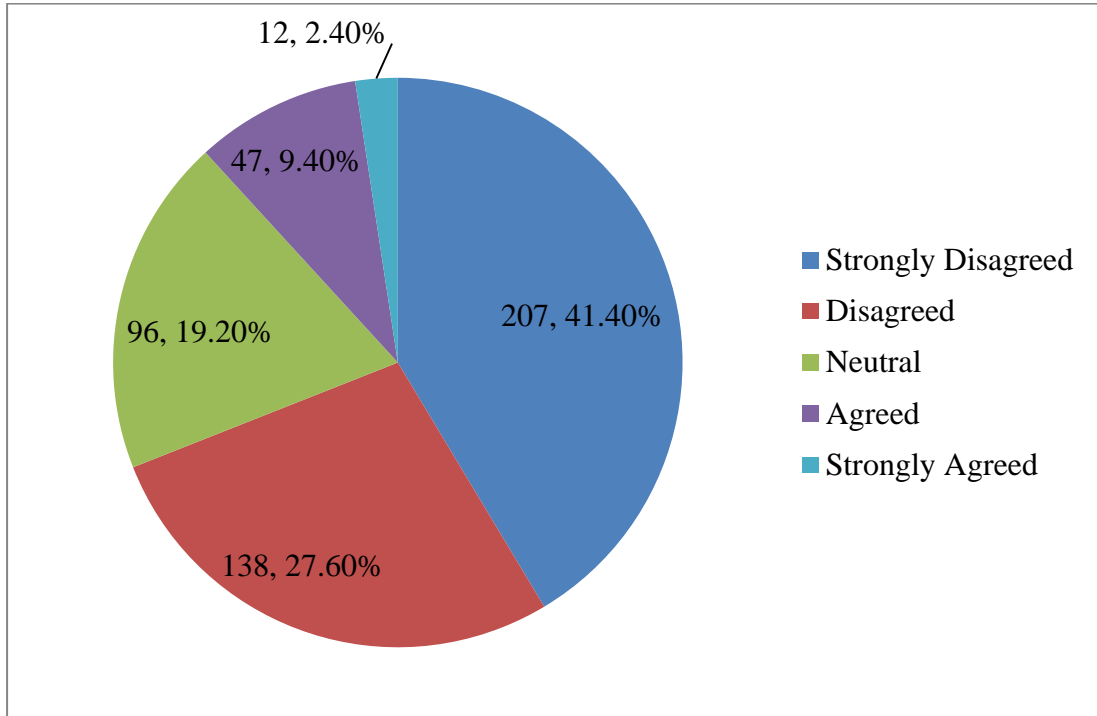
Inference: From the test, it can infer that the factors of late repayments of the microcredit are considered.

3. To evaluate the effectiveness of microcredit for the clients

Table No. 4.14: Frequency table showing the level of satisfaction of benefits and services provided by the MFI's

Satisfied with the benefits and services provided by the MFI's	Frequency	Percentage
Strongly Disagreed	207	41.4
Disagreed	138	27.6
Neutral	96	19.2
Agreed	47	9.4
Strongly Agreed	12	2.4
Total	500	100

Figure No. 4.21: Chart showing the level of satisfaction of benefits and services provided by the MFI's



(Strongly Disagreed – 1, Disagreed – 2, Neutral – 3, Agreed – 4, Strongly Agreed – 5)

Scale Point x sample size (i.e. 1 x 500 = 500, 2 x 500 = 1000, 3 x 500 = 1500, 4 x 500 = 2000, 5 x 500 = 2500)

Defined Range:

- Strongly Disagreed = 500 – 1000
- Disagreed = 1001 – 1499
- Neutral = 1500
- Agreed = 1501 – 2000
- Strongly Agreed = 2001 – 2500

Actual Results based on sample size & their responses

- 1 x 207 = 207
- 2 x 138 = 276
- 3 x 96 = 288
- 4 x 47 = 188
- 5 x 12 = 60

Total = 1019

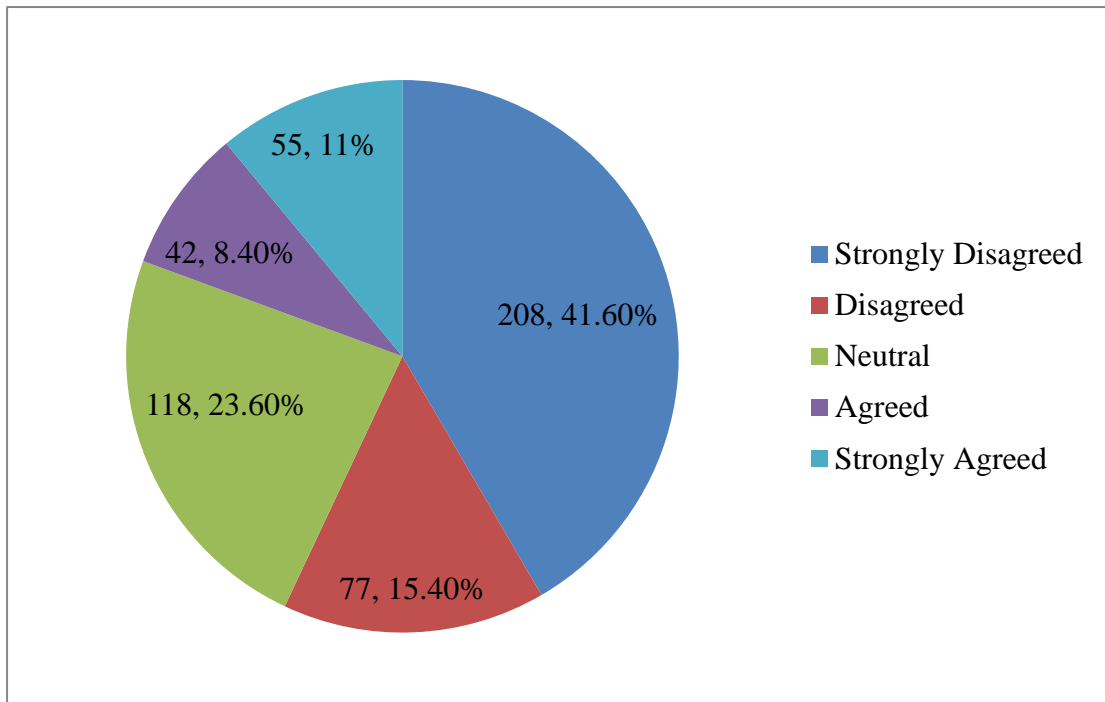
Interpretation: The total number – **1019** indicates that it lies in the defined range of 1000 – 1499 which means most of the respondents disagree.

Inference: From the Likert Scale, it can infer that the respondents disagree that the level of satisfaction of the benefits & services provided by the Microfinance Institutions are satisfactory.

Table No. 4.15: Frequency table showing the level of satisfaction with the interest rates charged by the MFI's.

Satisfied with the interest rates charged by the MFI's	Frequency	Percentage
Strongly Disagreed	208	41.6
Disagreed	77	15.4
Neutral	118	23.6
Agreed	42	8.4
Strongly Agreed	55	11
Total	500	100

Figure No. 4.22: Chart showing the level of satisfaction with the interest rates charged by the MFI's.



(Strongly Disagreed – 1, Disagreed – 2, Neutral – 3, Agreed – 4, Strongly Agreed – 5)

Scale Point x sample size (i.e. 1 x 500 = 500, 2 x 500 = 1000, 3 x 500 = 1500, 4 x 500 = 2000, 5 x 500 = 2500)

Defined Range:

- Strongly Disagreed = 500 – 1000
- Disagreed = 1001 – 1499
- Neutral = 1500
- Agreed = 1501 – 2000
- Strongly Agreed = 2001 – 2500

Actual Results based on sample size & their responses

- $1 \times 208 = 208$
 - $2 \times 77 = 154$
 - $3 \times 118 = 354$
 - $4 \times 42 = 168$
 - $5 \times 55 = 275$
- Total = 1159**

Interpretation: The total number – **1159** indicates that it lies in the defined range of 1000 – 1499 which means most of the respondents disagree.

Inference: From the Likert Scale, it can infer that the respondents disagree that the interest rates charged by the Microfinance Institutions are satisfactory.

Therefore, this analysis clearly shows that **High rate of interest being charged and the benefits & services provided by the Microfinance Institutions can be one of the main causes of Dissatisfaction.**

4. To find out whether Microfinance Institutions are satisfying the needs of clients or not

The following Hypothesis has been taken for this objective-

Ho: Utilization of Loan and Impact on Business is Independent on each other

Ha: Utilization of Loan and Impact on Business is dependent on each other

Table No. 4.16: Calculation of Chi - Square Test

	Impact on Business		Total
Utilisation of Loan	Yes	No	
Yes	234	24	258
No	0	242	242
Total	234	266	500

Observed (O)	Expected(E)	(O-E)	(O-E)^2	(O-E)^2 /E
234	120.744	113.256	12826.92154	106.2324
24	137.256	-113.256	12826.92154	93.45254
0	113.256	-113.256	12826.92154	113.256
242	128.744	113.256	12826.92154	99.63122
500	500			412.5721

Chi squared equals 412.5721 with 1 degree of freedom.

The P-Value is < 0.00001. The result is significant at $p < 0.05$.

Interpretation: The table shows that the association between Utilization of Loans and Positive Impact of Business is considered extremely significant statistically. That means Utilization of Loans and impact on Business are dependent on each other. There is sufficient evidence to show that Microfinance Institutions are fulfilling the needs of clients.

Inference: From the above test, it can infer that in order to check whether the Microfinance Institutions are fulfilling the needs, the hypothesis is considered.

5. To find out whether the clients of Microfinance Institutions are repaying the Loan on time or not

Graph No. 4.9: Bar graph showing that whether the clients of Microfinance Institutions are repaying the Loan on time or not

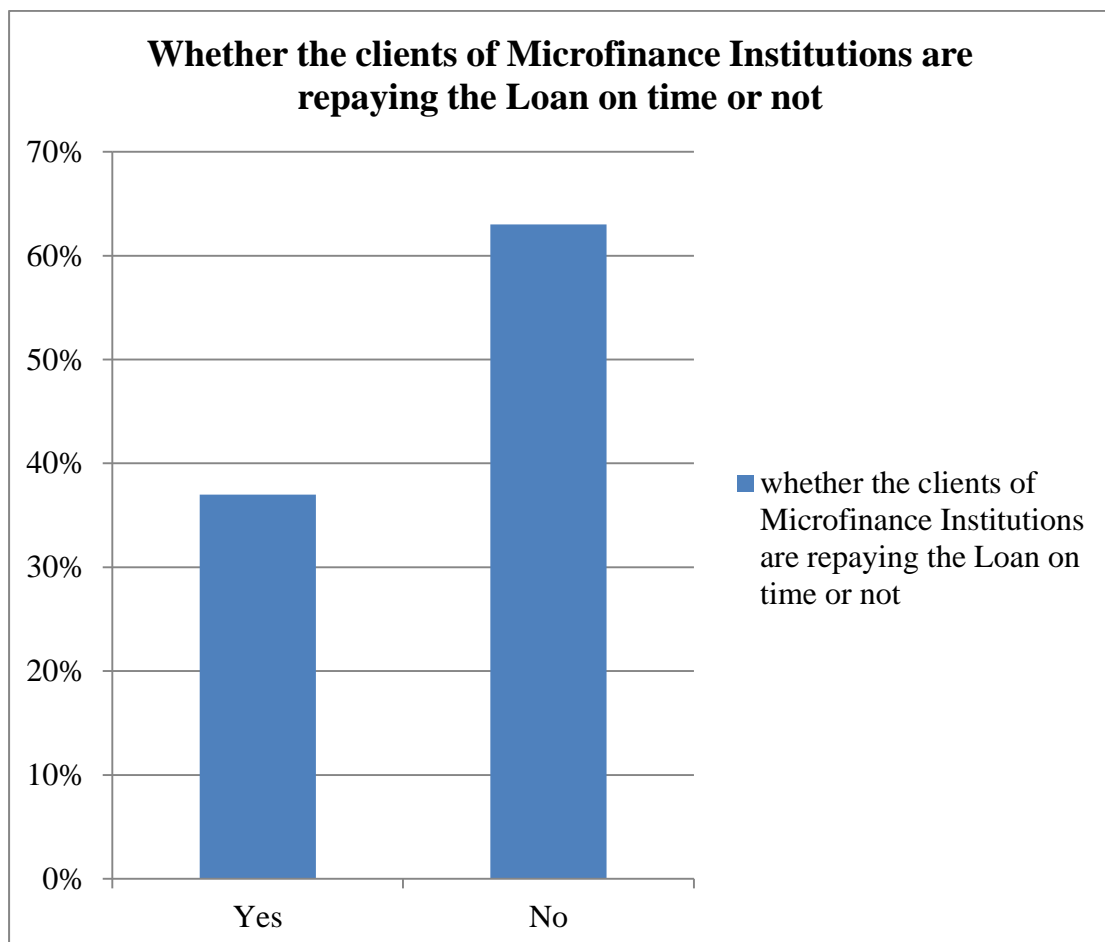
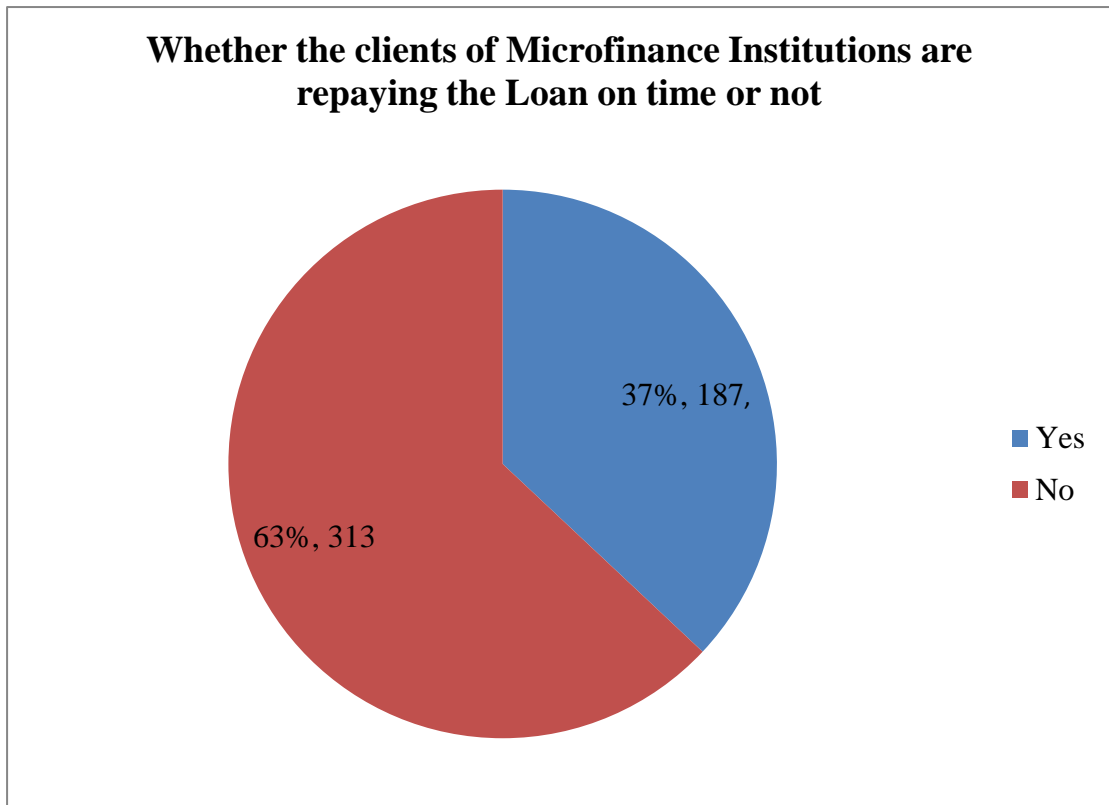


Figure No. 4.23: Chart showing that whether the clients of Microfinance Institutions are repaying the Loan on time or not



Interpretation: The above graph & pie chart shows that 63% of the clients are not paying the loan on time while only 37% of the Clients of MFIs are paying the loan on time. That is an alarming situation for MFIs, here Clients do not repay the Loans due to many reasons one of the major reasons is Family Obligation, Business etc.

Inference: From the above table and pie chart, it can infer that the incidences of the timing of the repayments are considered.

Statistical Estimation:

Assume $P_0 = \text{Yes}$ and $q_0 = \text{No}$ then,

$P_0 = 187/500$ i.e. 0.374 and $q_0 = 313/500$ i.e. 0.626

Standard Deviation (S.D) = $\sqrt{p_0 * q_0/n}$

= $\sqrt{0.374 * 0.626/500} = 0.0216$

Range (R) = $P \pm Z * \text{S.D.}$

$R (+) = 0.374 + 1.96 * 0.0216$

$R (+) = 0.4163$ or 41.63%

$R (-) = 0.374 - 1.96 * 0.0216$

$R (-) = 0.3316$ or 33.16%

Out of every 500 respondents selected randomly from the population, there is 95% chance that anywhere from 33.16% to 41.63% respondents are repaying the Loans on time.

6. To study the effect of Age, Gender, Number of Dependent and Education Level on Multiple Loan Contracts

The following Hypothesis has been taken for this objective-

Ho: $\beta_i = 0$ (Regression Coefficients are insignificant)

Ha: $\beta_i \neq 0$ (Regression Coefficients are significant)

There was a descriptive study aiming at obtaining a general picture of the prevalence of multiple borrowing, reasons for multiple borrowing and associated effects of multiple borrowing. In this objective, a regression analysis for determinants of

multiple loan contracts, rigorous statistical/econometrical analysis was not our aim at this stage, as we did not focus on meeting any statistical significance (see Kumar (2011)). For the regression model, we hypothesized that age, gender, education level, and a number of dependants would affect the number of loan contracts of clients. This supposition led to the development of the following linear model:

$$\text{Multiloans} = \beta_0 + \beta_1 \text{Gender} + \beta_2 \text{Age} + \beta_3 \text{Education} + \beta_4 \text{dependants} + \epsilon$$

Where: -

Multiloans is the dependent variable measured by the number of loan contracts a client had; -

Age is the age (in years) of the client;

Gender is the gender of the client (1 = male, 0 = female);

Education is the level of education of the client measured on a scale of 0 to 2, where 1 means no formal education and 2 means graduation

Dependants is the number of persons who completely depend on the client for a living; where 0-2 mark as 0, 3-4 mark as 1 and above 5 marks as 2.

- β_0 is the intercept;

- β_i 's are the parameters to be estimated using the OLS method; and

- ϵ is the stochastic error term.

Determinants of Multi Loans:-

Table No. 4.17: Model Summary of Predicators

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.090 ^a	.008	.000	1.254

a. Predictors: (Constant), Dependent , Qualificational Level, Current Age, Gender

- The first table of interest is the **Model Summary** table. This table provides the R , R^2 , adjusted R^2 , and the standard error of the estimate, which can be used to determine how well a regression model fits the data. The "**R**" column represents the value of R , the **multiple correlation coefficients**. R can be considered to be one measure of the quality of the prediction of the dependent variable. In this research, a value of 0.090 indicates a bad level of prediction. The "**R Square**" column represents the R^2 value (also called the coefficient of determination), which is the proportion of variance in the dependent variable that can be explained by the independent variables (technically, it is the proportion of variation accounted for by the regression model above and beyond the mean model). It is shown from our value of 0.008 that our independent variables explain 0.8% of the variability of our dependent variable, multi loans. The adjusted R-squared compares the explanatory power of regression models that contain different numbers of predictors and in

this research, it is negligible i.e. 0.000. The adjusted R-squared increases only if the new term improves the model more than would be expected by chance. It decreases when a predictor improves the model by less than expected by chance. The standard error of the estimate is a measure of the accuracy of predictions. In a regression line, the smaller the standard error of the estimate is, the more accurate the predictions are. In this research, the value is 1.254 that shows the inaccuracy in the predictions.

Table No. 4.18: ANOVA & Coefficients Table

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.305	4	1.576	1.002	.406 ^a
	Residual	778.895	495	1.574		
	Total	785.200	499			

a. Predictors: (Constant), Dependent , Qualificational Level, Current Age, Gender

b. Dependent Variable: Reasons for multiple loans

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.547	.263		9.677	.000
	Gender	-.185	.117	-.071	-1.586	.113
	Current Age	-.017	.082	-.009	-.208	.835
	Qualificational Level	.004	.097	.002	.042	.967
	Dependent	-.110	.091	-.054	-1.214	.225

a. Dependent Variable: Reasons for multiple loans

Statistical significance & estimated model coefficients:

- The F -ratio in the **ANOVA** table tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predict the dependent variable, $F(4, 495) = 1.002$, $p > .0005$ (i.e., the regression model is not a good fit of the data).
- Unstandardised coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables were held constant. Consider the effect of age on this output, the unstandardised coefficient, B_1 , for age is equal to -0.017 (see **Coefficients** table). This means that for each one year increase in age, there is a decrease in multiple Loan of 0.165.
- The researcher tests for the statistical significance of each of the independent variables. This tests whether the unstandardised (or standardized) coefficients are equal to 0 (zero) in the population. If $p < .05$, you can conclude that the coefficients are statistically significantly different to 0 (zero). The t -value and corresponding p -value are located in the "**t**" and "**Sig.**" columns, respectively.
- A multiple regression was used to predict reasons for multiple Loans as a gender, age, educational level & a number of dependants. These variables statistically significantly not predicted multiple Loans, $F(4, 495) = 1.002$, $p > .0005$, $R^2 = 0.008$. All four variables added statistically significantly not to the prediction, $p > 0.05$

Table No. 4.19: Calculation of Coefficients

Coefficients^a

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Gender	.999	1.001
Current Age	.999	1.001
Qualificational Level	1.000	1.000
Dependent	1.000	1.000

a. Dependent Variable: Reasons for multiple loans

- Tolerance – the tolerance measures the influence of one independent variable on all other independent variables; the tolerance is calculated with an initial linear regression analysis. Tolerance is defined as $T = 1 - R^2$ for these first step regression analysis. With $T < 0.2$, there might be multicollinearity in the data and with $T < 0.01$. Various recommendations for acceptable levels of tolerance have been published in the literature. Perhaps most commonly, a value of 0.10 is recommended as the minimum level of tolerance (e.g., Tabachnick & Fidell, 2001). However, a recommended minimum value as high as 0.20 has also been suggested (Menard, 1995) and a value of 0.25 can

be seen used in the literature (e.g., Huber & Stephens, 1993). In this output, the level of tolerance is very high which indicates no multicollinearity between the dependent and independent variables.

- In multiple regression, the variance inflation factor (VIF) is used as an indicator of multicollinearity. Computationally, it is defined as the reciprocal of tolerance: $1 / (1 - R^2)$. All other things equal, researchers desire lower levels of VIF, as higher levels of VIF are known to affect adversely the results associated with a multiple regression analysis. In fact, the utility of VIF, as distinct from tolerance, is that VIF specifically indicates the magnitude of the inflation in the standard errors associated with a particular beta weight that is due to multicollinearity. Various recommendations for acceptable levels of VIF have been published in the literature. Perhaps most commonly, a value of 10 has been recommended as the maximum level of VIF (e.g., Hair, Anderson, Tatham, & Black, 1995; Kennedy, 1992; Marquardt, 1970; Neter, Wasserman, & Kutner, 1989). The VIF recommendation of 10 corresponds to the tolerance recommendation of 0.10 (i.e., $1 / 0.10 = 10$). In this output, $VIF < 10$ which again indicates no multicollinearity between the dependent and independent variables.

Chapter 5: CONCLUSION

5.1 Findings:

5.1.1 Results from the description of profile:

- The sample consisted of both male and female respondents. Out of the 500 survey respondents, about 64% were male while the remaining 36% were female. Since the sample was taken randomly, this reflects the current situation where the majority of the MFIs focus their loans to target men. It was expected that women would have more multiple loans than men because they are less averse to take risk compared to men.
- About 65% of all survey respondents were in the 26 to 50 years of age group whereas about 13.2% were less than 26 years of age. It was expected that Middle-aged people would have more loan contracts than younger ones and older ones reflecting the family obligations. Since clients of age group of 75 years and above were negligible, it means either that older people were not engaged in small businesses or MFIs discouraged such people. Life expectancy (2015) at birth in India is 68.3 years.
- In terms of education, 62.6% of all survey respondents were Primary School dropouts, 28.8% had completed Secondary Education, and about 9% had completed Graduation. However, the Literacy rate is 74.04% in India. 47 out

of 100 children enrolled in class I reach class VIII, putting the dropout rate at 52.78 percent.

- It is interesting, however, to note that even completely illiterate people were entrusted with loans. In this study, it was expected that individuals with higher levels of education would have fewer loan contracts as compared to individuals with lower levels. Youth Literacy Rate between the age group of 15–24 in India is 90.2% according to 2015 data, which is contrary to the sample.
- The other important characteristic of respondents that the researcher needs to measure is the number of dependants of respondents. In the sample, all respondents had at least two dependants. However, 14% of all survey respondents had five or more dependants. Contrary to definition given in HBS (2009), which defines dependants as individuals who are under 15 or above 65 years, the researcher considers dependants as individuals of whatever age who entirely depend on the respondent socially & economically. It was expected that individuals with more dependants would have more loan contracts than those with fewer dependants.

5.1.2 Existence of multiple loans, reasons and effects on repayment schedule:-

- The existence of multiple loans, reasons for existence of multiple loans, and effects on repayment schedules are summarized. Results indicate that about 89.2% of all survey respondents had single loan contracts with MFIs while

10.8% had two or more loan contracts with different MFIs at the same time. This indicates that the prevalence of Single borrowing in Uttar Pradesh in India is very high. These findings neither indicate that the majority of the MFIs did not adhere to traditional banking credit rating history nor they share clients' information with each other.

- On the other hand, this might contradict Kwasniewski's (2010) argument that client poaching exists among MFIs in various countries. Since the majority of the MFIs are clustered in same urban or town centres, they certainly compete for the same clients.
- The researcher asked respondents to mention the one major reason for existence of multiple loan contracts. Results show that Family Obligations (44.4%) are the major reasons for the Loan application. During the extensive interviews, the researcher learned that some MFIs provide loans between Rs. 10,000 to Rs. 50,000 equivalent to USD 151 to USD 758. These amounts are too meagre to conduct any meaningful business; as such clients have to take the small loans from different sources to reach their goals, hence 25% of them take multiple loans due to small amount of the loan. Other reasons for multiple borrowing include the influence of friends, loan recycling and delayed loan disbursement from the concerned MFI. Although MFIs provide loans for Family Obligations, clients used the loan for running the business as well. From the extensive interviews, the researcher also learned that clients did not distinguish between business and family matters, as one informant says "we used a huge amount during the marriage of our daughter".

- Incidences of failure to repay loans on time were also high. About 62.6% of all survey respondents admitted to often facing the problem. Multiple borrowing was one of the major reasons for failure to repay on time. Although major reasons such as family obligations and poor business turnover were mentioned, but in the opinion of the researcher the major reason remains that of multiple borrowing. The argument is backed by the fact that about 10.8% of all survey respondents had two or more loan contracts while at the same time about 62.6% of all survey respondents faced problems in loan repayment.
- With the exception of Krishnaswamy (2007), the findings of this study are consistent with previous studies that multiple borrowing among the poor increases their indebtedness, which threatens their ability to repay.
- However, Krishnaswamy (2007) findings may apply in situations where the borrowers are purely business enterprises who distinguish between personal and business matters.
- Contrary to the expectation, the researcher finds that Gender, Age, Qualification Level and Number of Dependants did not significantly affect the number of loan contracts an individual had. Again, as expected, the researcher finds that the lower the level of education among respondents, the more the numbers of loan contracts exist.
- In addition, statistically the coefficient of Dependants is relatively very low. The more dependants a client had, fewer were the loan contracts. This reflects the response that one of the few reasons for multiple loans were family

obligations, where the researcher has seen that some clients borrow in order to meet some family problems rather than for business purpose. Even those who borrowed for business did not distinguish between family matters and the business itself.

- In fact, the researcher found that the regression coefficient between Multi loans and Dependants was as high as - 0.054. It means that there is a weak and negative association between the two variables.

5.2 Suggestions:

- Loan defaulting is an issue that creates a problem in growth and expansion of the organisation because around 73% loan defaulting is identified in MFIs. By considering clients' health needs, MFIs can reduce incidences of loan defaults and increase income.
- From the data analysis, the researcher can say that 63% of the clients are not paying the loan on time while only 37% of the Clients of MFIs are paying loans on time. So, Loan disbursement should be focused on target groups of men and women and initiate them to raise savings and repay the loan on time.
- As the number of dependants exceeds 1 in most of the families of borrowers in the sample, it is suggested to monitor the real utilization of the loan provided by the MFIs in order to get a positive impact on the business of the clients.

- It is advisable that rather than imposing fines on the amount borrowed, the borrowers should be motivated to repay the loan within time because it creates the debt trap for the clients.
- In order to have better results leading to poverty alleviation, Microfinance Institutions need to recognize client's non-financial needs and facilitate satisfaction of such needs. Poor people will not be able to break away from the vicious circle of poverty without significant health and educational improvements.
- In the opinion of the researcher, preference should be given to women as compared to men in providing microcredit because it leads to women empowerment and increases the income of the family. The higher the loan amount, higher will be the capacity building of rural women. There are significantly higher percentages of women making payment on time as compared to men.
- The MFIs should ensure that the disbursed loans should be used only for the purpose they are sanctioned, rather than for frivolous purposes.

5.3 Conclusion of each objective:

- Finally, the researcher concludes that from this research report 40% of the Clients admit that High Operating Cost is the main reason for a High interest

rate of Microfinance while 30% microfinance companies admit that due to loan Losses there is High rate of interest of the Loans.

- While checking the economic effects on households related to Loan repayments to the Microfinance Institutions, the researcher finds out that Monthly income of Clients does not have effect on Loan Repayments to Microfinance Institutions.
- When the researcher finds out the effectiveness of Microcredit for the Clients, he understands that 69% of the Clients are not satisfied with the services of MFIs and when the main cause of dissatisfaction is checked, the researcher comes to conclude that 57% of the Clients are worried due to the High interest rates.
- When the researcher goes to check that whether Microfinance Institutions are satisfying the needs of clients or not, he observes that the association between Utilization of Loans and Positive Impact of Business is considered to be extremely significant statistically in our analysis of the data which shows a positive indication for MFIs. That means Utilization of Loan and impact on Business are dependent on each other.
- Whether the clients of Microfinance Institutions are repaying the Loan on time or not, from the finding of data analysis, the researcher conclude that 63% of the clients are not paying the loan on time while only 37% of the Clients of MFIs are paying loans on time. That is an alarming situation for MFIs, here

Clients do not repay the Loans due to many reasons, one of the major reasons is Family Obligation, Business etc., while **late or non-repayment** of Loans is one of the Causes of High Interest Rates of Loan of MFIs according to Microfinance Institutions.

- A perusal of effects of Age, Gender, Number of Dependants and Education Level on Multiple Loan Contracts, the researcher finds that 65% of the total, Middle aged people would have more loan contracts than younger ones and older ones reflecting the family obligations.
- It is interesting, however, to note that even completely illiterate people were entrusted with loans. In this study it was expected that individual with higher levels of education would have fewer loan contracts as compared to individuals with lower levels of education. Youth Literacy Rate age group of 15–24 in India is 90.2% according to benchmark, 2015 data which is not compatible with the sample. According to the data sample most of the middle aged people who have loan contracts are illiterate.
- When the researcher measures the number of dependants on the respondents he finds that 14% of all survey respondents had five or more dependants, and 60.2% of Clients had 3-4 dependants. It was expected that individuals with more dependants would have more loan contracts than those with fewer dependants. This shows that dependence is not the main cause of Multiple Loan Contracts. While applying the equation of Regression line it is clear that none of the Coefficients of the independent factor has a significant effect on the dependant factor that is multiple loan contracts. So correlation coefficient

is very low and negative thus explained variation between dependant and independent variables is very small. The factors i.e. Gender, Age, Number of Dependants and Educational Level are independent of Multiple Loan Contracts.

“The Poor pay interest on small Loans while the Rich earn interest on Savings.”

5.4 Limitations:

During the study, it was very difficult to win the trust of the respondent in order to monitor each effected factors (different issues of the family) regarding the repayments of Loans to the Microfinance Institutions. The result of this thesis could, therefore, be effected by this particular circumstance that has somewhat limited our work scope. The study shall be confined to the Central Uttar Pradesh region of India. Any change in the government policies may affect the findings of the research.

5.5 Scope for Future Research:

The majority of people and microfinance institutions that the researcher studied had varying views regarding the impact of repayments of Loans in the field of the microfinance industry. Limitations and time constraint prevented the researcher from further discussion of the topics, but that has cleared opportunities for future research topics in microfinance. This study only focuses on the impact of repayments of Loans on economically weaker sections in the microfinance industry. Looking further on a global level, how other aspects in combination with microfinance institutions influence default risk and repayment rate would be an interesting research to create a better overall scenario. Furthermore, by looking deeper into the caste system effect on Indian microfinance, clients' abilities to conduct their businesses would also help to clarify the relationship between default risk and repayment rates. Lastly, it would also be interesting to evaluate the existent amount of the extremely socially and economically excluded communities SCs and STs that receive microloans and focus on evaluating their business success.

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INTERVIEW SCHEDULE

The following Schedule has been developed by Zain Mehdi (Research Scholar), School of Management, Babu Banarasi Das University, Lucknow. Your Co-operation in completing this study by responding to the following questions would be greatly appreciated.

INTERVIEWER: COMPLETE BEFORE BEGINNING THE MODULE

1. Respondent Name: _____

3. Respondent ID NUMBER:

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4. Date of visit: Day

--	--

 Month

--	--

 Year

--	--	--	--

5. Location: _____

6. Location ID

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RECORD ADDRESS:

Section 1: Basic Information related to the Respondent.

1. Gender: I am: Male.....1 , Female.....2

2. What is your current Age? 10 – 25 years.....1 ,26 – 50 years.....2 ,51 – 75 years.....3 , Above 75 years.....4
3. What is your marital status? Single1 , Married..... 2
4. What is your educational Level? Below 5th Class.....1 ,6th Class – 12thClass.....2 , 12th Class – Graduation.....3 , Above Graduation.....4
5. Are you working? Yes.....1 , No.....2
6. What is the nature of your work? Own Business.....1 ,Salaried.....2 , Wage Labour/Job work.....3 ,Others.....4
7. What is your monthly Income? Below Rs 5,000/-1 , Rs 5,000/- to Rs 10,000/-2, Above Rs 10,000/-3
8. How many members are there in your Family? 1 – 21 , 3 – 42 ,5 & above3
9. How many members are dependable or unemployed in your Family? 0 – 2.....1 , 3 – 42 , 5 & above3

Section 2: Information related to Loans and its repayments.

10. For what purposes did you take out the Loan?
Start a new business.....1 , Health.....2 , Education.....3 Repay old Debt.....4 , Regular Consumption.....5 , Others.....6
11. Did you have to give any collateral/guarantee for the Loan?
Yes.....1 (If Yes, Answer Q.11) No.....2
12. Which type of collateral did you give?

- Title (Land/House).....1 , Jewellery.....2 , Vehicle.....3 Surety
from known person (Guarantee).....4 , others.....5
13. How much amount of loan has been taken from MFI's?
Below Rs 10,000.....1 Rs 10,001 to Rs 50,000.....2 Rs 50,001 to
Rs 1,00,000.....3 Above Rs 1,00,000.....4
14. From how many MFI's or moneylenders have you taken loan?
From 1 MFI.....1 , 2 to 4 MFI.....2 , Above 4 MFI.....3
15. What are the reasons for multiple loans?
Loan Recycling.....1 , Family Obligations.....2 , Small size of
Loan.....3 Influence of friends.....4 , Others.....5
16. Do you know the interest (%) Charged on the outstanding loan?
Yes.....1 (if Yes, Answer Q. 16 & Q. 17) No.....2
17. What is the annual interest rate? (%)
10% - 15%.....1 , 16% - 20%.....2 21% - 25%.....3 26%
& above.....4
18. How the interest rates are charged?
Per Month.....1 , Per Year.....2 , Per Week.....3 , Per
Day.....4 Don't Know.....5
19. Do you give any commission for getting Loan?
Yes.....1 , No.....2 Don't Know.....3
20. Do you have to make compromises while making repayments?
Yes.....1 No.....2
21. Do you pay repayments of Loan directly to the MFI's or through SHG's?

- Directly.....1 , Through SHG's.....2 Others.....3
22. What is your cycle of paying installment?
 Daily.....1 , Weekly.....2
 Monthly.....3 , Quarterly.....4 , Half Yearly.....5
23. Do you pay the same amount every installment?
 Yes.....1 , No.....2
24. What are the reasons for late repayments?
 Loan Recycling.....1 , Family Obligations..... 2 , Lack of fixed
 source of income.....3 , Improper use of Loan amount.....4 ,
 Others.....5
25. Were you able to use the loan amount for your business or work as intended
 before taking the loan?
 Yes.....1 , No.....2
26. Did this loan positively impact your business or work?
 Yes.....1 No.....2
27. Are repayments of loan affecting the education of the children, family life
 balance and fulfillment of basic needs?
 Yes.....1 , No.....2
28. Have you made any repayment Schedule plan?
 Yes.....1 , No.....2
29. Are you repaying the loan amount on time?
 Yes.....1 , No.....2
30. I know all the benefits, terms and conditions on taking loans from the MFI's.

Strongly Disagreed 1 2 3 4 5 Strongly Agreed.

31. I feel satisfied with the interest rates charged by the MFI's.

Strongly Disagreed 1 2 3 4 5 Strongly Agreed.

32. I am not facing difficulties in repayments of loans?

Strongly Disagreed 1 2 3 4 5 Strongly Agreed.

33. I feel satisfied with the services provided by the MFI's.

Strongly Disagreed 1 2 3 4 5 Strongly Agreed.

QUESTIONNAIRE

The following Questionnaire has been developed by Zain Mehdi (Research Scholar), School of Management, Babu Banarasi Das University, Lucknow. Your Co-operation in completing this study by responding to the following questions would be greatly appreciated.

INTERVIEWER: COMPLETE BEFORE BEGINNING THE MODULE				
1.	Name of the Microfinance Institution:	_____		
2.	Respondent Name:	_____		
3.	Respondent ID NUMBER:	<input type="text"/>	<input type="text"/>	<input type="text"/>
4.	Date of visit:	Day <input type="text"/>	Month <input type="text"/>	Year <input type="text"/>
5.	Location:	_____		
6.	Location ID	<input type="text"/>	<input type="text"/>	<input type="text"/>
RECORD ADDRESS:				

1. For what purposes do you provide loans?

.....
.....
.....

2. What are the reasons behind high rate of interest?

.....
.....
.....

3. How do you decide the amount of Loan to be provided?

.....
.....
.....

4. Do you get the installments of Loan on time?

.....
.....
.....

5. Do you provide Loans through Self Help Group's or directly?

.....
.....
.....

6. To whom do you provide Loans?

.....
.....
.....

7. Do you take any collateral/guarantee for the amount of Loans?

.....
.....
.....

8. How do you approach for Loans to the people?

.....
.....
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