IMPACT OF MICROFINANCE
ON SOCIAL, ECONOMIC AND CAPABILITY WELL-BEING
OF FAMILIES BELOW POVERTY LINE, WITH SPECIAL REFERENCE TO
DEOGHAR DISTRICT IN JHARKHAND

Doctoral Thesis Submitted
In partial fulfillment of the requirements for the award of the degree of

DOCTOR OF PHILOSOPHY

In

MANAGEMENT

BY

PRIYANKA PRIYADARSHANI

Under the guidance of

Dr Hareram Mohanty	**Dr. B. M. Singh**
(Research Co- Supervisor)	**(Research Supervisor)**
Former Associate Dean	Dean and Registrar
IBS Bhubaneshwar	ICFAI University Jharkhand
Odisha, India	Ranchi, India

ICFAI
UNIVERSITY
JHARKHAND

ICFAI UNIVERSITY JHARKHAND

RANCHI

OCTOBER, 2017

I

THESIS COMPLETION CERTIFICATE

This is to certify that this research thesis titled "*Impact of Microfinance on Social, Economic and Capability Well- Being of Families Below Poverty Line, with Special Reference to Deoghar District in Jharkhand",* submitted by **Priyanka Priyadarshani** in partial fulfillment of the requirements for the award of the Degree of Doctor of Philosophy in Management by the ICFAI University Jharkhand, Ranchi is an original work carried out by her under our joint guidance. It is certified that the work has not been submitted anywhere else for the award of any other Degree or Diploma of this or any other University. We also certify that she complied with the Plagiarism Guidelines of the University.

<table>
<tr><td>**Dr Hareram Mohanty**</td><td>**Dr. B. M. Singh**</td></tr>
<tr><td>Former Associate Dean</td><td>Dean and Registrar</td></tr>
<tr><td>IBS Bhubaneshwar</td><td>ICFAI University Jharkhand</td></tr>
<tr><td>Odisha, India</td><td>Ranchi, India</td></tr>
<tr><td>**(Research Co-Supervisor)**</td><td>**(Research Supervisor)**</td></tr>
</table>

DECLARATION OF AUTHORSHIP

I declare that this thesis entitled *" Impact of Microfinance on Social, Economic and Capability Well -Being of Families Below Poverty Line, with Special Reference to Deoghar District in Jharkhand"* submitted by me in partial fulfillment of the requirements for the award of the degree of Doctor of Philosophy of the ICFAI University Jharkhand, Ranchi is my own work. It contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text. I further state that I complied with the plagiarism guidelines of the University, while preparing the thesis.

(PRIYANKA PRIYADARSHANI)

ID No. **13JU11300014**

ADDRESS

4C/1, PROFESSORS' COLONY

TAGORE HILL ROAD, RANCHI, JHARKHAND 834008

RANCHI

DATE:

ACKNOWLEDGEMENTS

EXECUTIVE SUMMARY

In the development paradigm, microfinance has evolved as a need-based programme for empowerment and alleviation of poverty to the so far neglected target groups (women, poor, deprived etc.). It has also become one of the most effective interventions for economic empowerment of the poor. (RAJENDRAN, 2012) In this context, the present study focuses on the impact of microfinance on the social economic and capability well-being of people languishing Below Poverty Line (BPL) in the Deoghar district of Jharkhand.

Microfinance, in simple terms, means providing financial assistance, in the form of a loan, insurance, saving, fund transfer, training to the small entrepreneurs and small businesses, lacking access to banking and related services (SINGH, 2014). Microfinance as Prahalad, 2005 defines, "a scheme for provisioning small loans to impoverished entrepreneurs in less-developed countries". This definition of Prahalad, is often cited in the literature as the quintessential example of a business solution to global poverty.

Need of microfinance in India: In India many estimations shows that 350 million people live below poverty line. The annual credit demand by the poor in the country is estimated to be about Rs 60,000 crores. And the cumulative disbursement under all microfinance programmes is only about Rs 5000 crores. But only about 5% of the rural poor have access to microfinance (NABARD, 2011)

Need of microfinance in Jharkhand: As per the latest survey in Jharkhand, 36.96% of the people live below the poverty line as compared to the all India average of 21.92% (Planning Commission., 2011-12). The Successes of such poverty alleviating programmes like microfinance are much required in Jharkhand. The literacy rate of Jharkhand is 67.6%, which is less than the national literacy average of 74.04% (Planning Commission., 2011-12).

The state has also hilly and difficult terrain covered with forests and 26% of the total population is tribal. Significant infrastructure gap, poor social indicators and a high index of poverty are some of the other features of Jharkhand (Government of India, 2012). Various initiatives by the state government in the microfinance sector would help in overcoming some of these problems.

Need of microfinance in Deoghar: As per the 2011 Jharkhand industrial policy study, Deoghar "comes under 'C' category, i.e. most backward district for industrial activities." (Government of India). Also, Deoghar was named as a backward district and hence came under the Backward Regions Grant Fund Programme (BRGF) of the Government of India. (Ministry of Panchayati Raj, 2009). The population of Deoghar comprises approximately Scheduled Castes (SCs: 12.6%) and Scheduled Tribes (STs: 12.2%). The literacy rate of males (66.4%) and female (32.0%) in Deoghar is also less than the Jharkhand state average of 67.3% and 38.9% respectively (as of 2016). (Directorate of Statistics & Evaluation, 2006)

With the above background of the Deoghar district and keeping in view the lack of any substantial relevant study in the field of microfinance within Deoghar district, the present research attempts to uncover and measure new approaches to the measurement of microfinance in India.

OBJECTIVES AND SCOPE

The research objectives have been developed from the research problem statement after an in-depth study of the domain area and literature review. The study has been undertaken to ascertain whether this movement of microfinance has in reality uplifted the social economic and capability well-being of the BPL people of Jharkhand and Deoghar district in particular. Further, most studies of microfinance in India has been focused on the southern or the western part of India. These regions of India had a significant exposure to microfinance and

academic studies focusing on the Socio-Economic Upliftment of people living below the poverty line, however the eastern region of India including the state of Jharkhand has not seen the same level of attention both in terms of exposure and academic studies. In this regard, the present study makes a significant academic contribution by:

1. Exploring the important latent variables relevant in the research setting (Deoghar district, Jharkhand) which are potentially important in assessing the impact of microfinance offerings across social, economic and capability dimensions. *(Study 1)* (The exploratory section of the thesis attempts to inductively understand emergent themes from a set of qualitative interviews of success and failure stories in microfinance loan use within the Deoghar district. This section attempts to isolate key dimensions of microfinance loan impact to be used later in the measurement sections of the study).

2. Exploring the various social, economic and capability dimensions of microfinance and measuring its impact on the well-being of the respondents in Deoghar district, Jharkhand, India *(Study 2 & 3)*.

3. Understanding the role of the demographic, social and geographic factors like age, caste, distance from the city centre, education, loan cycle, loan type etc. on the impact of microfinance loans with Special Reference to Deoghar District in Jharkhand, India *(Study 2 &3)*.

4. To study the impact of microfinance in the reduction of migration in the Deoghar district, Jharkhand, India *(Study 2 & 3)*.

5. Understanding the determinants of customer satisfaction in Rural Self Help Groups-Bank Linkage Programme by doing an empirical study of Deoghar district in Jharkhand, India *(Study 4)*.

6. Differentiating the impact on groups of respondent belonging to different poverty levels in the Deoghar district of Jharkhand, India *(Study 4)*

HYPOTHESES

The research study consists of qualitative (STUDY 1) as well as the quantitative (STUDY 2, 3 &4) analysis .Hypotheses of all the studies are provided below:

STUDY 1*: Study 1* is a qualitative exploration to extricate key latent impact dimensions from the caselets. Hence no hypotheses assumed in this study. The extricate key latent impact dimension identified in this study are distance from the city centre, migration, family and social support, etc., the other studies(*Study 2, 3 and 4)* focuses on the measurement and further analysis of the impact of microfinance, studied in the research setting.

STUDY 2*: Study 2* measures the impact of the microfinance on the social, economic and capability well-being of people living below the poverty line in the Deoghar district of Jharkhand. A comparison is done between microfinance borrower and non borrower. The non borrowers are taken as the control group for this study. The hypotheses assumed for this study is presented below:

Hypothesis 1: The use of Microfinance loans has led to an increase in the income of the respondents in their community in Deoghar, Jharkhand.

Hypothesis 2: The use of Microfinance loans has led to an increase in the expenses of the respondents in their community in Deoghar, Jharkhand.

Hypothesis 3: The use of Microfinance loans has resulted in a decrease in the migration of the respondents in their community in Deoghar, Jharkhand.

Hypothesis 4: The use of Microfinance loans has increased the educational qualifications/ vocational training of the respondents in their community in Deoghar, Jharkhand.

*Hypothesis 5***:** The use of Microfinance loans has led to an increase in the working understanding of skill/trades/crafts by the respondents in their community in Deoghar, Jharkhand.

Hypothesis 6: The use of Microfinance loans has led to an increase in the social status enjoyed by the respondents in their community in Deoghar, Jharkhand.

*Hypothesis 7***:** The use of Microfinance loans has led to an increase in the status enjoyed by the respondents in their family in Deoghar, Jharkhand.

STUDY 3: This study continues the measurement of microfinance impact by comparing the breakups of impact measurement based on the categories of various grouping variables like distance from city center, loan type, age group, etc. for the Microfinance borrower respondent group (368 respondents). The hypotheses in this study assume that there is no difference within each grouping variable as the null hypothesis. As we do not have significant input from the existing literature on the relationship between the grouping and impact variables, we present the null hypothesis arguments below.

*Hypothesis 1***:** The impact variables across Social, Capability and Economic well-being have no difference across the grouping variable: distance from city center (<=10 Km, 11-20 Km, 21-30 Km and 31-40 Km).

Hypothesis 2: The impact variables across Social, Capability and Economic well-being have no difference across the grouping variable: loan type (Self Help Group [SHG]/Joint Liability Group [JLG]).

*Hypothesis 3***:** The impact variables across Social, Capability and Economic well-being have no difference across the grouping variable: age groups (<=30 years, 31-40 years, 41-50 years and >=50 years).

Hypothesis 4: The variables measuring impact across Social, Capability and Economic well-being have no difference in the whole grouping variable: Caste (Scheduled Caste (SC), Scheduled Tribe (ST) and Other Backward Castes (OBC)).

*Hypothesis 5***:** The variables measuring impact across Social, Capability and Economic well-being have no difference in the whole grouping variable: loan cycle (1, 2, 3, and 4).

*Hypothesis 6***:** The impact variables across Social, Capability and Economic well-being have no difference in the whole grouping variable: education (Illiterate, Till Class X, High School and Graduate).

Although the impact variables (economic, capability and social well-being) have been grouped in the hypotheses presented above, each impact variable has been independently analyzed across the six grouping variables like loan types, distance from the district headquarter, age etc. The analysis of *study 3* will present results for each impact variable separately.

*STUDY 4***:** This is an empirical study to find out the Determinants of Customer Satisfaction in Rural Self Help Groups-Bank Linkage Programme from the same set of respondents who were used for the study 2 and 3, in the Deoghar district of Jharkhand, India.

Socio Economic Profile:

H1A: There will be a negative relationship between customer age and Overall Customer Satisfaction.

H1B: There will be a negative relationship between underprivileged caste membership and Overall Customer Satisfaction.

H1C: There will be a positive relationship between education level and Overall Customer Satisfaction.

H1D: There will be a negative relationship between MPCE and Overall Customer Satisfaction

H1E: There will be a negative relationship between the distance from city center of the survey respondent's address and Overall Customer Satisfaction.

Loan Dynamics:

H2A: There will be a positive relationship between increasing SHG Age and Overall SHG-BLP Customer Satisfaction

H2B: There will be a positive relationship between increasing Loan Amount and Overall SHG-BLP Customer Satisfaction

H2C: There will be a positive relationship between Training provided and Overall SHG-BLP Customer Satisfaction

H2D: There will be a positive relationship between Ease of Processing/Bureaucracy and Overall SHG-BLP Customer Satisfaction.

Loan Use:

H3A: There will be a positive relationship between Income Generating Use and Overall SHG-BLP Customer Satisfaction.

H3B: There will be a positive relationship between the choice of a New Occupation (New vs. Traditional Business) and Overall SHG-BLP Customer Satisfaction.

RESEARCH METHODOLOGY

The present study uses mixed method approach. A mixed methods approach allow for the inclusion of both qualitative and quantitative methods of data collection and/or analysis to

achieve a range of outcomes as discussed by Creswell (Creswell, 2005); and Greene et al. (Greene, Caracelli, & Graham, 1989).

The selection of mixed methods approach was done after analysis of the overall purpose of the study, and on the basis of the research questions identified, the research relating to factors /variables having an impact on social, economic and capability well-being of the BPL people residing in the Deoghar District of Jharkhand. The mixed method ensured that there is a greater validity in the result as it provided variation in data collected. Other benefits of mixed method are:

• The Research question is answered from a number of perspectives.

• There are no 'gaps' to the information / data collected is also ensured.

• It ensures that pre-existing assumptions from the researcher are less likely.

This approach was deemed important as any one methodological approach does not provide a holistic view of microfinance impact in Deoghar district. Both qualitative (semi-structured interviews, case studies) and quantitative techniques (OLS regression, ANOVA with post hoc analysis, t-tests) were used.

DATA ANALYSIS

This thesis comprises of four different yet symbiotic studies on the various aspects of the social economic and capability well-being of microfinance on the respondents in the Deoghar district of Jharkhand. While the first study of the present research is based on a qualitative approach, the remaining three studies used various quantitative techniques for analysis.

In the *first study* qualitative case studies were developed focusing on the positive and negative impacts of microfinance on the borrowers. Caselets were prepared on the basis of

interviews. All interviewees were asked about their experiences with microfinance. The case studies were done according to the guidelines provided for case studies by qualitative research literature (Eisenhardt, 1989; Yin, 1994).

Before the second study, a *pilot test* was done to check whether the questions in the survey were loaded to the constructs of economic, social and capability well-being separately. Exploratory factor analysis was used for the same.

In the *second study*, a comparison of 368 respondent groups from the microfinance borrower category was made with the 217 respondent groups belonging to the non-microfinance borrowers group. The statistical tool, Independent sample t-test was used to find significant differences in means between the two groups. Further, individual sub-groups based on Caste and Age was also compared using the statistical tool, independent sample t-test.

In the *third study*, grouping variables like distance from city center, loan type, age group etc. were used to further find patterns in the borrower data. The statistical tool, One way ANOVA with appropriate post-hoc tests were used for the analysis.

In the *fourth study* Ordinary Least Square (OLS) linear regression was the statistical tool used to find the determinants of overall customer satisfaction surveyed from 145 respondents spread across 28 villages.

95% confidence levels were considered for all quantitative tests. IBM SPSS Version 20 was used to perform all the above mentioned quantitative tests.

FINDINGS

The thesis comprises of four different yet connected studies. Both qualitative and quantitative approaches (mixed method) were used. The conclusions of all the four studies are briefed below:

Study 1: This study uncovers distance from the city center as one of the potentially potent factor that could be useful in understanding the holistic impact of microfinance in an Indian setting. Also, some success and failure stories of microfinance pointed at increasing migration in their households through the use of microfinance funds.

Study 2: It utilized a quantitative approach to compare the social, economic and capability well-being between microfinance borrowers and a control group that did not receive any microfinance loans.

Study 3: It analyzed the data compiled from microfinance borrowers based on grouping variables like caste, age group etc. The findings of study 2 and study 3 are briefed below:

- The Economic and Social Well -Being of Microfinance Borrowers were found to be significantly higher when compared to non-borrowers.

- Capability Well- Being was not significantly higher for microfinance borrowers as compared to non-borrowers.

- There were significant differences between microfinance borrowers and non-borrowers for SC and ST respondents. However, the impact was more widespread for OBCs.

- Lower Age group borrowers had more impact on their Well Being parameters than older borrowers.

Study 4: It attempts to extract determinants of overall customer satisfaction among a set of Self Help Group – Bank Linkage Programme. A proxy measure of poverty Monthly per Capital Expenditure (MPCE) was utilized for the study similar to Government of India guidelines. The study's findings are briefed below:

- The SHG-BLP programme in Deoghar district seems to be more satisfactory for higher MPCE respondents as compared to lower.

- SC respondents have significantly lower customer satisfaction as compared to other caste groups (like ST and OBC)

- Ease of processing was a significant determinant of customer satisfaction. (Important for Deoghar context)

- Loan Use was not found to be a significant determinant.

CONTRIBUTIONS

As discussed above, this research provides some important contributions. **Firstly**, the study proposed and tested a robust and comprehensive framework for microfinance impact measurement. The comprehensive framework includes the dimensions of social, economic and capability well-being. **Secondly**, this research measured the impact of microfinance in a backward district of eastern India: a region which has seen a paucity of impact measurement studies. **Thirdly**, the conceptualization of distance from city center and the impact on migration makes novel contributions to the academic understanding of microfinance impact. **Fourthly**, the findings suggest that the impact of microfinance is more positive for Other Backward Castes as compared to Scheduled Castes and Tribes. More analysis is needed as to why castes are the dominant influencers of microfinance impact. **Finally**, this thesis measures the determinants of overall customer satisfaction of microfinance borrowers in Deoghar. By

doing so, this study provides unique insights into understanding the satisfaction of microfinance borrowers by visualizing them as customers of a financial service.

TABLE OF CONTENTS

PART 1

PART 2

PART 3

TABLE OF FIGURES

LIST OF TABLES

ACRONYMS

Abbreviation	Explanation
ADB	Asian Development Bank
ANANDI	Area Networking and Development Initiative
APL	Above Poverty Line
APRACA	Asia Pacific Rural and Agricultural Credit Association
ARDB	Agricultural and Rural Development Bank
BAAC	Bank for Agriculture and Agricultural Cooperatives
BC	Banking Correspondent
BPL	Below Poverty Line
BRAC	Bangladesh Rural Advancement Committee
BRGF	Backward Grant Fund
CASHE	Credit and Savings for Household Enterprises
CBO	Community Based Organization
CGAP	Consultative Group to Assist the Poorest
CMG	Credit Management Group
DFID.	Department for International Development, United Kingdom
DRDA	District Rural Development Agency
DWCRA	Development of Women and Children in Rural Areas
EA	Economic Assistance
FI	Financial Institutions
FAO	Food and Agriculture Organization of the United Nations
FWWB	Friends of Women's World Banking
GCC	
GDI	Gender-related Development Index
GEM	Gender Empowerment Measure

GoI	Government of India
ICDS	Integrated Child Development Scheme
ICT	Information and Communication Technology
IGA	Income Generation Activities
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
IRDP	Integrated Rural Development Programme
JLG.	Joint Liability Group
KYC	Know Your Customer
LEAP	Learning for Empowerment Against Poverty
MDF	Microfinance development fund
MF	Micro Finance
MFI	Micro Finance Institutions
MFO.	Micro Finance Organisations
MDG	Millennium Development Goals
MPCE	Monthly Per Capital Consumption Expenditure
MSSRF	MS Swami Nathan Research Foundation
MRP	Mixed Reference Period
MMRP	Modified Mixed Reference Period
MYRADA	Mysore Resettlement and Development Agency
NABARD	National Bank for Agricultural and Rural Development
NGO	Non- Government Organisation
OBC	Other Backward Class
NRCWA	National Research Centre for Women in Agriculture
PPP	Purchasing power parity
PRI	Panchayat Raj Institution
PLF	Panchayat Level Federation
RBI	Reserve Bank of India

REDP	Rural Entrepreneur Development Programme
RF	Revolving Fund
RFA	Revolving fund assistance
RGVN	Rashtriya Gamin Vikas Nidhi
RMK	Rashtriya Mahila Kosh (National Credit Fund for Women) Rupees/Indian Rupees
Rs/INR	
ROSCA	Rotating Savings-and-Credit Association
SBLP	SHG Bank Linkage Program
SC	Scheduled Caste
SFMC	SIDBI Foundation for Micro credit.
SEWA	Self-Employed Women's Association
SGSY	Swarnajayanthi Gram Swarozgar Yojana
SHG	Self Help Group
SHPI	Self – Help Promoting Institution
SHGPI	Self-help group promoting institution
SIDBI	Small Industries Development Bank of India
ST	Scheduled Tribes
UNCDF	United Nations Capital Development Fund
UNEP	United Nations Environment Programme
UNFIP	United Nations Fund for International Partnerships
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Development Fund for Women
UNFPA	United Nations Population Fund
UNDP	United Nations Development Programme
UNHABITAT	United Nations Human Settlements Programme
URP	Uniform Reference Period
USAID	United States Agency for International Development
VO	Village Organization

WHO	World Health Organization
WIEGO	Women in Informal Employment: Globalizing and Organizing
WIN	Women's Initiative Network

CHAPTER 1

INTRODUCTION

CHAPTER 1: INTRODUCTION

1.1 OVERVIEW

The Eradication of poverty has been one of the most important agenda of most of the developing nations. The government and foreign aid worldwide have been trying to lift the poverty stricken individuals out of poverty and promote a sustained development. But many efforts like pure philanthropy did not fulfill its purposes as it failed to induce a sense of responsibility among the recipients.

Many innovative approaches have been devised by the policy makers, international development agencies, non-governmental organizations and governments too for poverty reduction. Based on this many coordinated programmes and strategies have been launched in many developing countries. One such strategy of financial inclusion includes various approaches to poverty alleviation like microfinance. Since the early 1990s, financial inclusion and microfinance have become increasingly popular and they have helped to reshape the ongoing debate regarding poverty alleviation while keeping hope alive for the ultimate goal of poverty eradication.

Various programmes have been undertaken worldwide to combat poverty, and the United Nations Millennium Declaration signed by all the 191 United Nation Member States, in September 2000 was a step towards it (World Health Organization, 2016). The declaration was signed to combat poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women. It consisted of following eight goals.

1. Eradication of extreme poverty and hunger;
2. Achieve universal primary education;
3. Promote gender equality and empower women;

4. Reduce child mortality;

5. Improve maternal health;

6. Combat HIV/AIDS, malaria, and other diseases;

7. Ensure environmental sustainability; and

8. Develop a global partnership for development. (World Health Organization, 2016)

As per the United Nations report of 2016 "extreme poverty has declined significantly over the last two decades" and globally, the number of people living in extreme poverty has also decreased by more than half, falling from 1.9 billion in 1990 to 836 million in 2015 (United Nations, 2016). In this regard, most of the progress has occurred since 2000, the year in which the United Nations Millennium Declaration was signed

The Sustainable development Goals superseded the millennium development goals is officially known as *"Transforming our world: the 2030 Agenda for Sustainable Development"* (United Nations, 2016).It consists of 17 "Global Goals" with 169 targets between them to be achieved by 2030. Few Goals are:

1. No Poverty.

2. Zero Hunger.

3. Good Health and Well-being.

4. Quality Education.

5. Gender Equality.

6. Clean Water and Sanitation.

7. Affordable and Clean Energy.

8. Decent Work and Economic Growth etc. (United Nations, 2016)

As per the latest survey of the planning commission (2011-2012), 36.96% of the people live below the poverty line in Jharkhand as compared to the all India average of 21.92%

(Planning Commission., 2011-12). The Success of such poverty alleviating programmes like microfinance is much required in Jharkhand. Demographically Jharkhand comprises of a significant population of SC and ST which has been historically marginalized. The upliftment of such section is an imperative for the society, policymaker, and government. In this regard, the present study is an attempt to get an insight on the success of microfinance program in the Deoghar district of Jharkhand.

Deoghar is one of the favorite tourist spots of the Jharkhand state mainly because of its famous Lord Shiva Temple. The district is fluxed with tourists throughout the year giving an excellent employment opportunity to the people residing here mainly in the dairy, vegetables and BADHI making sector.

This thesis focuses on studying the impact of microfinance in one of the backward district within the state of Jharkhand. To understand the context of the study with regard to the underlying poverty alleviating strategy and framework is important. This chapter throws light on the status of microfinance in India, Jharkhand, and Deoghar. The research motivation, objectives, research approach and methodology along with the scope of the study and limitations are also discussed.

1.2 MICROFINANCE IN INDIA

The services offered under microfinance include savings, credit, insurance, payment services as well as social intermediation like group formation, etc. (Ledgerwood, 1999). In the Indian setting, Microfinance has been defined as: "… an economic development tool whose objective is to assist the poor to work their way out of poverty. It covers a range of services which include, in addition to the provision of credit, many other services such as savings, insurance, money transfers, counseling, etc." (Reserve Bank of India, 2011)

Despite higher GDP growth rates achieved by India in the last decade, over 350 million rural Indians face chronic poverty (NABARD, 2015) . The 11th Five Year Plan of the Indian government aimed at inclusive growth and faster reduction of poverty. Further, the 12th Five Year Plan (2012-17), plans to reduce poverty in the country by 10% (2% annually). (Planning Commission, Government of India, 2013).

The microfinance ecosystem in India has the following major players: Central and State Governments, Microfinance Institutions (MFIs), Non-Governmental Organizations (NGOs), Self Help Groups (SHGs), Banks (commercial, Rural, and cooperatives) and Governing/Promoting Agencies like Reserve Bank of India (RBI), NABARD. The major modes of microfinance in India are: Subsidized Bank Loans, Self-help group–bank linkages, Microfinance Institutions-Joint Liability Groups, Direct Benefit Transfers and community-based microfinance institutions like cooperatives and Post office based schemes (Chidambaranathan, Premchander, & Raj, 2013). India currently has 76.97 Lakhs SHGs with 58% of them have credit outstanding (NABARD, 2015) . Further, approximately 268 Microfinance Institutions are known to operate in the country. (91 Non-Banking Financial Companies and 132 Societies/Trusts) (Sa-Dhan, 2014) . Three states with the highest number of MFIs are West Bengal (45), Tamil Nadu (33) and Odisha (29) (Sa-Dhan, 2014).

In India, the Eleventh Five Year Plan aimed at an inclusive growth and faster reduction of poverty (Planning Commission, Government of India, 2013). The planning commission reports state "Microfinance can contribute immensely to the financial inclusion of the poor without which it will be difficult for them to come out of the vicious cycle of poverty." There is a need to strengthen all the available channels of providing credit to the poor such as SHG-Bank Linkage programmes, Microfinance Institutions, Cooperative Banks, State financial corporations, Regional Rural Banks and Primary Agricultural Credit Societies in order to

enable the poor people to access credit is the fact which has been acknowledged by the planning commission report of 2013 .

1.3 JHARKHAND: INDICATORS AND STATUS OF MICROFINANCE:

Jharkhand became the 28th state of India on November 15, 2000, after being carved out of the state of Bihar. It lies in the eastern part of India with bordering states of Bihar (North), West Bengal (East), Odisha (South), Chattisgarh (West) and Uttar Pradesh (North West). As per the 2001 census of India, the state has a population of approximately 3.29 crores distributed in 24 districts and 260 blocks (Government of Jharkhand, 2013). Jharkhand is known for its plethora of tribal groups (total 32 distinct groups) which constitute 26.3 percent of the total population (Government of Jharkhand, 2016). Also, Jharkhand is well known for its mineral resources and leads the country in the production of Iron ore, Copper, Mica, Kainite, Uranium, Asbestos, etc (Government of Jharkhand, 2016). Key social indicators of Jharkhand are presented in **Table 1.3.1** (Department of Planning and Development, Government of Jharkhand, 2014).

TABLE 1.3.1 Key Social Sector Statistics: Jharkhand and Deoghar

Key Social Sector Statistics: Jharkhand and Deoghar

Statistic	Jharkhand	Deoghar
Number of administrative blocks	260	10
Number of Gram panchayats	4,423	194
Number of Villages	32,394	2,662
Number of households	62.5 Lakhs	2.643 Lakhs
Average Household Size	5.2	5.5
Area (in sq. km.)	79,714	2,479
Male Population (in crores)	1.69	0.077
Female Population (in crores)	1.6	0.071
Proportion of SC in population	12.08	12.73
Proportion of ST in population	26.21	12.06
Literacy Rate: Male	76.84	76.9
Literacy Rate: Female	55.42	51.8

Source: Department of Planning and Development , Goernment of Jharkhand, 17/11/2014

Poverty is one of the major concerns for the state. Details of the poverty percentage in the last few years are given in *Table 1.3.2*

TABLE: 1.3.2 Jharkhand BPL Report

Sl no	Year	Rural (%)	Urban (%)	Combined (%)
1	2004-2005	51.60	23	45.30
2	2009-2010	41.60	31.10	39.10
3	2011-2012	40.84	24.83	36.96

Source: www.rbi.org.in (Jharkhand BPL REPORT)

The table above shows that as per the latest BPL survey report of Jharkhand 40.84 percentages of rural people and 24.83 percentages of the urban people of Jharkhand reside below the poverty line.

Status of Microfinance in Jharkhand

The performance of microfinance schemes in the state of Jharkhand has been lagging when compared to other Indian states. As per the 2014-2015 progress report of NABARD, the current state of microfinance activities in Jharkhand is underwhelming. For ex., in the last fiscal year, the number of savings linked SHG groups in Jharkhand declined. The savings balance in the existing savings based SHG groups also did not show any improvement (the only state not showing improvement in the eastern region.) The number and quantum of new SHG loans issued in Jharkhand also showed a decline in 2015, with Non-Performing Assets (NPAs) exceeding 15% (25.57%) (NABARD, 2015). Further, Jharkhand is identified as a priority state with a total potential of 2, 20,893 new SHG formations. (NABARD, 2015).

In total, Jharkhand hosts 82,138 SHGs with a total savings balance of Rs. 8,492.52 Lakhs out of which only 4,470 SHGs were offered loans by various banks totaling a sum of Rs. 3,750.89 Lakhs in 2014-15.

1.4 DEOGHAR: INDICATORS AND STATUS OF MICROFINANCE:

Deoghar, one of the 24 districts of Jharkhand, is located on the North Eastern edge of the state. It is famous for being a pilgrimage center and attracts many tourists every year. Deoghar district is located in the western portion of the Santhal Parganas division, and its administrative headquarters are based in the town of Deoghar (Government of Jharkhand, 2016).

It constitutes of the following ten administrative blocks: Deoghar, Mohanpur, Sarwan, Sona Rai Tharhi, Devipur, Madhupur, Margo Munda, Karon, Sarath, and Palojori (Department of Planning and Development, Government of Jharkhand, 2014). Key social indicators of Deoghar are presented in **Table 1.3.1**. (Department of Planning and Development, Government of Jharkhand, 2014).

Deoghar has a total of 21 banks and 121 cooperative societies. There is a total of 224 branches of bank and cooperatives operating across the district. As of 2010, 4 MFIs and 4000 SHGs were working in the district. (NABARD, 2012)

1.5 RESEARCH MOTIVATIONS

The motivation for the research came after very closely observing the fact that microfinance is not only one of the potent tools for reducing poverty but also has the potential to make a positive change in the society in terms of empowerment of women and socio-economic upliftment of people residing below the poverty line.

Once the idea was formed, interactions with guides, peers, and teachers helped to freeze the idea so that the research could move to the next level. The studies was undertaken in the Jharkhand state mainly because Jharkhand though has a plethora of natural resources and minerals yet it battles with a high level of poverty. Wherein, 36.96 percent of people live

below poverty line, as per the latest BPL report 2011-12 of Jharkhand. The state has also a large number of disadvantaged castes and tribes. Many studies related to microfinance have targeted areas where microfinance activity and its growth have been robust like the southern and western part of India. On the other hand, in Jharkhand the performance and growth of microfinance have not been satisfactory as per the multiple reports published by the NABARD. Insights on the reasons of this unsatisfactory growth and the ensuing impacts on microfinance borrowers in Jharkhand could be valuable. Such insights could through light on how to improve microfinance services in Jharkhand and Deoghar in particular.

1.6 OBJECTIVES OF THE STUDY

Microfinance has grown 62% annually in terms of the number of clients served and 88% annually in terms of the gross loan portfolio, between 2005 and 2010 (M -Cril, 2011) making India the largest microfinance industry in the world. In this scenario where microfinance industry is booming and has been accepted worldwide as an important tool in alleviating poverty, the implementation of microfinance in Jharkhand, a state, which is having a significant infrastructure gap, poor social indicators and a high index of poverty proper can help in alleviating poverty.

Further Deoghar "comes under 'C' category, i.e., the most backward district for industrial activities." (Government of India). Also, Deoghar was named as a backward district and hence came under the Backward Regions Grant Fund Programme (BRGF) of the Government of India. (Ministry of Panchayati Raj, 2009). A reality check of the impact of this programme on the upliftment of the socio-economic factors namely Income, Income distribution, Savings, Expenditures, Employment, Literacy, and Migration will be of vital importance.

This research consists of four distinct yet connected studies. The prime objective of the present study is to gauge the impact of microfinance on the social, economic and capability well- being of the respondents and their satisfaction level. The detailed objectives are, however, delt in the *chapter 4* of the present study. By achieving these objectives, the study intends to attain a nuisance understanding of the various socio-economic dimensions of microfinance impact.

1.7 RESEARCH GAPS

Apart from the paucity or lack of significant studies in the field of microfinance in the Deoghar District of Jharkhand where the performance of the microfinance has been minimal as per the NABARD annual reports (NABARD 14-15) other research gaps identified are:

TABLE: 1.7.1 Research Gaps Identified

SL NO	STUDIES	RESEARCH GAPS IDENTIFIED
1	*Studies on Social well being*: Women empowerment (Arora and Meenu 2011; Chowdhury and Chowdhury 2011; Selome and Tshuma 2014,Sashi Rajagopalan 2005) *Studies on economic wellbeing*: Financial performance (Ngo *et al.* 2014; Kar and Swain 2014), Poverty alleviation, outreach (Hudak 2012; Abate *et al.*, 2014) *Studies on Capability Wellbeing*: Girabi and Mwakaje (2013)	Sparse studies conducted in India combining social economic and capability wellbeing factors together in one study to assess the impact of microfinance on the borrowers. (eg.Rajendran and Raya (2010))
2	Recent studies in the field of microfinance have shown that microfinance impact may be dependent on the geographical distance between the household and the financial institution (Alimukhamedova N, Filer R, Hanousek J.,2015)	Adaptability of such microfinance impact factor i.e. microfinance impact dependence on the geographical distance between the household and the financial institution was lacking.

3.	In the last few years, there have been some attempts to apply the findings from literature to study microfinance as a service aiming at maximizing the satisfaction of SHG-BLP customers. (Jose & Buchanan, 2013) (Bihari, Roy, & Bhattacharya, 2006) (Radhika & Anupriya, 2011)	Various Studies on satisfaction of financial and marketing services, however few studies on satisfaction level of microfinance borrowers wherein microfinance is considered as a service.
4.	The need to study the relationship between migration and microfinance has been highlighted (Bylander & Hamilton, 2015)	However, not many studies in the Indian context (especially Jharkhand) have focused on the relationship between migration and microfinance

.

1.8 RESEARCH APPROACH AND METHODOLOGY

The study uses the mix method approach, offering a combination of qualitative and quantitative research questions. The Mixed method approach studies allow for the inclusion of both qualitative and quantitative methods of data collection and analysis to achieve a range of outcomes as discussed by Creswell (Creswell, 2005); and Greene et al. (Greene, Caracelli, & Graham, 1989).

Using inductive derivation *Study 1* uncovers key dimensions like distance from city centre, the scope of future migration, etc. Combining the variables identified in Study 1 with other deductively isolated impact variables like saving, income, social status, migration, and education. *Study 2 & 3* focuses on measuring and analyzing the various impacts on microfinance borrowers in Deoghar District, Jharkhand. While the *study 4* gauges the satisfaction level of the borrowers.

The basis of selection of mixed methods approach was done upon the analysis of the overall purpose of the study and the research questions identified.

The mixed method approach was deemed necessary as any one methodological approach does not provide a holistic view of the microfinance impact in Deoghar district. Both

qualitative (semi-structured interviews, case studies) and quantitative techniques (OLS regression, ANOVA with post hoc analysis, t-tests) were used.

1.8.1 Statement of the Problem

Micro-credit, as many studies suggest, has emerged as a financial strategy to reach the urban, semi-urban and the rural poor. But whether micro-credit schemes routed through self-help groups have proved to be a great success in Deoghar District of Jharkhand too, as claimed elsewhere, is a matter worth probing. The evaluation of the impact of SHGs on the beneficiary members' has assumed crucial importance. In other words, whether micro-credits dispensed through self-help groups in Deoghar district has helped the recipients in raising their level of living through the pursuit of profitable micro ventures, is a problem that merits detailed study. The present study is undertaken essentially to assess this impact.

1.8.2 Scope of the Study

The study undertakes an in-depth analysis of microfinance loan borrowers in the eastern Indian state of Jharkhand. A relatively backward district of Deoghar was selected to better access the impact of microfinance on the social, economic and capability well- being of the borrowers. The study involved only the women respondents, as microfinance schemes are largely focused on women members of the society. In an attempt to build a nuanced understanding of the impact, various impact and grouping variables are utilized. The impact variables are income, family support, social status, migration, training/skill, education, and saving while the grouping variables are age of the borrowers, caste, distance from the district headquarter, loan cycle, and education level.

1.9 RELEVANCE OF THE STUDY

The present study holds importance as there had been very few studies in the Eastern region of India in the field of microfinance. Jharkhand is one of those eastern region states of India where according to the planning commission report of 2011-12 about 36.96% of the people live below the poverty line as compared to the all India average of 21.92% (Planning Commission., 2011-12). The Success of such poverty alleviating programmes like microfinance is much required in Jharkhand as microfinance through various previous research studies carried out worldwide has established itself as a potent tool for poverty alleviation.

Jharkhand demographically comprises of a significant population of SC and ST which has been historically marginalized. The upliftment of such section is an imperative for the society, policy maker, and government.

Deoghar "comes under 'C' category, i.e., the most backward district for industrial activities" and it receives the Backward Regions Grant Fund (BRGF) from the Government of India. (Ministry of Panchayati Raj, 2009)

1.10 LIMITATIONS OF THE STUDY:

This thesis and its inter-related four studies have some limitations. They are:

- *Firstly*, the thesis focuses on the microfinance borrower/ respondents only in the Deoghar district of Jharkhand, India. The choice of Deoghar district as the focus area was made due to a variety of reasons mentioned earlier. However, due to the focus on only one district, generalization across other districts/states is limited.
- *Secondly*, in-depth interviews and surveys were used to collect the data. These instruments were applied to respondents, some of whom were illiterate. Even though

necessary precautions were taken, it is possible that few interviewees' responses were not properly captured due to potential communication issues.

- *Finally*, this thesis focuses only on social, economic and capability well beings for evaluating the impact of microfinance. Other dimensions like environmental and psychological dimensions have not been considered.

CHAPTER 2

BACKGROUND

CHAPTER 2: BACKGROUND

2.1 OVERVIEW

In the previous chapter a brief introduction to the research study was given by discussing the research motivation, objectives, research approach, methodology, relevance, and limitations of the study. This chapter discusses the important terms and concepts used throughout the thesis. The terms discussed here are financial exclusion, financial inclusion, below poverty line, microfinance, Non-Governmental Organizations, Self Help Group (SHG) and Joint Liability Group (JLG).

2.2 FINANCIAL EXCLUSION

The lack of access to suitable low-cost, fair and safe financial products and services to a certain section of society from mainstream providers is called financial exclusion (Chibba, 2011). Thus the financial inclusion ensures that a range of appropriate financial services is available to every individual and further enable the excluded individuals to understand and access those services.

Who are excluded: Marginal farmers, landless labor, oral lessees, self-employed, unorganized sector, urban slum dwellers, migrants, ethnic minorities, socially excluded groups, senior citizens, women, eastern & central regions are the most excluded ones (Alpana, 2007).

Reasons for Exclusion**:** Following are some of the reasons for financial exclusion.

- Sparsely populated areas with poor infrastructure and difficult physical access especially remote, hilly areas

- Illiteracy, lack of awareness, low income, social exclusion.

- The attitude of the bank staff, distance from bank branch, branch timings, cumbersome documentation/procedures, unsuitable products, language are common reasons

- Higher transaction cost is the other reason

- Availability of informal credit easily.

- KYC – documentary proof of identity address. (Amaeshi, 2006)

2.3 FINANCIAL INCLUSION:

It's the cooperative movement which took place in India in the year 1904 which led to the start of financial inclusion concept. It gained momentum in 1969 when 14 major commercial banks of the country were nationalized, and the lead bank scheme was introduced shortly after that. Branches were opened in large numbers across the country and even in the areas which were till now being neglected. Even after all these measures, a sizable portion of the population of the country could not be brought under the fold of the banking system.

The United Nations defined the goals of financial inclusion as:

- Access for all households to a full range of financial services, including savings or deposit services, payment and transfer services, credit and insurance a reasonable cost;

- Sound and safe institutions governed by clear regulation and industry performance standards;

- To ensure continuity and certainty of investment so that there is financial and institutional sustainability; and

- Competition to ensure choice and affordability for clients. (C. Rangarajan, 2008)

Recent RBI Initiatives for financial inclusions:

In India, RBI has initiated several measures to achieve greater financial inclusion, such as facilitating no-frills accounts and GCCs for small deposits and credit. Some of these steps are:

- o *Opening of no –frills accounts*: Basic banking, no frills accounts with nil or deficient minimum balance as well as charges that make such accounts accessible to vast sections of the population. Banks has been advised to provide small overdrafts in such accounts.

- o *Relaxation on know –your customer(KYC) norms:* KYC requirements for opening bank accounts were relaxed for small accounts in August 2005, thereby simplifying procedures by stipulating that introduction by an account holder who is subjected to the full KYC drill would suffice for opening such accounts. The banks were also permitted to take any evidence as to the identity and address of the customer to their satisfaction. It has now been further relaxed to include the letters issued by the Unique Identification Authority of India containing details of name, address, and Adhar number.

- o *Engaging Business Correspondents (BCs):* In January 2006, RBI permitted banks to engage business facilitators (BFs) and BCs as intermediaries for providing financial and banking services. The BC model allows banks to provide doorstep delivery of services, especially cash-in, cash –out transactions, thus addressing the last mile problem. The list of eligible individuals and entities that can be engaged as BC is being widened from time to time. With effect from Sept 2010, for profit companies have also been allowed to be engaged as BCs.

- o *Use of Technology:* Recognizing that technology has the potential to address the issues of outreach and credit delivery in rural and remote areas in a viable manner,

banks have been advised to make efficient use of information and communication technology (ICT), to provide doorstep banking services through the BC model where the accounts can be operated by even illiterate customers by using biometrics, thus ensuring the security of transactions and enhancing confidence in the banking system.

o *Simplified branch authorization:* To address the issue of the uneven spread of bank branches, in Dec 2009, domestic scheduled commercial banks were permitted to freely open branches in tier III to tier VI centres with a population of less than 50000 under general permission, subject to reporting. In the northeastern states and Sikkim, domestic scheduled commercial banks can now open branches in rural, semi-urban and urban centres without the need to take permission from RBI in each case, subject to reporting.

o *Opening of Branches in unbanked rural centres:* To further step up the opening of branches in rural areas to improve banking penetration and financial inclusion rapidly, the need for the opening of more bricks and mortar branches, besides the use of BCs was felt. Accordingly, banks have been mandated in the April monetary policy statement to allocate at least 25% of the total number of branches that will be opened during a year to unbanked rural centres.

o *Road Map for providing banking services in unbanked villages with a population of more than 2000.*

o *Pradhan Mantri Jan- Dhan Yojona(PMJDY):* Financial Inclusion program (Pradhan Mantri Jan- Dhan Yojona,) was Prime Minister's first financial inclusion drive aimed at improving lives of millions of India's poor by bringing them into the main financial stream and freeing them from the clutches of usurious money lenders. (Reserve Bank of India, 2016)

2.4 BELOW POVERTY LINE

Although India has a sizable consumer economy and is one of the fastest growing countries in the world still it battles with poverty. India had a growth rate of 7.6% in 2015. Still, poverty in India is an important issue. According to United Nation's Millennium Development Goal (MDG) programme, 270 million or 21.9% people out of 1.2 billion of Indians lived below poverty line of $1.25 in 2011-2012 (United Nations, 2016).

As per the Deutsche bank research, nearly 300 million people in India belong to the Middle Class. (Saxena, 2010) If current trends continue, India's share of world Gross Domestic Product (GDP) will significantly increase from 7.3% in 2016 to 8.5% by 2020. (INTERNATIONAL MONETARY FUND, 2017). In 2011, less than 22 percent of Indians lived under the global poverty line, nearly a 10 percent reduction from 29.8 percent just two years prior to 2009. (THE WORLD BANK, n.d.)

The definition and the benchmark to measure poverty even by the world bank has kept on being revised since 1990.From the year 2005-2013, $2 per day income in purchasing power parity was the basis for the definition in use. (Ravallion, Chen, & Sangraula, 2008).

The different underlying small sample surveys and different definitions used to determine poverty in India have resulted in widely different estimates of poverty from the 1950s to 2010s. In 2011, the Indian government stated 22% of its population is below its official poverty limit. (RBI). The World Bank, in 2011 based on 2005's PPPs International Comparison Program, estimated 23.6% of Indian population, or about 276 million people, and lives below $1.25 per day in purchasing power parity.

The government's official definition of poverty is the ability to acquire between 2,100 (urban) to 2,400 (rural) calories a day (Haub & Sharma). The poverty rate excludes dwelling,

clothing, and medicine, considered essentials for life. Therefore, the Indian poverty data do not allow for a comparison with other nations.

Few other prominent definitions of poverty:

A state of deprivation and a social phenomenon where a section of the society could not even meet the minimum requirement of living is how Singhal and Gill defined poverty (Singhal & Gill, 1991). It is a situation that gives rise to a feeling of a discrepancy between what one has and what one 'should have.' What one should have is an internal construct; hence each person's feeling and experience of poverty is individual and unique, but the feeling of 'powerlessness' and 'resourcelessness' is possessed by all poor people (Qureshi, 2004)

Rein identified three elements in poverty: subsistence, inequality, and externality (Rein, 1968), while, Madan emphasized on the minimum level of living rather than a reasonable standard of living (Madan, 1990).

Official estimates of poverty in India have hitherto made by the Planning Commission by the methodology that was recommended by the Lakdawala Committee (1993). The poverty lines and the corresponding poverty ratios that had emerged from this methodology for 1993-94 and 2004- 05 These estimates had shown a decline in the percentage of the population below poverty line from about 36% in 1993-94 to 27.5% in 2004-05.

The literature on poverty in India is vast, and many of the contributions or references to the contributions are found in Srinivasan and Bardhan (1974, 1988), Fields (1980), Tendulkar (1998), Deaton and Dr`eze (2002), Bhalla (2002), and Deaton and Kozel (2005). Panagariya (2008) provides a comprehensive treatment of the subject until the mid-2000s including the debates on whether or not poverty had declined in the post-reform era and whether or not reforms had been behind the acceleration in growth rates and the decline in poverty.

Monthly Per Capita Consumption Expenditure (MPCE): Many academicians and practitioners have suggested the use of expense data for measuring poverty levels due to its reliability. Following, the expense approach, Tendulkar committee calculates the level of poverty "As per Tendulkar Methodology, the poverty line has been expressed regarding MPCE based on Mixed Reference Period" (Government of India, Planning Commission, 2013, p. 2) Monthly Per Capita Consumption Expenditure or MPCE is calculated by converting household level expense data to a per capita value. There are three main methods of calculating MPCE based on uniform reference period (URP), Mixed Reference Period (MRP) and Modified Mixed Reference Period (MMRP).

According to the National Sample Survey Office, Government of India, (National Sample Survey Office, Ministry of Statistics, Government of India, 2011) the Mixed Reference Period (MRP) "…is the measure of MPCE obtained…when household consumer expenditure on items of clothing and bedding, footwear, education, institutional medical care, and durable goods is recorded for a reference period of "last 365 days", and expenditure on all other items is recorded with a reference period of "last30 days". (National Sample Survey Office, Ministry of Statistics, Government of India, 2011, p. 3)

2.5 MICROFINANCE

Microfinance in simple terms means providing financial assistance, in the form of a loan, insurance, saving, fund transfer, training to the small entrepreneurs and small businesses lacking access to banking and related services (Barua & Sane, 2014). Such services are delivered to the clients mainly through two principal mechanisms:

(1) Relationship-Based banking for individual entrepreneurs and small businesses; and

(2) Group-based models, where several entrepreneurs come together to apply for loans and other services as a group. (Barua & Sane, 2014)

Many of those who promote microfinance believe that such access will help poor people to get out of poverty. For others, microfinance is a way to promote economic development, employment and growth through the support of micro-entrepreneurs and small businesses. However, many studies in the past have shown that the microfinance plays a major role in financial inclusion irrespective of the geographical locations.

Microfinance methodologies are classified into five groups*:*

- o *Grameen and Solidarity Model:* A groups of three to eight persons is formed on the condition that each of them would be assuming, responsibility for the lending and other financial operations for the other members of the group. Grameen Banks in Bangladesh are based on it.

- o *The Group Approach:* The entire financial process is delegated to the group rather than the financial institutions. Savings, loans, loan repayments are taken care of at the group level. Self-help Groups-Bank linkage programme in India, the PHBX project in Indonesia and the Chikola groups of K-REP in Kenya, are based on it.

- o *Individual Credit:* The Credit given directly to the individuals also forms a part of the microfinance technology. BRI Unit Deasa in Indonesia, as well as priority sector lending by the regional rural banks and cooperative banks in India, are some of the examples.

- o *Community Banking***:** This model is an expansion of the group approach to some extent where the core financial necessities of the poor especially the women are met through the community banking system. The community or village banks are

organized with 30-50 members. A Prominent example of this type of microfinance institution is the Village Bank of FINCA in Latin America

o *Credit Unions and Cooperatives:* Credit unions and cooperatives are member-owned organizations providing credit and other financial services to their members. (e.g., SANASA of Sri Lanka). (Prasad, 2006) (Ray, 2004)

Microfinance in India: Key Operational points

In India, microfinance is understood but not defined. For instance, if an SHG gives a loan for an economic activity, it is seen as microfinance. However, if a commercial bank gives a similar loan, it is unlikely that it will be treated as microfinance. In the Indian context, there are some value attributes of microfinance. They are as follows:

1. Microfinance is an activity undertaken by the alternate sector (NGOs). Therefore, a loan given by a market intermediary to a small borrower is not considered as microfinance. However, when an NGO gives a similar loan it is treated as microfinance.

2. Second, microfinance is something done predominantly with the poor. Banks usually do not qualify to be MFOs (Microfinance Organizations) because they do not predominantly cater to the poor. However, there is ambivalence about the (RRBs).

3. Third, microfinance grows out of developmental roots. It can be termed as the "alternative commercial sector." MFOs classified under this head are promoted by the alternative sector and target the poor. However, these MFOs need not necessarily be developmental in incorporation. Some MFOs are offshoots of NGOs and runs commercially.

4. Last, the Reserve Bank of India (RBI) has defined microfinance by specifying criteria for exempting MFOs from its registration guidelines. (Ministry of Rural Development, Government of India, 2016)

2.6 NON GOVERNMENTAL ORGANIZATIONS (NGO'S)

The term, "non-governmental organization" or NGO, which came into use in 1945 are the non-profit making agencies. They are constituted by a group of like-minded people with a vision, committed for the uplift of the poor, marginalized, unprivileged, underprivileged, impoverished, downtrodden, and the needy and they are closer and accessible to the target groups. Initially, NGOs were familiar with Voluntary Organizations (VOs). Gandhiji established his first VO at South Africa. The activity of that organization was to address the problems of Indians migrated to South Africa. Ramakrishna Mission was established during 1900. Though it is a religious organization, it has been working for rural reconstruction since its inception. After returning to India, Gandhiji established different Ashrams (informal organization) for development of self-sustaining of the villages. Sabarmati and sevagram Ashrams are famous.

However, things have been changing since 1970s. Poverty and Unemployment have been increasing at a rapid pace. This situation became more complex due to rapid price rise of daily consumables. Government machinery has failed to deliver the services in the rural area timely. Agriculture production has been declining. There is a skewed development among the states. The percentage of plan expenditure went to the grass root level is around 4-5. This situation enhances the activity of NGOs. Different NGOs have grown up in different parts of the country. The JP movement had accelerated this activity during the early Seventies.

During the period of Rajiv Gandhi, VOs converted into NGOs (Non-Governmental Organizations). NGOs become more professional than VOs. They took a lead role in the Development sector. Following table shows changing the pattern of activity of VOs periodically:

TABLE 2.6.1: Changing Pattern of activity of VOs Periodically

Period	Activities
Pre Independence	Social welfare, Constructive work (inspired by Gandhian philosophy) very much in line with independence movement
1950-1970	Social welfare, Govt. funded and managed NGO like Khadi Industries. India's five year's development plans came into existence, Most of the development works were vested with NGO's
1970-1990	Civil Society space started increasing from 70s; NGO's started highlighting that why government programme are not yielding positive results for poor and marginalized presented new model for development with people's participation. With this new paradigm NGO's covered vast program areas like education, primary health care, drinking water, sanitation, small irrigation, forest regeneration, tribal development, women's development, child labour, pollution safety, etc. later on many of these models were included in government programmes and policies.
1990-2005	GO-NGO partnership got a boost in this period; NGO focus is more on Self Help Groups, Micro Credit, and Livelihood. NGO participation is ensured in policy formation and programme implementation

Source: Discussion with Chinese Delegates at PRIA, 2007

2.7 SELF HELP GROUPS (SHG) IN INDIA:

Self Help Groups (SHGs) are defined by the Indian Government as "… Affinity-Based homogenous groups of 10-20 members (usually women). They follow five cardinal principles or Panchsutra (regular meetings, regular savings, internal lending, regular repayment, and bookkeeping). The SHGs are federated at the village (Village Organisation), sub-block and higher levels. They are supported to become independent and community-managed institutions over time." (Ministry of Rural Development, Government of India, 2016)

"The SHG movement in India took shape in the 1980s as several NGOs experimented with social mobilization and organization of the rural poor into groups for self-help." (Tankha, 2012, p. 1) NABARD started the Indian SHG-BLP programme in 1992 by piloting the first SHG group in Udaipur, Rajasthan. (Tankha, 2012) The term loans offered were collateral free and initially, open only to commercial banks having stable balance sheets and not the Regional Rural Banks (RRBs). The Indian Self Help Group (SHG) is the largest microfinance programme in the world. (NABARD, 2015) . 86% of the Self Help Groups are made up exclusively by women, and hence schemes run via the SHG eco-system have significant impact on women empowerment. (NABARD, 2015)

Self Help Groups are promoted, administered and monitored by various Governmental agencies. The umbrella governmental policies providing the mandate for SHGs have changed over time. At present, SHG fall under the ambit of the National Rural Livelihoods Mission-Aajeevika (NRLM) (for rural poor) and National Urban Livelihoods Mission (NULM) (for urban poor).

NRLM was launched by the Ministry of Rural Development (MoRD), Government of India, in June 2011, replacing the earlier Swarna Jayanti Gram Swarozgar Yojana (SGSY) scheme. "NRLM has the mandate of reaching out to 100 million rural poor in 6 lakh villages across

the country." (Ministry of Rural Development, Government of India, 2016) As per the Indian government, NRLM improves upon the Swarna Jayanti Swarozgar Yojana (SGSY) by adopting a "demand- driven" strategy as compared to the previous "allocation based" strategy of SGSY.

On the other hand, NULM replaced the erstwhile Swarna Jayanti Shahari Rozgar Yojana (SJSRY) in 2013. (Press Information Bureau, Government of India, 2013) (Urban Development and Housing Department, Government of Jharkhand) NULM aims at providing the financial, educational and institutional support for the development of the urban poor. In the 12th Five Year Plan, NULM has been planned to be implemented in all district headquarters and other towns with a population of 1 Lakh or more as per the 2011 census. The funding of the scheme is shared between the central (75%) and state governments. (25%) (Urban Development and Housing Department, Government of Jharkhand).

Another key aspect of the umbrella programmes of the Indian Government is the identification of beneficiaries of the various programmes run under SHGs. The main aim of Financial Inclusion and Microfinance programmes are to assist in the eradication of poverty. However, due to the lack of a reliable, implementable and acceptable definition of the poverty line, SHG schemes are not limited to Below poverty line (BPL) households. Instead, in the rural setting, the beneficiaries are identified at the community level by the process of "Participatory Identification of Poor (PIP)" Community-based Organizations identify the poor in the village using participatory tools under the aegis of the Gram Sabha. (Village level governing council) (Ministry of Rural Development, Government of India, 2016) In urban areas, "Community Organizers (COs) and professionals from Urban Local Body (ULB) will identify the prospective beneficiaries from among the urban poor." (Reserve Bank of India, 2015).

SHG Bank linkage model

In the year 1992 SHG (Self Help Group) bank linkage programme was started as a pilot project by NABARD with 500 SHGs of rural poor. It has now transformed into the world's largest microfinance initiative with over 7.4 million SHGs representing 97 million rural households becoming part of the movement. (RESERVE BANK OF INDIA).

As per the various reports of NABARD, SHG Bank linkage has been the predominant form of lending to women as 88 percent of SHGs members are female SHGs as on March 31, 2016. The scale of the programme is enormous given savings of women SHGs in banks stand at over 120 billion as on March 31, 2016, and bank loan outstanding against women SHGs is over `514 billion as on March 31, 2016. The emphasis of the SHGF program is now to shift towards livelihood opportunities to SHG members apart from the expanding outreach across the country (NABARD, 2015-2016)for the various banking, insurance, and nonbanking entities involved and delivery of the full range of affordable and quality financial services. The government's DBT payments will flow into these accounts. Also, BC (Banking Correspondence) agents − in a village or urban MOHALLA −will also offer other financial products like insurance and remittances.

TABLE 2.7.1: Self Help Group Bank Linkage Programme in India

- o   (Amount in Rupees Crores)

Year (end March)	No. of SHGs	Growth %	Cumulative no. of SHGs linked	Bank Loan	Growth %	Cumulative Bank Loan
1992-93	255		255	0.29		0.29
1993-94	365	43.1	620	0.36	24.1	0.65
1994-95	1502	311.5	2122	1.79	397.0	2.44
1995-96	2635	75.4	4757	3.62	102.0	6.06
1996-97	3841	45.8	8598	5.78	60.0	11.84
1997-98	5719	48.9	14317	11.92	106.0	23.76
1998-99	18678	226.6	32995	33.31	140.0	57.07

2000-01	149050	82.0	263825	287.89	112.0	480.87
2001-02	197653	33.0	461478	545.47	89.0	1026.34
2002-03	255882	29.0	717360	1022.34	87.0	2048.67
2003-04	361731	41.0	1089091	1855.53	81.0	3904.20
2004-05	539365	49.0	1618456	2994.25	62.0	6898.46
2005-06	620109	15.0	2238565	4499.09	50.0	11397.55
2006-07	684408	10.4	2924973	6643.19	47.7	18040.74
2007-08	2084821	204.5	5009794	8849.26	33.2	26890.00
2008-09	1111353	-46.7	6121147	12253.51	38.5	39143.51
2009-10	832103	25.1	6953250	14453.30	18.0	53596.81

- Source : NABARD

Figure 2.7.1: Progress of SHG-BLP during past three years

PROGRESS OF SHG-**BLP** DURING PAST THREE YEARS

(No. of SHGs in Lakh, Amount in ₹'000 crore)

Legend: 2014-15, 2015-16, 2016-17

	No. of SHGs with savings Linkage	Amount of savings outstanding	No. of SHGs disbursed with loan	Amount of loan disbursed	No. of SHGs with loan outstanding	Amount of loan outstanding
2014-15	76.97	11.06	16.26	27.58	44.68	51.55
2015-16	79.03	13.69	18.32	37.29	46.73	57.12
2016-17	85.77	16.11	18.98	38.78	48.48	61.58
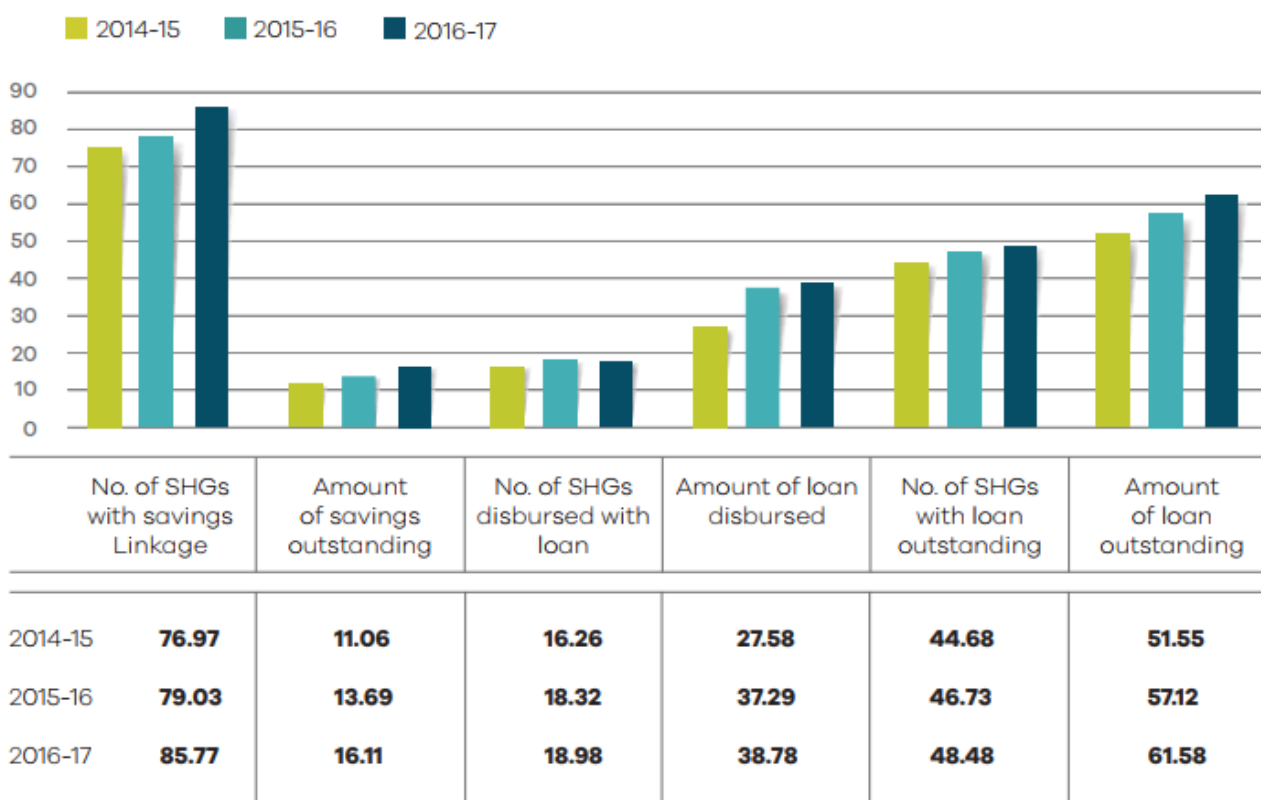
Source: NABARD, 2017

Three broad models of SHG bank linkage have emerged over the past few years in India and are as follows:

Model-I: Bank – SHG-Member: In this type of model, banks play an important role by forming and promoting SHGs. The bank opens the account of the members of the SHGs. After satisfying about the functions, bank provides credit to SHGs.

Model-II: Bank (Facilitating Agency) – SHG – Members: This is the most common form of SHG bank linkage, almost 70 percent of the SHGs are linked under this model wherein the NGOs, Government Agencies or Community based organizations act as facilitating agencies to form SHGs. Bank observes the operations of the SHGs and after satisfying their functions helps them to open savings accounts and provides credit directly to the SHGs. The State Government agencies like DRDA and DWDA play an active role in the linkage of this model. Cooperatives have a greater role to play and should take laudable efforts in linkage exercises.

Model-III: Bank-NGO-MFI-SHG-Members: This model is different from other two models. Under this model, SHGs are nurtured, promoted and even financed by NGOs. NGOs act as facilitator and microfinance intermediaries (MFIs). After some time, when the SHGs have fully developed, and stabilized banks are approached by the NGOs for loans for on lending to SHGs. A Significant development in this model is that NGOs have also been found to federate the SHGs and gradually equip the SHG federations to take on this role. (Misra 2006).

EShakti or Digitization of SHGs

For creating a digital India, an initiative in the field of microfinance known as EShakti or Digitization of SHGs has been undertaken. It is an initiative of micro credit and innovations

department of **NABARD** in sync with the Government of India's mission. NABARD has launched a project for digitization of all Self Help Group (SHG) in the country. (NABARD, 2015-16)

Ramgarh (Jharkhand) and Dhule (Maharashtra) are the two districts in the country where the pilot project of digitization has started. These districts were covered in phase I on the digitization of SHGs in 2015. NABARD is moving to expand project Eshakti for digitization of SHGs under Phase II to another 22 districts across different geographies of the country. About 2.3 lakh SHGs touching the lives of around 35 lakh SHG members mostly impoverished rural women will be covered in this Phase. (NABARD, 2015-16)

Early impact of Phase I of pilot on digitization of SHGs

Table 2.7.2: Digitization Details of Ramgarh District (Jharkhand*)*

No of SHGs credit linked before digitization	340
No of SHGs credit linked after digitization	1006

Source: (NABARD, 2015-16)

Table 2.7.3: Digitization Details of Dhule District (Maharashtra)

No of SHGs credit linked before digitization	1424
No of SHGs credit linked after digitization	2254

Source: (NABARD, 2015-16)

The data above reflect there has been substantial increase in the credit linkage of SHG's after digitization. The Output and MIS include Member wise details of SHGs on saving, lending, attendance, financial statement of SHGs, balance sheet and profit and loss account, grading chart of SHG, audit report, bank linkage details, savings and credit disbursement and other periodicals MIS on the performance of SHGs.

Some of the benefits of digitization of SHGs are:

Access to wider range of financial services by main-streaming of SHG members with financial inclusion, Ease in credit appraisal and linkage of SHGs after digitization of SHG accounts, automatic and accurate rating of SHGs which will be made available online for banks, mapping of persons not covered under Aadhaar platform and bringing them under Aadhaar fold, Ease of transfer of social benefits and Direct Benefit Transfer (DBT) through Aadhaar linked accounts and convergence with other Government benefits ,identifying suitable interventions and support for proper nurturing and strengthening of SHGs etc. (NABARD).

2.8 JOINT LIABILITY GROUP (JLG) IN INDIA:

The JLG model was the innovation of Prof. Muhammad Yunus. This model stemmed from the Grameen Bank of Bangladesh (Hussain, 1998). In India, both Self Help Groups (SHGs), as well as Joint Liability Groups (JLGs), are based on the concept of peer-pressure and joint liability. However, JLGs are promoted and linked to banks or MFIs to take care of higher quantum of loans. In some cases matured SHG members are encouraged to form JLG groups with different contract rules than SHGs. (NABARD, 2017). The JLG groups are broadly developed, organized and nurtured by an intermediary. It is an informal group of 4-10 members. However, most of the JLGs in India have five members (Panda, 2009).

JLGs do not have compulsory savings before availing credits. The main motto of JLGs is to access credits along with other financial products like insurances etc. Like SHGs, the JLGs also work on moral collateral to avail financial products. Since the peer pressure develops collective responsibility and social capital among the members, it reduces the possibility of willful defaults (Panda, 2009).

Number of JLGs organized by the Indian state machinery as well as the loans disbursed in the last three years is presented below.

FIGURE 2.8.1: Number of JLG Organized in the last three years in India

No. OF JLGs ORGANISED

■ March 2015   ■ March 2016   ■ March 2017

Region	March 2015	March 2016	March 2017
NORTHERN REGION	77198	112529	162931
NORTH EASTERN REGION	48732	64647	88800
EASTERN REGION	301809	466408	700427
CENTRAL REGION	199282	287923	397057
WESTERN REGION	126334	215465	303577
SOUTHERN REGION	375505	604750	800553
TOTAL	1128860	1751722	2453345

No. OF JLGs PROMOTED
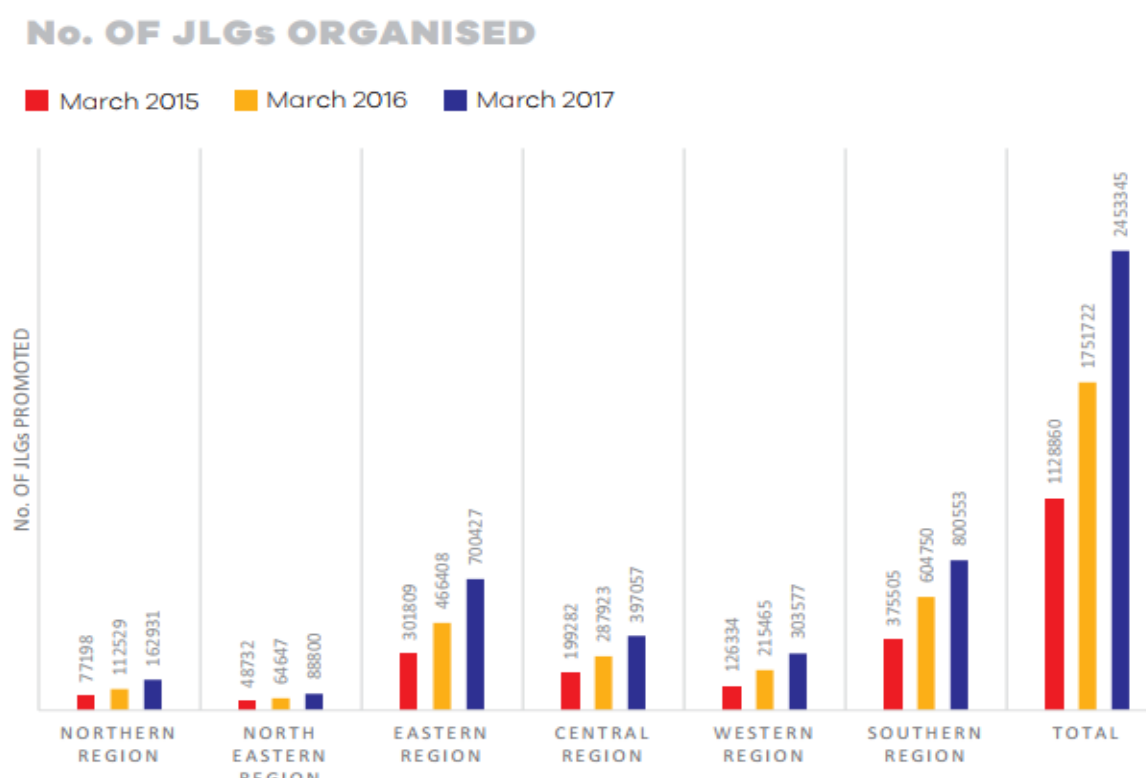
Source: NABARD Annual Report 2016-17

FIGURE 2.8.2: Loans disbursed in the last three years in India: JLG

JLG - LOAN DISBURSED

	Northern region	Nort Eastern region	Eastern region	Central region	Western region	Southern region	Total
2014-15	436.09	126.03	1104.11	650.12	663.37	1434.69	4414.41
2015-16	211.53	254.27	1475.08	785.18	782.78	2651.88	6160.72
2016-17	718.26	383.14	2519.24	1353.81	1191.29	3345.43	9511.17
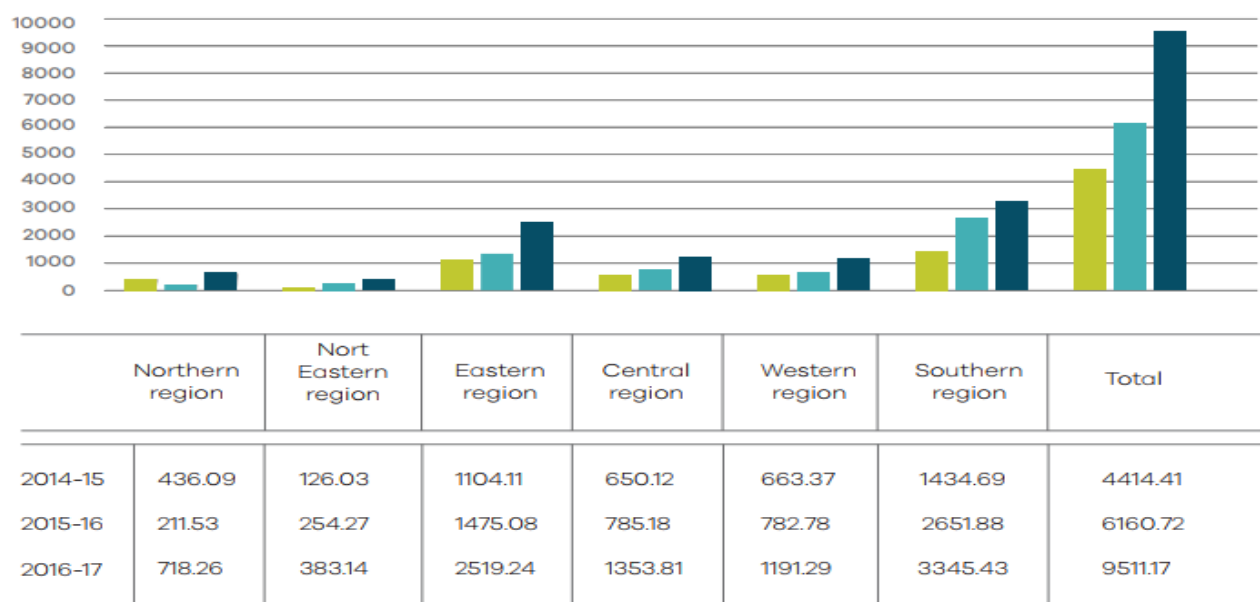
Source: NABARD Annual Report 2016-17

CHAPTER 3

LITERATURE REVIEW

CHAPTER 3: LITERATURE REVIEW

3.1 OVERVIEW

The literature on Self Help Group (SHG), Joint Liability Group (JLG) and microfinance are relatively one of the youngest. Although, the Credit unions and lending cooperatives have been around globally for hundreds of years. Neither microfinance nor microcredit was used, as terms, in the academic literature or by development aid practitioners before the 1980s or 1990s, respectively. The concept of providing financial services to low-income people is much older. Hence SHG and microfinance can be said as a recent movement, and it is the youngest field of research, but the origin may be traced back to approximately thirty years, so the literature available is fairly large. Since the volume of literature is large, the review is limited to the core issues to identify the major trends.

Here in this chapter, the existing literature on the important term is presented. It covers the existing relevant literature on SHG's, JLG'S, microfinance (positive, negative and mixed results, impact of microfinance).

3.2 LITERATURES ON MICROFINANCE

The microfinance revolution, particularly the success stories of institutions like Bangladesh's Grameen Bank (Yunus 2007), Bolivia's Banco Sol and Indonesia's Bank Rakyat attracted several economists to study microfinance in the latter half of the 1990s. Since then, innovation in microfinance has continued, and providers of financial services to the poor continue to evolve.

Microfinance means providing very low-income families with very small loans (micro-credit) to help them engage in productive activities /small businesses. Over time, microfinance has

come to include a broader range of services (credit, savings, insurance, etc.) as all stakeholders have come to realize that the poor and the very poor lack access to traditional formal financial institutions and require a variety of financial products customized to their requirements. United Nations' previous Secretary-General Kofi Annan emphatically stated that microfinance was "…in no way charity; rather, it offered the same rights and services to low-income households as everyone else and recognized that they were the solution, not the problem"(United Nations 2004).

The big question globally is whether microfinance is a potent tool for poverty reduction/alleviation and other related outcomes. Various aspects of microfinance impacts have been studied in the recent past. Some of the aspects that have received significant attention are: women empowerment, (for example, see Arora and Meenu 2011; Chowdhury and Chowdhury 2011; Selome and Tshuma 2014), financial performance (for example, see Ngo *et al.* 2014; Kar and Swain 2014), poverty alleviation, outreach (for example, see Hudak 2012; Abate *et al.*, 2014). Each of the impacts mentioned above has been studied both through the use of case studies as well as empirical tests.

Another aspect of microfinance that has received significant attention is the ethics and crises associated with MFIs (For ex. Schmidt 2010; Sama and Casselman 2013). Particularly, the case of SKS Microfinance has received significant academic attention with academics and practitioners questioning the sole focus of profitability displayed by some MFIs. (Mohan and Potnis 2010; Grunewald and Baron 2011).

A comprehensive definition given by Robinson applies to microfinance in all countries in the world. "Microfinance refers to small-scale financial services for both credit and deposits.It is provided to people who farm or fish or herd; operate small or micro-enterprises where goods are produced, recycled, repaired or traded; provide services, work for wages or commissions;

gain income from renting out small amounts of land, vehicles, draft animals, or machinery and tools; and to other individuals and local groups in developing countries, in both rural and urban areas."

NABARD has defined microfinance as: "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."

Based on the experiences gained during last three decades all over the world **Sharma (2007)** explains the principles of microfinance

1. Small savings or thrift by poor.

2. Poor people need small collateral free loans with regular frequency instead of large loans at a time.

3. Repayment matches with the family cash flow instead of individual cash flow.

4. Rate of interest is not crucial.

5. Timely, adequate and continued credit facility.

6. Relatively small repayment periods, e.g., weekly, monthly, instead of yearly installments and half yearly installments.

7. Credit plus is preferred to credit alone.

8. Women are better customers than men.

9. Group method of lending is more successful than individual lending.

Microfinance, by definition, as mentioned by **Sarkar** refers to the entire range of financial and non-financial services, including skill up gradation and entrepreneurial development, rendered to the poor for enabling them to overcome poverty.

The World Bank defines Microfinance as the "the provision of financial services to low-income clients, including the self-employed." (Ledgerwood 1)It applies to both rural and urban settings where low-income households might be devoid of access to the formal banking structure. The microfinance revolution, particularly the success stories of institutions like Bangladesh's Grameen Bank (Yunus), Bolivia's Banco Sol and Indonesia's Bank Rakyat attracted several economists to study microfinance in the latter half of the 1990s. Since then, innovation in microfinance has continued, and providers of financial services to the poor continue to evolve.

In the Indian setting, Microfinance has been defined as: "… an economic development tool whose objective is to assist the poor to work their way out of poverty. It covers a range of services which include, in addition to the provision of credit, many other services such as savings, insurance, money transfers, counseling, etc." (Reserve Bank of India)

Some other prominent studies in the field of microfinance are presented below:

Shetty and Veerashekharappa (2009) found in their study that SHG-bank linkage and MFI models are the two dominating microfinance approaches in the post-financial reforms in India.

Satyasai in the year **2003** studied the impact of microfinance on the living standards of the clients in Andhra Pradesh and Tamil Nadu (both the economic and the social aspects). He concluded that the microfinance has positive impact in respect of self-confidence, economic and social development and skill formation in Andhra Pradesh and social empowerment of

the members in Tamil Nadu. Similarly, the study conducted by **Tamizoli and MSSRF team** in 2004 to analyze the livelihood of *irula*, a tribal community in Pichavaram mangrove in Tamil Nadu has also highlighted the positive impact of microfinance on them. They concluded that the formation of Self Help Groups, microfinance, and microenterprises has helped the *irula* community to overcome indebtedness and they have even widened the women's livelihood options.

Goetz in the year **2001 s**tudied the extent of development of women after the implementation of the Rural Credit programmes in Bangladesh.The study concluded that the credit brought into the house by women, whether they manage or not, results in greater benefits to themselves, their children and husbands than it does by the credit in men's name. It also increased women's self-esteem and contributed to the formation of social and business networks outside the household.

Puhazhendi and Badyata(2002) studied the impact of Self Help Groups in Orissa, Chattisgarh, and *Jharkhand*. Moreover, deduced that the Self Help Group – Bank linkage programme with better access to credit brought increased income to the Self Help Group members and the incremental net income was the result of loans for productive purposes in farm, off-farm and non-farm activities. Easy and timely availability of credit enhanced different economic activities which increased employment in non-farm and off-farm employment.

The micro-credit interventions played an important role in reducing vulnerability through smooth consumption, building assets, providing emergency assistance and contributing to women empowerment were some of the positive findings of **Zubair** in the year 2004 in Bangladesh, who was studying the impact of micro-credit on poverty and vulnerability in *Matlab* division of Bangladesh.

Sashi Rajagopalan (2005) Studied micro-credit programme of Lokadrusti, an organization based in Naupada district of Orissa and the study concluded that women gained very significantly in terms of mobility, self-confidence, access to financial services, the building of own savings, competence in public affairs and improved status at home and the community.

Kabeer and Noponen (2005) researched on social and economic impacts of PRADAN's Self Help Group microfinance and livelihoods Promotion Programme: Analysis from *Jharkhand,* India. They founded that the SHG beneficiaries had more nutritious food, and enjoyed a favorable food situation. They had more of livestock, diversified cropping, high-value crops, higher savings and reduced indebtedness.

Sharma (2007) concluded from his study that microfinance through Self Help Groups is contributing to poverty reduction in a sustainable manner and significant changes have taken place in the standards of living of rural women in terms of increase in income level, assets, savings, borrowing capacity and income generating activities.

Ghosal (2009) while analyzing the global financial crisis informed that microfinance is not affected by the crisis because they have been able to maintain an enviable repayment record and also generate sustainable business for the poor and neglected section of the society.

Microfinance in India recently has been in limelight for wrong reasons mainly because of the advent of profit-making attitude out of this novel cause of microfinance lending by many organizations.

Rajendran and Raya (2010) in their study on the impact of microfinance on the empowerment in psychological, economic and social aspects and managerial skills of leaders of SHGs and their attitude in Vellore concluded that:

- Microfinance brought psychological and social empowerment than economic empowerment (Rajendran & Raya, 2010)

- Age and education is not having any influence on empowerment as well as on managerial skill development among rural women.

- Impact of micro finance is appreciable in bringing confidence, courage, skill development and empowerment but there is no positive impact in sustainable rural development especially reduction of poverty creation of employment opportunities and creation of assets in rural areas.

- There is appreciable development in planning, coordination, decision making and financial skills among the leader respondents. However, the effect of micro finance on communication, organizing, competency and technical, marketing skills and entrepreneurial skills is moderate only.

Goetz and Gupta (**1996)** while evaluating the micro-credit in relation to women's empowerment concluded that 37 percent (out of 253 respondents) of the women had full or significant control of loan use, 17 percent had very limited control and 21.7 percent had no control while **Akhter** (2006) criticized the micro-credit as a capitalist programme since it is based on high interest rate and strict regularity of payment schedule, but it is called as a poverty alleviation programmes.

Anand and Jaya (2007) studied the impact of micro-credit programme on physical assets and amenities in Kerala and found that 28 percent of the members acquired livestock and 12 percent respondents renovated or constructed their houses. However, there is an improvement in knowledge level and social interaction among members after joining the groups. About 91 percent of members learned about the banking system and were confident in dealing with bankers which they could not have dreamt earlier. They also found that the returns from

micro-enterprises are hardly sufficient to meet daily expenses of the unit resulting in poor repayment of loans.

Girabi and Mwakaje (2013) studied the impact of micro-credit in Tanga region of Tanzania covering 268 households. Their study has revealed that a good proportion of women respondents felt that they were more involved in decision making after taking a loan than before. Fifty percent of respondents only acquired more skills and the remaining acquired fewer skills. The respectability of women increased in the eyes of husbands and community after their participation in credit schemes. The study concluded that success is due to cooperation from husbands, marketing of the products, hard work, efficient management, training and skills and inhibitory factors were the inadequacy of funds, lack of skills and high running costs.

Murthy et al. (2005) reported that there is a debate globally on whether micro-credit can really address poverty and women's empowerment; with one group holding that micro-credit is the answer to both problems and another group arguing that this is far from truth, and in fact women are exploited through participation in such programmes. They indicated that both positions are not correct and the result is somewhere in between.

Malhotra and Schuler (2006) reported conflicting results. Some studies conclude that micro-credit participation is empowering women in Bangladesh(Hashemi, Schuler, Riley 1996 Kabeer 1998) while others conclude that it is not(Goetz and Gupta 1996), and the empirical research also indicated contextual differences in the impact of micro-credit programmes Studies in certain settings find a substantial positive impact on outcomes such as household expenditure and contraceptive use (Pitt and Khandker 1998, Schuler and Hashemi, Schuler, Hashemi and Riley 1997). However, those on some other settings do not find such

effects (Schuler, Hashemi, and Pandit for India, Mayoux for Cameroon, Schuler, Jenkins and Townsend 1995 for Bolivia)

Maggiano (2006) surveyed microfinance clients in Kabale, (a rural area close to the Rwandan and Congolese border) Uganda, to find whether microfinance had a measurable impact on clients' social, spiritual and economic lives. He concluded that microfinance programme had a significant impact on the clients' social and spiritual development but no impact on economic development.

Hegde (2006) identified following critical factors which will empower the poor and play a critical role in the sustainable rural development in our country

1. Motivation and training of the weaker sections of the society.

2. Multi-disciplinary programmes were introduced.

3. Appropriate technologies were introduced.

4. Establishment of people organizations to sustain development.

Ranjani (2012) discusses the current turmoil related to microfinance in India and discusses the need for proper regulation from a multi-stakeholder perspective using a conceptual framework.

3.3 LITERATURES ON SELF HELP GROUPS (SHGs) AND JOINT LIABILITY GROUPS (JLG)

The Self-Help Groups (SHGs) are voluntary associations of people formed to attain some common goals. These are groups that have similar social identity, heritage, caste or traditional occupations and come together for a common cause and manage resources for the benefit of the group members

Krishnaiah (2003) Studied Self Help Groups in Andhra Pradesh found that repayment of loans by the groups were very high because of peer pressure, members are known to each other and they are aware of the creditworthiness of members and the good performance of repayment from members to groups and groups to banks helped to get higher loans subsequently. Further, **Reddy and Manak** (2005) also reviewed the genesis and development of Self Help Groups in India and came up with the findings that Self Help Groups are sustainable, have replicability, stimulate savings and *help borrowers to come out of poverty.* In 2004, **Lalitha and Nagarajun** also studied Self Help Groups in Dindigul, Madurai and Theni Districts in Tamil Nadu and deducted that organization of women in the form of Self Help Groups has laid the seeds for economic and social empowerment of women

Parameswaran (2005) studied 347 SHGs formed in Panchayat Level Development Planning (PLDP) in Kerala found out that women gained control over their earnings, they got more freedom in domestic decision making, gained confidence, cut down wasteful expense and enjoyed better status in family and social circles

Dogra (2005) Studied Self Help Groups in Saharanpur district of Uttar Pradesh found Self Help Groups are successful in breaking the stronghold of money lenders, and families do not go to money lenders as forced labour and need not mortgage land or valuables as a result of SHG.

Farrington and Priya (2006) surveyed 400 SHGs in Andhra Pradesh and concluded that SHGs are being viewed as a route for implementing social protection schemes.

Some studies have shown the negative impact of SHGs. A sketch of such studies that criticize the functioning of SHGs has been presented in the following sections:

Datar and Prakash (2004) studied on the Engendering Community Rights. Women access to water and wasteland in Gujarat, Maharashtra, Madhya Pradesh, Andhra Pradesh and Karnataka and came up with the finding that the country's SHGs are successful in covering non-bankable credit needs but not so in income generating activities. Training is inadequate, and there is no linkage between training and credit or credit and marketing.

A study in West Bengal on the Self Help Groups in Hoogly district by **Dhara and Nitra (2005)** also reflected that 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.

Swain and Wallentin (2007) studied the Self Help groups of five states namely Orissa, Tamil Nadu, Andhra Pradesh, Uttar Pradesh and Maharashtra and found that there was a significant increase in the level of women empowerment over a period (2000-2003). However, it does not mean that every woman has been empowered to the same degree, but on the average, the Self Help Group members.

Karuppannan (2014) reviewed 53 studies in India and found that SHG respondents, by and large, had a positive impact on their economic well-being.

Ghatak and Guinnane, **(1999)** suggest that Joint Liability Groups solve information asymmetries by transferring the risk of default from the lenders to the borrowers hence leading to reduced borrowing costs.

Gine et al. (2011) suggest that joint liability contracts have the potential for higher repayment because borrowers have better information about each other. Further, monitoring of each other's economic activity as well imposition of social sanctions is possible.

Apart from the importance of contract based joint liability, researchers have also found the exceedingly important role played by the joint meetings even beyond joint liability. A few studies report that even after removing joint liability in controlled experiments, groups still had high repayment rates due to the shame and censor associated with joint meetings. (Feigenberg et al. 2010; Rai and Sjöström, 2010).

3.4 LITERATURES ON CUSTOMER (BORROWERS) SATISFACTION LEVEL

Research on Microfinance, over the last decade, has been impressive. Many studies have attempted to study the financial performance parameters like loan repayment rates, coverage, impact on income etc. {for ex. (Laha & Kuri, 2015) (Ghalib, 2013) (Kar A. K., Microfinance Institutions: A Cross-Country Empirical Investigation of Outreach and Sustainability, 2011)} However, in the last few years, there have been some attempts to apply the findings from marketing literature to study microfinance as a service aiming at maximizing the satisfaction of SHG-BLP customers. (Jose & Buchanan, 2013) (Bihari, Roy, & Bhattacharya, 2006) (Radhika & Anupriya, 2011).

Jose & Buchanan, 2013, study the determinants of future purchase intentions of microfinance customers by considering the factors of dissatisfaction with product, staff, and information available to the customer. They also consider how the customers perceive the loan providers' Corporate Social Responsibility (CSR) inclination. Radhika & Anupriya, 2011 study the MFI loans offered to SHG members in Karur district of Tamil Nadu State. They consider variables like Interest Rate, Loan Availability, Hospitality of Services, Using the loan for intended purpose among others. Bihari, Roy & Bhattacharya, 2006 apply an existing marketing framework of SERVPERF on two Micro Finance Institutions based in the states of Andhra

Pradesh and Orissa. They consider factors like Service Fairness, Attitude, and Behavioral Loyalty among others.

3.5 LITERATURES ON IMAPCT STUDIES OF MICROFINANCE

Many researchers conducted impact assessment studies on group-based microfinance programs. Some of the researchers concluded a positive impact of microfinance on the socioeconomic development in India and across the world.

At the same time, some other researchers found that the microfinance interventions had little impact on the socio-economic development of people and some found a negative impact of microfinance in Bangladesh. So the positive impact of microfinance cannot be generalized and universally accepted.

IMPACT ASSESSMENT

Many researchers conducted impact assessment studies on group-based microfinance programs.

- ❖ Some of the researchers concluded a positive impact of microfinance on the socioeconomic development **(Tripathi, 2006) (Sundarapandian, 2006) (Pandian & Eswaran, 2006)** in India and across the world. **(Hiatt & Woodworth, 2006) (Farida et al., 2016)**.

- ❖ At the same time, some other researchers found that the microfinance interventions had little impact on the socioeconomic development of people **(Kabeer, 2005)** (Kabeer, "Is Microfinance a Magic Bullet for Women's Empowerment?Analysis of Findings from South Asia", 2005). **Kabeer (2001)** (Kabeer, "Conflicts Over Credit: Reevaluating the Empowerment Potential of Loans to Women in Rural Bangladesh", 2001) found a negative impact of microfinance in Bangladesh. So the positive impact of microfinance cannot be generalized and universally accepted. In this perspective,.

49

Puhazhendi and Satyasai (2000) studied socio-economic impact of Self Help Groups and founded that the overall impact of Self Help Group was significant both on social and economic spheres of the house hold.

Nedumaran, S; Palanisami, K; Swaminathan, L P (2001) studied the performance and the socio-economic impact of SHGs in Tamil Nadu and founded that there was an increase of 23 percent in the net income in the post SHG situation, compared to the pre-SHG situation,social conditions of the members also considerably improved after joining the Self Help Group.

Lakshmamma (2005) found that 95 percent of respondents out of 435 respondents informed that there is an improved economic position after joining the group and only 12 beneficiaries out of 435 felt that there is no improvement in their economic condition. Found a substantial change in the consumption pattern of the sample beneficiaries, i.e., increased expenditure on food etc. while he was studying the DWCRA groups in Prakasam District of AP

Kumar in the year 2005 the economic and non-economic impact of microfinance in Haryana and the Study revealed that there is an enhancement of knowledge and skills of women. They fight against social evils like dowry, female infanticide, and alcoholism. In the same year (2005) Thorat in his study on the Sectoral issues and challenges on microfinance in India concluded the below-mentioned points:

1. Micro finance has reduced poverty through increase in income and enabled poor to build assets.

2. It has enabled households to spend more on education.

3. It has contributed to a reduced dependency on rural money lenders. It is banking for the poor and not poor banking

According to **Gobezie (2004, 2005 and 2010),** SHG is a development scheme, which works on the principles of self-regulation, mutual help, and co-operation. He adds that SHGs members create their capital through regular savings currently emerging in Ethiopia. The scheme provides saving and credit services which stimulate members' self-help capacity resulting in social and economic empowerment as a resource for low-income families, especially women.

Anitha and Revenkar (2007) have attempted to study the rural development through microcredit, the growth of SHGs from 1992-93 to 2003-04 and agency-wise Self Help Group Bank Linkage as on March 31, 2004. They concluded that the success of SHGs not only improved the economic status of women but also brought many changes in their social status.

Karmakar (2008) reported various experts' studies that Self Help Groups have indeed helped in the social and economic empowerment of rural women at the same time delivering crucial financial services

Jothi (2010) with the aid of primary data brought out the changes in the social and economic aspects of the sample respondents who are the members in SHG. The sample respondents, who were either unemployed or engaged in petty activities during their pre-membership period, have become very active by becoming employed in varied activities and thereby earning more. He has concluded that the self-help groups contribute substantially in pushing the conditions of the female population up and through that chip in poverty eradication as well.

CHAPTER 4

OBJECTIVES, HYPOTHESES, AND DEVELOPMENT OF CONCEPTUAL FRAMEWORK

CHAPTER 4: OBJECTIVES, HYPOTHESES, AND DEVELOPMENT OF CONCEPTUAL FRAMEWORK

4.1. OVERVIEW

This chapter further develops the literature gap by focusing on how microfinance has helped in improving the social, economic and capability well-being of the people with the help of existing publications in this area. This chapter provides the objectives and corresponding hypotheses (where applicable). A conceptual framework has been included in this chapter by referring to the key literature identified in the previous chapter. The conceptual frameworks have been treated as a guide for the remaining portions of this research.

4.2 OBJECTIVES OF THE STUDY

Microfinance has been in the news for wrong reasons in the recent past. The pursuit of economic profit rather than focus on socio-economic development by few MFIs has been cited as the causes for the negative connotation surrounding microfinance especially in India (Haldar & Stiglitz, 2015, 2016). As suggested earlier, most studies of microfinance impact in India have focused on the Western and Southern parts of India. These regions of India had a significant exposure to microfinance and academic studies focusing on the Socio Economic Upliftment of people living below poverty line. However, the eastern region of India including the state of Jharkhand has not seen the same level of attention both regarding exposure and academic studies. This study studies the eastern Indian state of Jharkhand comprising of a significant tribal and backward castes population.

The study attempts to create a comprehensive understanding of the various dimensions of impact related to microfinance instruments. After isolating such key dimensions of impact, the study measures the identified dimensions within the Deoghar district of Jharkhand. It

uses, mixed method which is a mix of Qualitative and Quantitative techniques. It is used to identify and measure various dimensions of impacts related to the availing of microfinance loans.

The first section of the study deals with an inductive interview and caselet based Qualitative approach. By studying both success and failure stories, the qualitative section attempts to isolate themes and dimensions related to microfinance impact and poverty. The subsequent sections utilize the identified dimensions of microfinance impact and measure them using a survey instrument. The qualitative themes identified in the first section of the study were used to create the survey instrument. The data collected through the administration of the survey instrument are then analyzed using various statistical techniques. Before presenting the details of the findings, this section presents key objectives.

The present research has been undertaken by keeping following objectives in mind:

1. Exploring the important latent variables relevant in the research setting (Deoghar district, Jharkhand) which are potentially important in assessing the impact of microfinance offerings across social, economic and capability dimensions. *(Study 1)* (The exploratory section of the thesis attempts to inductively understand emergent themes from a set of qualitative interviews of success and failure stories in microfinance loan use within the Deoghar district. This section attempts to isolate key dimensions of microfinance loan impact to be used later in the measurement sections of the study).

2. Exploring the various social, economic and capability dimensions of microfinance and measuring its impact on the well-being of the respondents in Deoghar district, Jharkhand, India *(Study 2 & 3)*.

3. Understanding the role of the demographic, social and geographic factors like age, caste, distance from the city centre, education, loan cycle, loan type etc. on the impact

of microfinance loans with Special Reference to Deoghar District in Jharkhand, India *(Study 2 &3).*

4. To study the impact of microfinance in the reduction of migration in the Deoghar district, Jharkhand, India *(Study 2 & 3).*

5. Understanding the determinants of customer satisfaction in Rural Self Help Groups-Bank Linkage Programme by doing an empirical study of Deoghar district in Jharkhand, India *(Study 4).*

6. Differentiating the impact on groups of respondent belonging to different poverty levels in the Deoghar district of Jharkhand, India *(Study 4).*

4.3 HYPOTHESES:

STUDY 1: Study 1 is a qualitative exploration to extricate key latent impact dimensions from the caselets. Hence no hypotheses assumed in this study. The extricate key latent impact dimension identified in this study are distance from the city centre, migration, family and social support, etc. , the other studies(*Study 2, 3 and 4)* focuses on the measurement and further analysis of the impact, studied in the research setting.

STUDY 2: This study measures the impact of the microfinance on the social, economic and capability well-being of people living below poverty line in the Deoghar district of Jharkhand. A comparison is done between microfinance borrower and a control group that did not receive any microfinance loans. The hypotheses assumed for this study is presented below:

*Hypothesis 1***:** The Microfinance loans use has led to an increase in the income of the respondents in their community in Deoghar, Jharkhand.

*Hypothesis 2***:** The Microfinance loans use has led to an increase in the expenses of the respondents in their community in Deoghar, Jharkhand.

Hypothesis 3: The Microfinance loans use has resulted in a decrease in the migration of the respondents in their community in Deoghar, Jharkhand.

Hypothesis 4: The Microfinance loans use has increased the educational qualifications/ vocational training of the respondents in their community in Deoghar, Jharkhand.

*Hypothesis 5***:** The Microfinance loans use has led to an increase in the working understanding of skill/trades/crafts by the respondents in their community in Deoghar, Jharkhand.

Hypothesis 6: The Microfinance loans use has led to an increase in the social status enjoyed by the respondents in their community in Deoghar, Jharkhand.

*Hypothesis 7***:** The Microfinance loans use has led to an increase in the status enjoyed by the respondents in their family in Deoghar, Jharkhand.

STUDY 3: This study continues the measurement of microfinance impact by comparing the breakups of impact measurement based on the categories of various grouping variables like distance from city center, loan type, age group, etc. for the Microfinance borrower respondent group (368 respondents). The hypotheses in this study assume that there is no difference within each grouping variable as the null hypothesis. As we do not have significant input from the existing literature on the relationship between the grouping and impact variables, we present the null hypothesis arguments below.

*Hypothesis 1***:** The impact variables across Social, Capability and Economic well-being have no difference across the grouping variable: distance from city center (<=10 Km, 11-20 Km, 21-30 Km and 31-40 Km).

Hypothesis 2: The impact variables across Social, Capability and Economic well-being have no difference across the grouping variable: loan type (Self Help Group [SHG]/Joint Liability Group [JLG]).

Hypothesis 3: The impact variables across Social, Capability and Economic well-being have no difference across the grouping variable: age groups (<=30 years, 31-40 years, 41-50 years and >=50 years).

Hypothesis 4: The impact variables across Social, Capability and Economic well-being have no difference in the whole grouping variable: Caste (Scheduled Caste (SC), Scheduled Tribe (ST) and Other Backward Castes (OBC)).

Hypothesis 5: The impact variables across Social, Capability and Economic well-being have no difference in the whole grouping variable: loan cycle (1, 2, 3, and 4).

Hypothesis 6: The impact variables across Social, Capability and Economic well-being have no difference in the whole grouping variable: education (Illiterate, Till Class X, High School and Graduate).

Although the impact variables (economic, capability and social well-being) have been grouped in the hypotheses presented above, each impact variable has been independently analyzed across the six grouping variables like loan types, distance from the district headquarter, age etc. The analysis of *study 3* will present results for each impact variable separately.

STUDY 4: This is an empirical study to find out the Determinants of Customer Satisfaction in Rural Self Help Groups-Bank Linkage Programme from the same set of respondents who were used for the study 2 and 3, in the Deoghar district of Jharkhand, India.

Socio Economic Profile:

H1A: There will be a negative relationship between customer age and Overall Customer Satisfaction.

H1B: There will be a negative relationship between underprivileged caste membership and Overall Customer Satisfaction.

H1C: There will be a positive relationship between education level and Overall Customer Satisfaction.

H1D: There will be a negative relationship between MPCE and Overall Customer Satisfaction

H1E: There will be a negative relationship between the distance from city center of the survey respondent's address and Overall Customer Satisfaction.

Loan Dynamics:

H2A: There will be a positive relationship between increasing SHG Age and Overall SHG-BLP Customer Satisfaction

H2B: There will be a positive relationship between increasing Loan Amount and Overall SHG-BLP Customer Satisfaction

H2C: There will be a positive relationship between Training provided and Overall SHG-BLP Customer Satisfaction

H2D: There will be a positive relationship between Ease of Processing/Bureaucracy and Overall SHG-BLP Customer Satisfaction.

Loan Use:

H3A: There will be a positive relationship between Income Generating Use and Overall SHG-BLP Customer Satisfaction.

H3B: There will be a positive relationship between the choice of a New Occupation (New vs. Traditional Business) and Overall SHG-BLP Customer Satisfaction.

4.4. PREVIOUS AVAILABLE CONCEPTUAL FRAMEWORKS IN MICROFINANCE.

Various previous studies on microfinance have focused on accessing its impact. Hence, there are many available conceptual frameworks which allow one to study the impact of microfinance. However, there are few previous study on the theoretical framework, and empirical study focusing on the effectiveness of microfinance services especially in the eastern Indian region.

The preliminary framework proposed by Sebstad, Neil, Barnes, & Chen, 1995 had identified four domains of microfinance interventions namely individuals, households, enterprises, and community. Some of the previous studies on microfinance impact conceptually considered important in the context of present study have been presented in the table below:

TABLE 4.4.1 Previous Studies on Microfinance Impact Conceptually:

AUTHOR	YEAR	CONCEPTUAL FRAMEWORK
Sebstad et al	1995	They identified four domains of microfinance interventions • Individuals, • Households, • Enterprises • Community They proposed three impact domains (i.e., the areas where impacts have been expected) at the household level, namely: ◦ Income, ◦ Expenditure ◦ Assets.
Barnes	1996	He asserted that assets are a crucial element of household welfare. However, the asset of a household may have been accumulated over an extended period. Thus, if not treated appropriately (e.g., using longitudinal data), this variable may provide a misleading measure of the impacts due to differences in asset values among households before the intervention.
Dunn et al	1996	Argued that microfinance impacts be desirable if they help households reduce *ex-ante* exposure to risk and provide better strategies for the management of *ex-post* losses.
Chen	1997	Outlined a framework for individual-level impact assessment, consisting of four pathways through which impacts may be created, including material (e.g. income,

		assets),cognitive (e.g. knowledge, skills, awareness), perceptual (e.g. self-esteem, self-confidence),and relational (e.g. bargaining power, level of participation in household and community activities).
Schreiner	2003	Provided an example of a useful tool to judge the worthiness of microfinance programs using cost-effectiveness analysis.
Hudak	2012	Impact of regulatory environment and financial systems on microfinance impact.
Ganesh and Singh	2015	Measuring microfinance's social impact using Euclidean distance based approach between ideal and actual impact.
Alimukhamedova N, Filer R, Hanousek J.	2015	Microfinance impact may be dependent on the geographical distance between the household and the financial institution.

Source: (The AIMS Team, 2001)*;* (Dunn, 1996)*;(Ganesh, 2015)

2 X 2 Window on Effects of Microfinance

The difference between impacts and effectiveness of microfinance analysis is illustrated in the table below.

TABLE 4.4.2: 2 X 2 Windows on Effects of Microfinance

	Expected	Unexpected
Direct	Planned effects **(I)** e.g.: - Increase income/expenditure of member households and individuals	Unplanned direct effects **(II)** e.g.: - Increase "debt trap" for borrowers - Increase workload for women - Possible increase in child labour
Indirect	Effects through other channels **(III)** e.g.: - More jobs created for non-members - Increase in solidarity in the community	Unplanned distance effects **(IV)** e.g.: - Increase participation of formal banks in microfinance market - More involvement of the poor and their organisations in policy making dialogues

Source: Adapted from Johnson (1998)

Quadrant I: Microfinance can create direct and expected effects by helping poor clients to have enough capital to invest in profitable projects to earn more income.

Quadrant II: Microfinance may also create unexpected direct effects (Quadrant II) such as "debt trap" for borrowers whose investments failed to generate income.

Quadrant III: Microfinance creates indirect effects such as borrowers employing non-borrowers in their projects. Also through mediation of group activities, microfinance may promote solidarity among community members.

Quadrant IV: Some indirect and unexpected effects may be created such as formal banks becoming interested in joining the microfinance market.

This framework suggests that apart from direct and planned economic benefits from microfinance there are other benefits like social and capability benefits.

Microfinance and the Household Economic Portfolios

Household resources have been classified into three groups: human capital, physical capital and financial capital. This resource pool includes the household endowment and that mobilized from external sources, such as microfinance and social networks. Households use their resource pool for three sets of activities: consumption, production, and investment (Figure 4.4.1). Consumption includes activities to satisfy needs and wants using items such as food, clothing, healthcare, education, and entertainment. Consumption activities often do not contribute directly to the accumulation of physical and financial capital of households. The fig 4.4.1 below explains it.

FIGURE 4.4.1: Microfinance and the Household Economic Portfolios
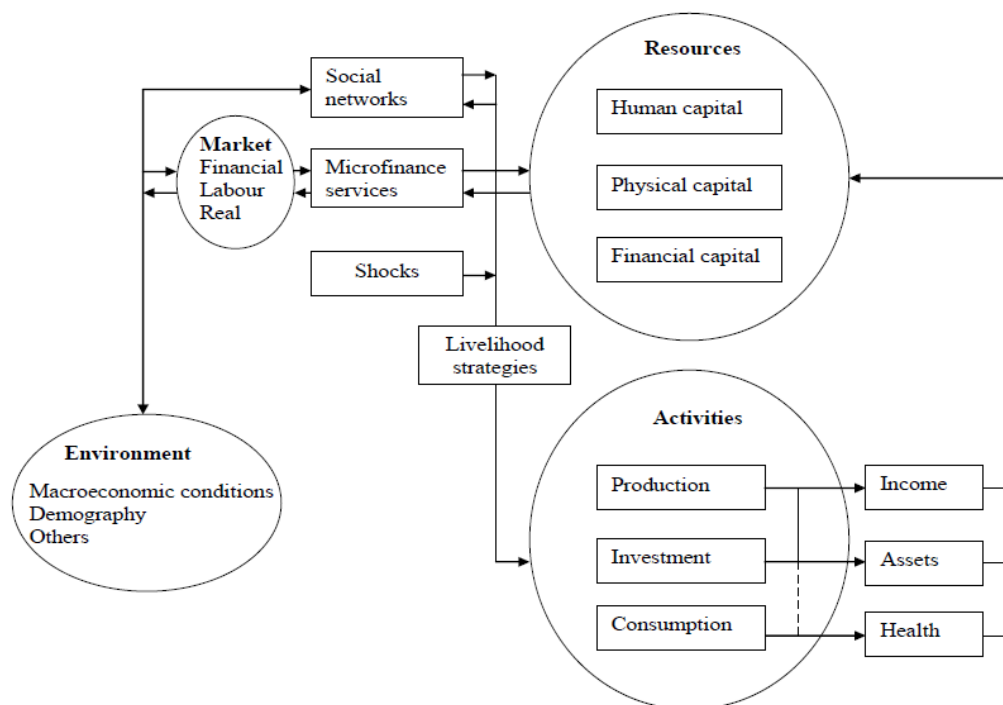
Source: compiled from Zeller (1995), Scoones (1998), AIMS (2001) (Zeller, 1995) (Scoones, 1998) (AIMS, 2001)

4.5 CONCEPTUAL FRAMEWORK DEVELOPED BY THE RESEARCHER

During the course, this research study two conceptual frameworks has been developed by the researcher. Both of them are discussed below:

63

Framework 1

The framework 1 deals with the analysis of the impact of the microfinance on the social, economic and capability well-being of the people residing below poverty line in the Deoghar district of Jharkhand, wherein age, caste, distance from the district headquarter, etc. are the socio economic demographics. The loan cycle /amount and the type of group, i.e., SHG/JLG shows the loan details. Moreover, further its impact (microfinance) is measured on the parameters like saving, income, expense, social status, migration, and education.

FIGURE 4.5.1: Conceptual Framework for Study 2 and 3
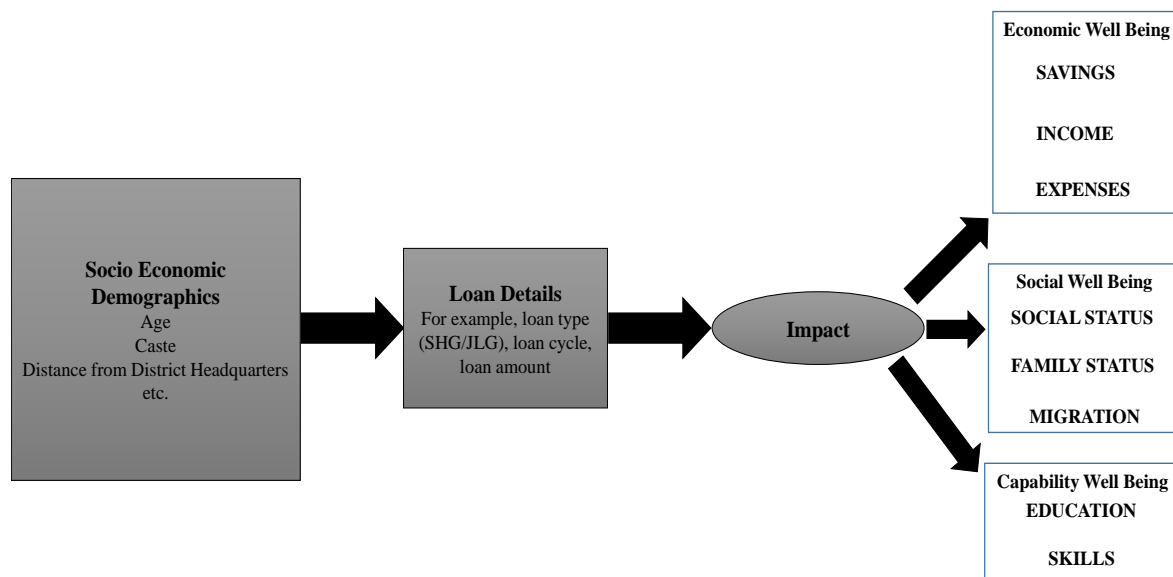
Source: Developed by the Researcher

Framework 2

This framework is developed to understand the various aspects of the process of microfinance service delivery and the eventual generation of customer satisfaction. It has been assumed here that significant aspects affecting the delivery and use of microfinance loans by borrowers are the socio- economic profile of the consumers, the loan dynamics, and the actual loan use. Each of these three aspects can be measured by different variables like Age

of the borrower, caste, loan amount, income generating use, etc. For a full description of the variables, please refer to the analysis of study 4.

FIGURE 4.5.2: Conceptual Framework for Study 4

Determinants of Customer Satisfaction of rural SHG-BLP customers
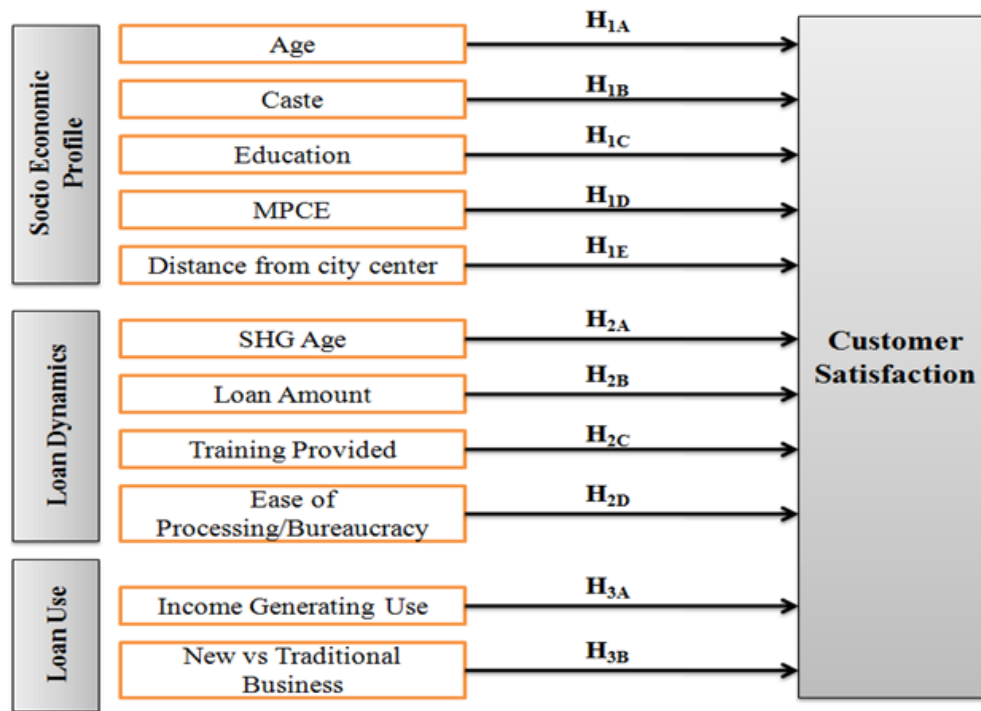
Source: Developed by the Researcher

CHAPTER 5

RESEARCH DESIGN AND METHODOLOGY

CHAPTER 5: RESEARCH DESIGN AND METHODOLOGY

5.1 OVERVIEW

This chapter provides an overview of the survey questionnaire methodology, questionnaire and its development, survey construction and methodology of all the four studies along with that of a pilot study.

5.2 SURVEY QUESTIONNAIRE METHODOLOGY

In research texts and publications the term survey and questionnaire are often left undefined or have been used in a variety of contexts, sometimes interchangeably (for example, compare (Creswell, 2005), (Sekaran, 2003) and (Zikmund, 2000). In this study, the instrument used for data collection throughout, has been referred as the survey questionnaire. A survey may use some data collection techniques including personal interviews, telephone interviews, direct observation or self-administered questionnaires (Scheaffer, Mendenhall, & Ott, 1990). In this study, the data collection technique used to survey was a questionnaire; hence the term survey questionnaire.

5.3. INSTRUMENT DEVELOPMENT

The survey questionnaire for the pilot was used as a baseline for the research survey used in the main study. The survey questionnaire was based on the National Sample Survey Organization 2011-12 (68th round) Schedule measuring consumption and expenditure ((MOSPI), 2013). However, additions/changes were made to ensure that the findings from the literature review and qualitative studies were included in the questionnaire. The questionnaire prepared was then distributed to various reputed NGO officials, field officers, and industry expert for their expert comment. Changes were made likewise because of their

pragmatic experience.Since the sample population did not have knowledge of English. The questionnaire formed after making minor changes keeping in mind the industry expert comments were then translated into Hindi with the help of Google translator for the better understanding of questionnaire by the respondents.

5.4. SURVEY CONSTRUCTION

The below presented questionnaire was used for the qualitative studies in this thesis (Study 2, 3 and 4). The survey instrument consisted of 9 sections. The first section included the basic questions like the name, address, age, religion, social class and marital status of the respondents.

1. HOUSEHOLD PROFILE

a) Name:

b) Address:

c) Age: (1) < 25 ☐   (2) 26-35 ☐   (3) 36-45 ☐   (4) > 46 ☐

d) Religion: (1) Hindu ☐   (2) Muslim ☐   (3) Christian ☐   (4) Sikh ☐
          (5) Others ☐

e) Social Class: (1) SC ☐ (2) ST ☐ 3) OBC ☐ 4) General ☐

f) Marital Status (1) Married ☐   (2) Unmarried ☐   (3)   Widow /Widower☐   (4) Divorce ☐   (5) Separated ☐

2. FAMILY PROFILE

The Second section included questions related to the family members of the respondents.

2.1 *Demography*

Name of the member	Sex	Age	Relation with borrower	Education level	Occupation

Note:-

<u>Sex</u>- *1. Male   2.Female*

<u>Marital Status</u>*:- 1.Married 2.Unmarried 3.Widow/Widower 4.Others*

<u>Educational Level Class</u>- *1.Class 1-5 , 2.Class 6-8 , 3.Class 9-10, 4.Class 11-12 , 5.Graduation, 6.ITI 7.Drop out, 8.Not gone to School, 9.Diploma, 10.Aanganwadi centre,11.Illiterate, 12 N.A*

<u>Status of Education</u>-*1. Dropout, 2. Not gone to school,3.Ongoing*

3. ASSET

The third section comprised of the questions on asset like house type (Kutcha, pucca , Mix),

household assets (land, TV, radio, fridge, Car , Self, etc)..

3.1 *House type*

Type of house	Type of roof
Kutcha	
Pucca	
Mix	

3.2 *Household asset*

Asset	If owns(tick)
Land	
TV	
Radio	
Fridge	
Telephone/mobile	
Bicycle	
Motor cycle	
Car	
Shelf	
Almirah	
Gas connection	
Pump set/electric motor	
Weeder	
Bullock cart	

Tractor	
Sewing machine	
Trees	

3.3*Other facilities*

Facilities	YES	NO
Electricity		
Drinking water		
Sanitation(*pucca*)		

4. ECONOMIC CONDITION

The fourth section comprised of the questions which accessed the economic condition of the respondents. The respondents were also asked about their present liabilities and any mortgaged family property to further access their economic conditions.

4.1 *Liabilities:*

Source of credit	Borrowed Amount	Annual interest	Purpose of loan
Bank –NRLM			
Bank KCC			
Bank –others			
Cooperatives			
Money lender			
Friends/relatives with interest			
Friends/relatives without interest			
Private company			
Chit fund			
MFI 1			
MFI 2			
MFI 3			
SHG's /farmers group			
Trader			

Note:

Purpose of loan: *1.Help Relatives, 2. Enterprise, 3. Agriculture, 4. Education, 5. Health, 6.Other productive purpose, 7. Other consumption purpose, 8.Marriage*

4.2 Have your family mortgaged any property?   YES   NO

If yes

Mortgage code	Amount (in Rs)	Reason Code

Note: - <u>Mortgage code</u>-*1. Mortgage of immovable property 2. Mortgage of assets*

Note:- <u>Reason Code</u> – 1.Medical treatment,2.Construction of House,3.Purchase of Land 4.Purchase of household assets,5.Marriage,6.Repayment of old loan,7.Death ceremony,8.Education,9.Festival,10 Other Social Cermony,11.Others

5. SAVINGS:

The section fifth accessed the saving pattern of the respondents. Five scale likerat scales was used to know whether the respondents income increased after availing the loan from the microfinance.

Savings Method	Amount Saved in last year	Total Amount till now
SHG		
Bank		
Post office		
Money lender		
Cash at home		
Committees		
Jewelry		
Small animal(sellable)		
Insurance		
a/c for disability		
Non-banking		
Others(specify)		

5.1Saving has increased after availing the loan:

Strongly Disagree   Strongly Agree

1   2   3   4   5

71
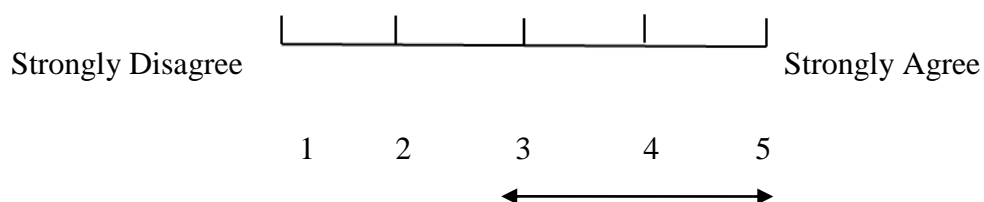
6. INCOME

The sixth section of the survey questionnaire included the questions on the sources of income (agriculture, wage, horticulture, etc.).

6.1

Source wise	Amount(in Rs) P.A
Agriculture	
Wage	
Others	

6.2 INCOME from the Livestock (sellable)

Livestock type	Number currently	Sold in lasr year	Income from sale in last year
Cow			
Buffalo			
Bullocks			
Sheep			
Poultry			
Pig			
Pigeon			
Others			

6.3 Income has increased after availing the loan:

Strongly Disagree   Strongly Agree

1   2   3   4   5

7. EXPENDITURE

The seventh section of the survey questionnaire consisted of questions on expenditure pattern of the respondents.

Items	Periodicity	Frequency	Quantity	Price/unit	Value (Annual)
Food groceries/pulses					
Fuel/fuel wood					
Clothes					

Education				
Health/medicines				
Travel/local conveyance				
Alcohol/tobacco etc				
Litigation				
House repair/decoration				
Festivals				
Electricity/Water /cables bills/				
Telephone/mobile expense				
Loan repayment/debt servicing				
Bribes				
Others(specify)				

8. MIGRATION

8.1. Did any members of your family migrate? YES ☐   NO ☐

8.2 If YES how many members?

8.3 Migration details of the members

Name of the member migrating.	Total number of days	Avg wage/day

9. SATISFACTION LEVEL

9.1 How satisfied are you from the availed microfinance loan?

Highly Dissatisfied |___|___|___|___| Highly Satisfied

　　　　　　1　　2　　3　　4　　5
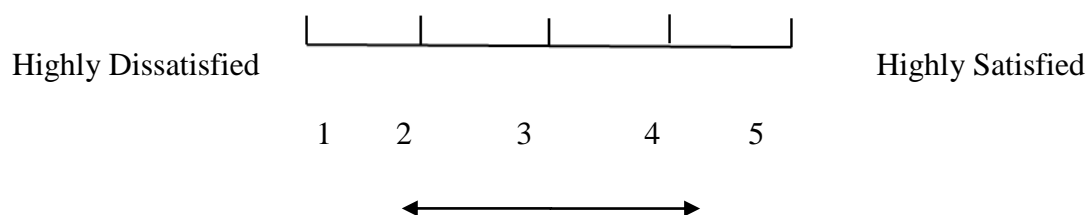
5.5 METHODOLOGY:

 The Present study uses mixed method approach. Mixed methods studies include both qualitative and quantitative methods of data collection and/or analysis to achieve a range of outcomes as discussed by Creswell and Greene et al. (Greene, Caracelli, & Graham, 1989). The mixed methods approach was selected after the analysis of the overall purpose of the study, and the research questions identified. Further the mixed method ensures that there is a greater validity in the result as it provided variation in data collected. Other benefits of the mixed method are:

• The research question is answered from some perspectives.

•It ensures that there are no 'gaps' to the information/data collected.

• The preexisting assumptions from the researcher are less likely.

This method was important as one methodology does not provide all the information required.

The present research study consists of four distinct yet connected studies. In the subsequent sections, the methodology used for all the four studies along with that of pilot study is given:

5.5.1 Pilot Study Methodology

The pilot study utilizes all three aspects of Economic, Capacity and Social Well Being:

- o Economic Well Being: Increase in Savings, Income, and Impact on Migration
- o Capability Well Being: Change in Education and Skills
- o Social Well Being: Community Status and Family Support

The pilot study focuses on measuring the impact of microfinance on the socio-economic upliftment of people living below poverty line in the Deoghar district of Jharkhand. Deoghar district consists of 10 administrative blocks as mentioned earlier. For this study, 4 blocks were randomly chosen. The study constituted of 75 respondents who had availed microfinance loans in the last 3 years. The respondents belonged to 9 villages of Birneya, Dubjora, Raghunathpur, Basuliya, Sarpatta, Mohanpur, Badhani, Ramsagar and Ramnathpur in all 4 blocks of Deoghar District.

In order to test the internal consistency of the survey instrument, the Cronbach's alpha test for 3 constructs Economic, Capability and Social Well Being were administered. The scale item of actual savings changes in the last 3 years has been removed from the study as only questions posed on a Likert scale were checked for reliability. The statistical package SPSS version 20 Release 20.0.0 was used for the analysis of results.

5.5.2 Study 2: Microfinance Impact Estimation Using Control Group. &
Study 3: Microfinance Borrower Analysis Using Grouping Variables Methodologies.

A total of 368 microfinance borrowers were chosen as respondents based on ownership of BPL card and the use of either SHG/JLG loans in the four blocks within the Deoghar District. These blocks were randomly chosen which covered 31 villages.

For a control group, 217 respondents were interviewed who were not beneficiaries of microfinance loans but held BPL cards in the same set of villages.

The two groups were then administered the same questionnaire focusing on the respondents:

❑ Economic Well Being (Increase in Savings, Income , Expenditure, and Migration)

❑ Capability Well Being (Education and Skills)

❑ Social Well Being (Community Status and Family Support)

All these parameters, i.e., Economic Well Being, Capability Well Being and Social Well Being were recorded based on the experiences of the respondents in the last three years (2013-2015) irrespective of whether the respondent had taken a loan or not.

The creation of a control group serves many purposes. *Primarily*, the control group findings give a basis for the comparison of impact on Well Being components between microfinance and non-microfinance borrowers. *Secondly*, the control groups acts as a validation of the scale of data collected (for example savings, income, etc.) in the region selected.Finally, it aids in the use of more robust statistical tests to analyze the data.

As far as possible the economic data was validated by reviewing saving's data with MFIs/Bank. The income data was collected both at an aggregate level as well as a component level. For ex. income from agriculture, income from livestock, trade income, etc. The summing then verified the consolidated income up the component level incomes reported by the respondents. Apart from the impact data, various demographic variables like Age, Caste, Distance from City Center, etc. were collected.

5.5.3 Study 4: Customer Satisfaction Survey

This study focuses on the determinants of Overall Customer Satisfaction in rural SHG-BLP loan recipients in the rural, semi-urban and urban sections of Deoghar district. Deoghar district consists of 10 administrative blocks as mentioned earlier. For this study, 4 blocks were randomly chosen. These blocks were: Sarwan, Devipur, Madhupur, and Deoghar.

The independent variables (discussed above) and the dependent variable (Overall Customer Satisfaction) were used to construct a structured questionnaire in English. Overall Customer Satisfaction was measured using a five-point Likert scale (from Extremely Dissatisfied

graded as 1 and Extremely Satisfied graded as 5). This approach to measurement of Overall Customer Satisfaction was in line with earlier studies focusing on the same dependent variable. (Jose & Buchanan, 2013) (Radhika & Anupriya). A face to face structured interviews were conducted with respondents. The questionnaire used for the interviews was the one which has been translated into the local language (Hindi).

The study was conducted in two phases. In the *first phase*, 30 respondents were chosen to represent the pilot sample. Based on the findings from the pilot survey, two more variables were added to the structured questionnaire, namely distance from city center and new vs. traditional business.

In the *second phase*, 145 respondents spread across 28 villages were surveyed. It was essential for the study to ensure the quality of the dependent variable: Overall Customer Satisfaction. This was important because BoP (Base of Pyramid) consumers were not well educated and might not be able to explicate their satisfaction levels properly. To overcome this challenge, customers were asked to qualitatively list their reasons explaining their choice of overall customer satisfaction on the Likert Scale. The responses which did not have any accompanying qualitative reasons were excluded from analysis. In this process 11 responses were excluded. Further, one response was excluded due to being an outlier. After all the filtration the total sample came out to be 133.

In order to understand the significance of the hypotheses presented above OLS Linear Multiple Regression was applied. The regression method has been used in previous studies of microfinance customer satisfaction. (Jose & Buchanan, 2013) (Radhika & Anupriya). The statistical package SPSS version 20 Release 20.0.0 was used for the analysis of results. As there were no composite scores/factors used for the study, the Cronbach's Alpha measure of questionnaire reliability is not applicable. Major scale variables like MPCE, age and loan

amount were tested for normality using the Shapiro Wilk statistics, histogram, and Q-Q plots. MPCE was found to be positively skewed. This was because of 1 (one) outlier with abnormally large MPCE. This outlier was removed from analysis to preserve normality. All other scale variables were found to be acceptably normal.

CHAPTER 6

QUALITATIVE STUDY (STUDY 1)

CHAPTER 6: QUALITATIVE STUDY (STUDY 1)

6.1 OVERVIEW:

The previous chapter discussed the research design and methodology of the present research. This chapter deals with the impact of microfinance in the Deoghar District, Jharkhand in the form of success and failure stories resulting into caselets. This study is a qualitative exploration to extricate key latent impact dimensions from the caselets. The extricate key latent impact dimension identified in this study are distance from the city centre, migration, family and social support, etc. , the other studies(*Study 2, 3 and 4*) focuses on the measurement and further analysis of the impact studied in the research setting.

6.2 OVERVIEW OF QUALITATIVE STUDY

Qualitative research is a broad methodological approach that encompasses many research methods. A Popular method of qualitative research is the case study (Stake, 1995; Yin, 1989) which examines in depth "purposive samples" to better understand a phenomenon. Qualitative research is a type of scientific research. In general terms, scientific research consists of an investigation that:

- Seeks answers to a question

- Systematically uses a predefined set of procedures to answer the question

- Collects evidence

- Produces findings that were not determined in advance

- Produces findings that are applicable beyond the immediate boundaries of the study

Based on the above criteria, qualitative research positions itself as an important tool for research in social sciences and management research.

This portion of the study intended to gain a nuanced understanding of the context of microfinance in Deoghar, Jharkhand. Hence, both successes as well failure stories are discussed below which has resulted in the selection of socio-economic variables for the remaining portions of the study. Each caselet is followed by a brief analysis of the variable identified.

6.3 CASELETS (SUCCESS AND FAILURE STORIES)

This section presents the caselets which the researcher came cross while interacting with the respondents. It consists of both the success as well as the failure stories. The key latent impact dimensions were identified from this caselets. Each caselet is followed by the variables identified from the case .The extricate key latent impact dimension identified in this study are distance from the city centre, migration, family and social support, etc.

6.3.1 CASELET 1 (SUCCESS STORY)

Name of the JLG

Group: SHANTI JLG

District: Deoghar

Block: Deoghar Sadar

Village: Gidhni

Usha Devi, w/o of Mr. Niranjan Mahata, is a lady languishing under the BPL, in the Gidhni village of Deoghar sadar block. She has been availing loan from the MFI, XYZ microfinance for the last eight years. Initially, the loan amount was Rs 8000/-, Usha Devi's husband who used to work as a helper in a retail shop in Deoghar was asked by his wife to utilize the loan amount to open their retail shop (KIRANA SHOP) in the outer room of their own house. Her husband was not ready, he felt that the loan amount was too minimal and could be better used

for household chores. There were regular fights between them, but Usha Devi was firm, and she with the assistance of her father in law and mother in law started the shop with few baby toys and chocolates. She says that it was difficult to save much because of the drinking habit of her husband but her in laws help was very encouraging.

A fixed amount had to be paid back every week to the MFI's collecting personnel. Many times when she ran out of cash, the ladies from the group used to help her. After the successful repayment of first loan amount, she got her second loan amount of Rs 12000/- which was further used for the extension of the shop. Though she had the liability of getting her four daughters married, she told that she never used the principal or the savings from the loan amount for the marriage purpose. She has got two of her daughters married.

Usha Devi has availed her third loan amount of Rs 16000/-.Now even her husband helps her in the marketing of items for the shop and has invested some of his savings in the shop. Even though her shop is small in size but now she is experiencing increased self-dependence.

This caselet depict the Increase in the Economic well-being of the subject after availing and successful utilization of microfinance loan amount

Variable Identified from the Caselet 1: Increase in Saving, Increase in Income, Increase in Expenditure (Economic well-being)

6.3.2. CASELET 2 (SUCCESS STORY).

Name of the SHG: TARA SHG

No of members: 12

District: Deoghar

Block Devipur

Village: Munda Munda (Rajpura panchayat)

Munni Hembram,w/o of Vishwanath Soren, a tribal lady in the Devipur block where the researcher had been to meet the LEO and BDO of the block. The researcher saw this lady meticulously listening to few government officials as how to make the map of her village road under the NAREGA scheme of the Government of Jharkhand. After the completion of the meeting which was taking place under the shed of a tree, the researcher approached her to know more about the NAREGA programme in her village. She told that the villagers have elected her as their representative for this programme.

She is the only educated lady (10th pass) of her village was involved in most of the government schemes about her village. She was even the president of her SHG group named "Tara SHG" and a motivator in the functioning of two more such groups in the Munda Munda village. Married at a very young age, her husband is a daily labourer, so the income is very limited and it comes on daily basis. She told that though this SHG groups were there in her village since long, but she became part of it only after her two children attained the age of 10. Now it has been four years since she has been part of this Tara group which has received a credit linkage of Rs 2 lac, for the farming purpose from ABCD bank. The performance and the involvement of Munni have led to an increase in her social status of in the Community as well as in the family.

Munni here needs to be appreciated for reviving the belief of the ladies to form SHG group.She says since most of the ladies of the village are not educated, so she faces many questions and cross- questions regarding the bank transactions and savings deposits for which she accompanies different bunch of the ladies of her group to the bank and makes them talk to the bank officials on a regular interval. This has made the group ladies more secure and confident about their savings deposits and loan amount utilization.

This caselet depicts an increase in Social well-being of the subject after joining the group.

Variable Identified: Increase in the status of the subject in the family and the community. (Social well-being).

6.3.3 CASELET 3 (SUCCESS STORY)

Name of the SHG: Surujmukhi SHG

No of members: 12

District: Deoghar

Block: Sarwan

The Suruijmukhi SHG at Rohini village of Sarwan block was formed during 2009-10 and passed its first grading in 2011-12. A revolving fund of Rs. 25,000/- had been provided during February 2012 to the group. The XYZ bank sanctioned an amount of Rs. 4.00 lakhs against their activity for dairy farming during 2013-2014 after the SHG has passed second grading test. An amount of Rs. 1.00 lakh was released to the SHG as subsidy and accordingly disbursed by the bank. There are 12 members in the group. Seven numbers of Jersey cows has been procured by the group, and all these cows are being kept in a common shed under their supervision. At present, the SHG is selling milk and milk products and selling the products in the local areas as well as in the Deoghar town which has good consumption of milk throughout the year because of the tourist attraction for PEERA (form of sweet) in the holy city Deoghar. The village Rohini's proximity to the city center makes the transportation of milk from the village to the city center affordable.

This caselet depicts an increase in Economic well-being of the subjects after joining the group. However, many respondents from the group suggested that the location of Rohini was key in the feasibility of the plan as there were ample opportunities for transportation from Rohini to Deoghar.

Variable Identified: Distance from city center can have an impact on the feasibility of the economic activities undertaken.

6.3.4 CASELET 4 (FAILURE STORIES)

Name of the JLG group: Sita Devi group

No of members: 5

District: Deoghar,

Block: Madhupur

Sarita Devi part of Sita Devi JLG group formed and financed by ABC MFI is on her third loan cycle availing loan amount of Rs 25000/-.During one of the scheduled interview, Sarita devi who had availed the loan for tailoring previously paid back her loan amount successfully without any default. When asked about her shop and sewing machine, she said though she had issued the loan, her husband, who is a proficient tailor, migrated to Gujarat after purchasing the machine from the loan amount for better income. He does send money at regular intervals, and this is how she pays back her installments. Sarita Devi was not happy with the state of affairs although she did acknowledge the role of the loan in procuring the cash flow from her husband. Her children hardly saw their father, and she had a tough time managing the household all by herself. She was of the opinion that given a choice she would have preferred that her husband stay with her and earned the income from local sources.

Although the intended aim of microfinance is to increase the economic, social and capability well-being of borrowers, this caselet suggests that microfinance loans were used for migration. This has lead to the economic improvement of the borrowers' situation but creates other social problems. Such social problems have hitherto not been explored in the microfinance impact literature.

Variable Identified: Direct impact of Microfinance loan on promoting migration.

6.3.5 CASELET 5 (FAILURE STORIES)

Name of the JLG Group: Mahila Unati Group

Number of members: 5

District: Deoghar

Block: Sarwan

Rekha Devi part of the Mahila Unati JLG group has availed the loan for the farming purpose. It was the very first time that the group had taken a loan. Inspite of having no problem in repaying back the loan installments, members of the group are determined not to avail loans in the future as they feel the loan amount did not suffice the purpose it was meant for. The loan was availed to increase the vegetable production, which happened as they used better quality of seeds and fertilizer. However, after the production, they had problem in selling the produce, since they resided in the rural and difficult to access area of the Sarwan block. Even after making arrangements for the sale of crops, the group did not get the price which other groups, situated near the city center, could receive who too has availed the loan. Members of the group suggested that the distance from markets and buyers did form a problem. Even though different SHG groups of the village paid the same interest on the loans, the payoff from the sale of crops was not enough to increase the well-being of the group members.

This caselet again highlights the importance of the distance from city center concerning the overall impact generated by microfinance loans. This variable has not been given much attention in the academic literature. However, multiple respondents during our qualitative study suggested the importance of the variable.

Variable Identified: Distance from city center.

CHAPTER 7
PILOT STUDY

CHAPTER 7:   PILOT STUDY

7.1 OVERVIEW

The volume of literature available since the nationalization of commercial banks in 1969 highlights that various studies has been conducted, highlighting the importance and use of credit particularly in the rural areas. An empirical study on the Impact of MFIs in enhancing SHG by Radhika and Anupriya in 2011 have, in general, shown that microfinance services have a positive impact on specific Socio-economic variables such as children's schooling, household nutrition status, and women's empowerment. (Radhika & Anupriya, 2011)**.** This chapter provides specific details of the Pilot Survey, the participants, data analysis, and findings.

7.2 SAMPLING AND METHODOLOGY

A total of 75 microfinance borrowers were chosen as respondents based on ownership of BPL card and the use of either SHG/JLG loans in the four blocks within the Deoghar District. These blocks were randomly chosen which covered 9 villages.

The two groups were then administered the same questionnaire focusing on the respondents:

- ❑ Economic Well Being   (Increase in Savings, Income , Expenditure, and Migration)

- ❑ Capability Well Being (Education and Skills)

- ❑ Social Well Being (Community Status and Family Support)

All these parameters, i.e., Economic well-being, Capability well-being and Relationship well-being were monitored in the last three years.

Apart from the widely considered Economic aspects of poverty (Economic Well Being, (Citro & Michael, 1995) (MacPherson & Silburn, 1998)), recent works on poverty measurement (for ex, (Merz & Rathjen, 2014), (Wagle, 2005)) have included other well-being dimensions of Capability (Sen, 1992) (Sen, 1999)and social inclusion (Silver, Social exclusion and social solidarity: three paradigms, 1994) (Silver, 1995)

This study focuses on measuring the impact of microfinance on the social, economic and capability well-being of people living below poverty line in the Deoghar district of Jharkhand. Deoghar district consists of 10 administrative blocks as mentioned earlier. For this study, 4 blocks were randomly chosen. The study constituted of 75 respondents who had availed Microfinance loans in the last 3 years. The respondents belonged to 9 villages of Birneya, Dubjora, Raghunathpur, Basuliya, Sarpatta, Mohanpur, Badhani, Ramsagar and Ramnathpur in all 4 blocks of Deoghar District.

In order to check the internal consistency and reliability of the survey instrument, the Cronbach's alpha test for 3 constructs Economic, Capability and Social Well Being was administered. The scale item of actual saving changes in the last 3 years was removed from the study as only questions posed on a Likert scale were checked for reliability. The statistical package SPSS version 20 Release 20.0.0 was used for the analysis of results

7.3 FINDINGS AND ANALYSIS

7.3.1 Test of Reliability using Cronbach alpha test

Economic Well Being: Cronbach alpha, a measure of the reliability of the survey instrument (questionnaire), came out to be .688 based on a set of 75 respondents. This suggests sufficient reliability of the construct: Economic well-being. As the figure .688 was very close to figure of 0.7, it was considered to be reliable.

Capability Well Being: Cronbach alpha, a measure of the reliability of the survey instrument (questionnaire) came out to be .770 based on a set of 75 respondents. This suggests sufficient reliability of the construct: Capability well-being

Social Well Being: Cronbach alpha, a measure of the reliability of the survey instrument (questionnaire) came out to be .646 based on a set of 75 respondents. This suggests sufficient reliability of the construct: Social well-being.

The Cronbach's alpha for the 3 constructs: Social well-being, Economic well-being, Capability well-being suggest that the internal reliability of the scale is satisfactory.

7.3.2 Exploratory Factor Analysis

Apart from the internal validity test, the study analysis also consisted of an exploratory factor analysis. This was done to confirm whether the three constructs were being evidenced as different dimensions of microfinance impact. Exploratory Factor Analysis was done using 7 variables: FAM_SUP, SOC_STAT, IMP_MIGR, TRNG_SKL, CHG_EDUC, INC_SAV and INC_Inc. The definitions of these variables have been discussed below:

1. **Family Support (FAM_SUP):** The respondents were asked whether the SHG/JLG loan has helped to increase the support from their families for their activities. The responses were graded on a 5-point Likert Scale.

2. **Social Status (SOC_STAT):** The respondents were asked whether the SHG/JLG loan has helped to increase their status in their community. The responses were graded on a 5-point Likert Scale.

3. **Impact on Migration (IMP_MIGR):** The respondents were asked whether the loan had impacted migration in their family. The responses were graded on a 5-point Likert Scale.

4. **Training in Skills/Trades/Crafts (TRNG_SKL):** The respondents were asked whether the loan had directly/indirectly led to the respondent receiving training in Skills/Trades/Crafts. The responses were graded on a 3-point Scale: No Changes coded as 0; Incremental Changes as 1 and completely new skill training as 2.

5. **Change in Education (CHG_EDUC):** The respondents were asked whether the loan had directly/indirectly led to the respondent receiving formal education. The responses were graded on a 3-point Scale: No Changes coded as 0, Help in continuing education as 1 and completely new formal education as 2.

6. **Increase in Savings (INC_SAV):** The respondents were asked whether the SHG/JLG loan had led to an increase in savings in the last three years. The responses were graded on a Likert Scale of 5-point.

7. **Increase in Income (INC_Inc):** The respondents were asked whether the SHG/JLG loan had led to an increase in income in the last three years. The responses were graded on a Likert Scale of 5-point.

Principal Components Extraction method with Varimax rotation was used to run the test. The results of sampling adequacy and Sphericity, namely KMO and Bartlett's test are presented below:

a) *KMO and Bartlett's Test:* Before running the Exploratory factor analysis the KMO
    and Bartlett's give an indication of the usability of the collected data for the factor
    analysis. The results of KMO and Bartlett's test are presented in the Table 7.3.1
    below:

TABLE 7.3.1 KMO and Bartlett's Test Results

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy.		.628
Bartlett's Test of Sphericity	Approx. Chi-Square	51.837
	df	21
	Sig.	.000

(df-Degree of freedom)

As can be seen above, the KMO value of 0.628 suggests sufficient sample adequacy while
the Bartlett's test value of 0.000 suggests that there are no significant interrelationships
between the variables.

(b) *Total Variance Explained*: This tool helps to understand whether the factors extracted can
explain the variance in the data

TABLE 7.3.2 Total Variance Explained

Total Variance Explained									
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.084	29.770	29.770	2.084	29.770	29.770	1.541	22.012	22.012
2	1.249	17.846	47.616	1.249	17.846	47.616	1.456	20.795	42.807
3	.996	14.227	61.843	.996	14.227	61.843	1.333	19.036	61.843
4	.798	11.404	73.247						
5	.774	11.055	84.302						
6	.588	8.405	92.707						
7	.511	7.293	100.000						

Extraction Method: Principal Component Analysis.

As shown in the table above 61.843 % of total variance in the data was explained by the three extracted components/factors.

(c) The Rotated Component Matrix: In the Table 7.3.3 below, the matrix reveals that the data suggests three different dimensions. This finding agrees with the theoretical arguments regarding Economic Well- Being, Capability Well- Being and Social Well- Being. However, one variable deserves special mention (Impact on migration).Impact on migration (IMP_MIGR), in the data, aligns with social parameters of family support (FAM_SUP) and Social Status (SOC_STAT). This finding suggests that migration might have relationships with social aspects of microfinance impact as well as the theoretical intended economic well-being classification.

TABLE: 7.3.3 Rotated Component Matrix

Rotated Component Matrix[a]			
	Component		
	1	2	3
FAM_SUP	.479	.556	
SOC_STAT		.562	
IMP_MIGR		.893	
TRNG_SKL			.835
CHG_EDUC			.784
INC_SAV	.759		
INC_Inc	.737		

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

7.3.3 Mean differences within category

Apart from the Internal Reliability Analysis and Exploratory Factor Analysis, preliminary intergroup differences based on Caste, Age, and SHG/JLG were gauged on the 7 variables mentioned earlier using ANOVA/ Independent Samples t-test.

➢ *One way ANOVA for Caste:* The detail table of one way ANOVA results for Caste categories: SC, ST, and OBC is given in the *Appendix 2.*

The summary results of the tests are presented in the table below:

Table 7.3.4 Summary of ANOVA Analysis for Caste categories: SC, ST, and OBC

Sl Nbr	Variable Name	Type of Well Being	Significance
1	Increase in Family Support	Social	0.368
2	**Increase in Social Status**	**Social**	**0.084**
3	Impact on Migration	Social	0.336
4	**Increase in Training/Skill**	**Capability**	**0.094**
5	Change in Education	Capability	0.412
6	Increase in Savings	Economic	0.408
7	Increase in Income	Economic	0.525

(A significance of less than 0.1 suggests a significant difference between the various sub-categories/groups.)

The results suggest that there is a significant increase in the SOC_STAT (Social Status) and TRNG_SKL (Training Skills) of SC, ST, and OBC after availing the microfinance loan. This could be ascertained with 90% confidence level

➤ *One way ANOVA for Age:* The respondents by age has been categorized into four sub groups: 30, 31-40, 41-50 and > 50.The detailed table for the one way ANOVA results for Age categories is given in the *Appendix 3.*

The summary results of the tests are presented in the table below:

Table 7.3.5 Summary of ANOVA Analysis for Age categories: <30, 31-40, 41-50 and 51 and above

Sl Nbr	Variable Name	Type of Well Being	Significance
1	**Increase in Family Support**	**Social**	**0.000**
2	**Increase in Social Status**	**Social**	**0.044**
3	**Impact on Migration**	**Social**	**0.044**
4	Increase in Training/Skill	Capability	0.056
5	**Change in Education**	**Capability**	**0.022**
6	**Increase in Savings**	**Economic**	**0.001**
7	Increase in Income	Economic	0.836

A significance of less than 0.1 suggests a significant difference between the various sub-categories/groups.

The null hypothesis in the one way ANOVA assumes that the mean of each impact variable like family support, social status, migration etc. across the four categories of the age group, i.e., <30, 31-40, 41-50 and >50 are equal. A significant difference between at least two categories suggests that the null hypothesis is rejected. The alternate hypothesis which states that there are some differences among the mean is hence accepted.

The results suggest that the alternate hypothesis, i.e., there is differences in at least two age category in the case of six variables namely, FAM_SUP and SOC_STAT (Social Well-Being), TRNG_SKL and CHG_EDUC (Capability Well Being) and IMP_MIGR and INC_SAV (Economic Well Being) at the 90% confidence level are found based on the classification of Age Group.

➤ *Independent Sample t-test for Loan type (SHG/JLG):* In the case of loan type, this study compares the differences between the SHG borrowers and JLG borrowers. As there are only two categories in the loan type, independent sample t-test was used.

Independent Sample t-test Results for Loan Type: SHG/JLG and the detail table for the Levene's Test for Equality of Variances and t-test for Equality of Means are given in *Appendix 4* and *Appendix 5 respectively.*

7.4 RESULTS

The pilot study above throws some interesting result regarding the impact of microfinance on the socio-economic upliftment of the BPL family residing in the Deoghar district of Jharkhand .They are:

- o The overall Social Well- Being, Capability Well -Being and Economic Well - Being were not found to be significantly different between the various castes.

- o The Social, Capability and Economic Well Being were found to be significantly different among the various age groups.

- o On the basis of loan type, JLG respondents were much better off in terms of Social Capability and Reduction in migration.

- o However, the change in income was significantly higher for JLG respondents than SHG respondents. The Increase in Income in JLG (2.69) was significantly more than SHG respondents (1.68).

Some of the other significant findings of the study are:

1. Firstly, the data collected supports the theoretical proposition of the three distinct well-being dimensions namely, Economic, Social and Capability Well-being. This finding is supported by the Exploratory Factor Analysis run on the sample data.

2. Secondly, the One Way ANOVA test result for the caste category suggests that increase in social status (social well-being) and increase in training skill (capability well-being) showed significant difference between the caste category (SC, ST and OBC).

3. Thirdly, the One Way ANOVA test for the age categories suggests that increase in family support, increase in social status, impact on migration, change in education, increase in savings showed significant difference between the age category (<30,31-40,41-50 and 51 and above).

4. Finally, JLG respondents were found to be much better off in most impact dimensions as compared to SHG respondents. JLG respondents were much better off in terms of Social Capability and Reduction in migration. Also, the change in income was significantly higher for JLG respondents (2.69) than SHG respondents (1.68).

CHAPTER 8

IMPACT MEASUREMENT: SURVEY RESULTS (STUDY 2 &3)

CHAPTER 8: IMPACT MEASUREMENT: SURVEY RESULTS (STUDY 2 & 3)

8.1 OVERVIEW

The present chapter analyzes the microfinance loans impact of on a sample of respondents from the Deoghar district in Jharkhand. Data has been collected from respondents using a structured survey covering both microfinance borrowers and non-borrowers, all belonging to the BPL category according to the Jharkhand state government records. The collected data then form the basis of two connected yet distinct studies. Both the studies use the variable identified in the *study* 1 like migration, distance from the city centre, family and social support, etc. in conjunction with the impact variables identified from the review of the microfinance literatures. The brief overview of the study is presented below:

Study 2: Microfinance impact estimation using control group:

Based on the dataset of 585 respondents (consisting of 368 Microfinance borrowers and 217 non borrowers), the hypotheses identified earlier in the thesis are evaluated at an aggregate level. Also, the respondents are grouped based on Caste and Age, and the two samples (borrowers and non-borrowers) are further analyzed based on the hypotheses developed for the aggregate data.

Study 3: Microfinance Borrower analysis using grouping variables:

The data collected from 368 Microfinance borrowers is analyzed through the use of grouping variables listed below:

- Distance from the district headquarters
- Loan type SHG/JLG

- Caste

- Education

- Age Group

In this study, the focus is to extract key differences based on the sub groups within the grouping variables selected. The hypothesis of *study 2 and study 3* are discussed earlier.

8.2 RESEARCH DESIGN AND METHODOLOGY

A total of 368 microfinance borrowers were chosen as respondents based on ownership of BPL card and the use of either SHG/JLG loans in the four blocks within the Deoghar District. These blocks were randomly chosen which covered 31 villages (Details of the villages attached in *Appendix 7).*

For a control group, 217 respondents were interviewed who were not beneficiaries of microfinance loans but held BPL cards in the same set of villages.

The two groups were then administered the same questionnaire focusing on the respondents:

❑ Economic Well Being (Increase in Savings, Income , Expenditure, and Migration)

❑ Capability Well Being (Education and Skills)

❑ Social Well Being (Community Status and Family Support)

All these parameters, i.e., Economic Well Being, Capability Well Being and Social Well Being were recorded based on the experiences of the respondents in the last three years irrespective of whether the respondent had taken a loan or not.

The creation of a control group serves many purposes. *Primarily*, the control group findings give a basis for the comparison of impact on well-being components between microfinance and non-microfinance borrowers. *Secondly*, the control groups acts as a validation of the scale of data collected (for example savings, income, etc) in the region selected.Finally, it aids in the use of more robust statistical tests to analyze the data.

As far as possible the economic data were validated by reviewing saving's data with MFIs/Bank. The income data was collected both at an aggregate level as well as a component level for ex. Income from agriculture, income from livestock, trade income, etc. The summing then verified the consolidated income up to the component level incomes reported by the respondents.

Apart from the impact data, various demographic variables like Age, Caste, Distance from City Center, etc. were collected. These demographic variables help by acting as grouping variables in the later portions of the studies.

8.3 TAXONOMY AND DETAILS OF DATA

As mentioned earlier, the data collected was categorized into either an Impact Variable or a Grouping variable. Even though the taxonomy and the details of the data was discussed in the last chapter, it is represented here for reference.

Impact Variables

The impact variable measures the impact of the microfinance loan for borrowers across social, economic and capability well-being. All the impact variables used in the present research are listed below.

1. **Family Support (FAM_SUP):** The respondents were asked whether the SHG/JLG loan helped increase the support from their families for their activities. The responses were graded on a 5-point Likert Scale.

2. **Social Status (SOC_STAT):** The respondents were asked whether the SHG/JLG loan helped increase their status in their community. The responses were graded on a 5-point Likert Scale.

3. **Impact on Migration (IMP_MIGR):** The respondents were asked whether the loan had impacted migration in their family. The responses were graded on a Likert Scale of 5-point.

4. **Training in Skills/Trades/Crafts (TRNG_SKL):** The respondents were asked whether the loan had directly/indirectly led to the respondent receiving training in Skills/Trades/Crafts. The responses were graded on a 3-point Scale: No Changes coded as 0; Incremental Changes as 1 and completely new skill training as 2.

5. **Change in Education (CHG_EDUC):** The respondents were asked whether the loan had directly/indirectly led to the respondent receiving formal education. The responses were graded on a 3-point Scale : No Changes coded as 0, Help in continuing education as 1 and completely new formal education as 2.

6. **Increase in Savings (INC_SAV):** The respondents were asked whether the SHG/JLG loan had led to an increase in savings in the last three years. The responses were graded on Likert Scale a 5-point.

7. **Actual Savings Differential (SAV_DIFF):** Apart from asking whether the respondents thought their savings had increased, the respondents were also asked detailed questions about their savings figures across cash, bank balances, investments, etc. to find whether there were changes in their savings balances across the last three

years. The difference between current savings and the savings three years ago was recorded in the variable Actual Savings Differential.

8. **Increase in Income (INC_Inc):** The respondents were asked whether the SHG/JLG loan had led to an increase in income in the last three years. The responses were graded on a Likert Scale of 5-point.

Grouping Variables

Apart from measuring the impact at an aggregate level, the below mentioned grouping variables were used to categories the data into meaningful subsets/category. These subsets were then compared with each other to gain a more granular understanding of the differences between various subsets like the impact variable like family support, migration, etc. were compared across various age group categories.

1. **Loan Type**: SHG or JLG

2. **Distance from District headquarters**: The geographical distance of the villages from the Deoghar district headquarters were calculated while travelling to these villages during the data collection phase.

3. **Age of Borrower**: The actual ages of the respondents were classified into four categories: <30 years, 30-40 years, 40-50 years and >50 years.

4. **Caste of Borrower**: divided into four categories Scheduled Caste, Scheduled Tribes, Other Backward Categories and General Category.

5. **Loan Cycle**: The current loan cycles of the borrowers were recorded.

6. **Education Level**: The borrowers current education level was recorded and classified into five categories: Illiterate, Less than Class 10, High School, Graduate and Post Graduates.

The details of the data collected are presented below and are classified based on the microfinance borrower and microfinance non-borrower group.

8.4 DETAILS OF MICROFINANCE BORROWER GROUP

A total of 368 responses have been collected across four blocks (Deoghar, Devipur, Madhupur, and Sarwan) in Deoghar district of Jharkhand. The four blocks were randomly selected from the total 10 blocks in the district. The geographical map of the Deoghar district is given below.

Figure: 8.4.1 Map of Deoghar District

The details of the data are given below:

8.4.1 Details of survey data

(a) Block: The block level number of responses in tabular form is

presented in the ***Appendix 6***

The percentage values are depicted in the pie chart below

Figure: 8.4.2. Pie Chart- Percentage of Borrower Group respondents (Block)
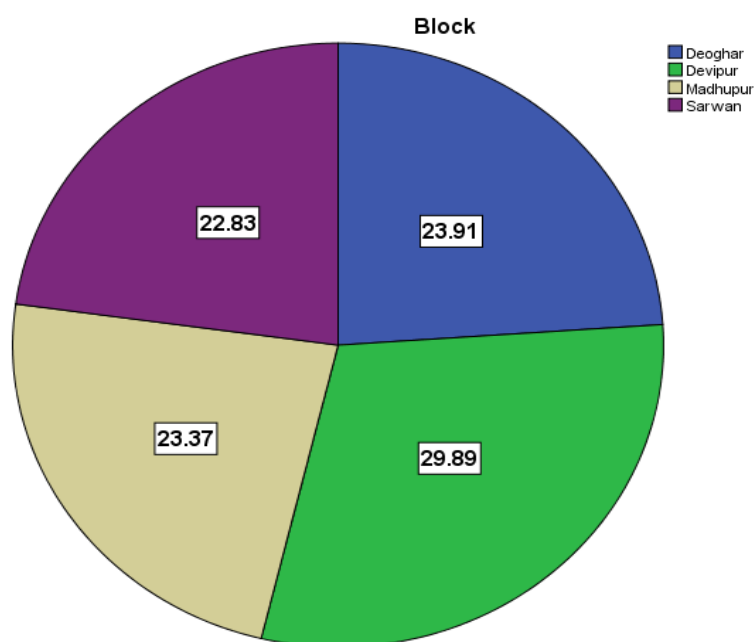
The chart above shows that the overall the data has a fair representation of each of the four blocks with devipur having the maximum percentage, i.e., 29.89 percentages.

(b) Villages: The details of the names of the villages and the number of responses taken are given in ***Appendix 7***

(c) Other Categories: The breakup of microfinance borrower data based on various demographic variables like distance from the district headquarter, loan types, caste, age group, education, and loan cycle are presented below.

➢ Distance from District Headquarter: In order to identify the difference in the impact of microfinance in urban, semi-urban and rural locations, the distance of the area of study from the district head-quarters were recorded.

District head quarter: Deoghar

Urban Area: Deoghar Block

Semi Urban Area: Devipur and Madhupur

Rural Area: Sarwan

The number of responses classified on distance from district headquarters in detail is presented in tabular form in *Appendix 8.*

The percentage values are depicted in the pie chart below.

Figure: 8.4.3: Pie Chart- Percentage of Borrower Group respondents (Distance from the District headquarter)
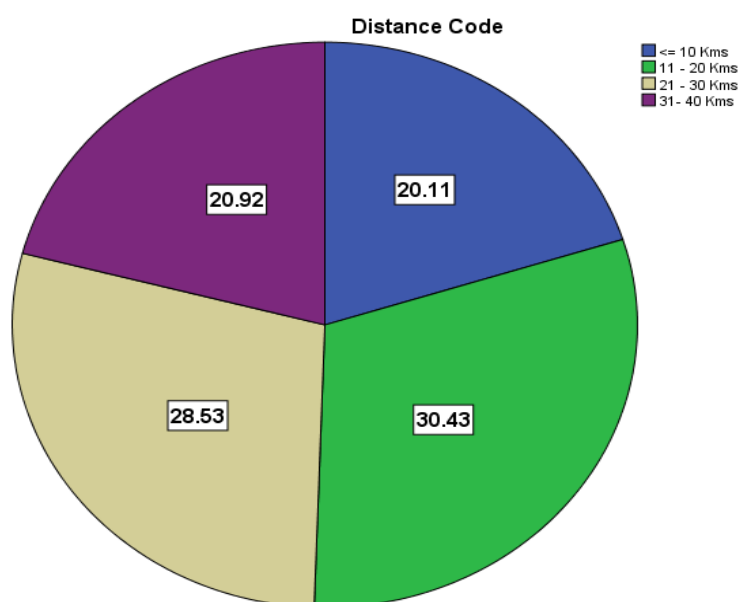
The Pie chart above shows that the although there is fair representation of all the four categories of the distance, the maximum respondents were the one residing between 11-20 Km from the district headquarter (Deoghar).

> ➢ Loan Type: The number of responses from the SHG groups was more than that of the JLG. The details of the classifications are given in Tabular form in *Appendix 9.*

The percentage values are depicted in the pie chart below:

Figure 8.4.4: Pie Chart- Percentage of Borrower Group respondents (Loan Type)
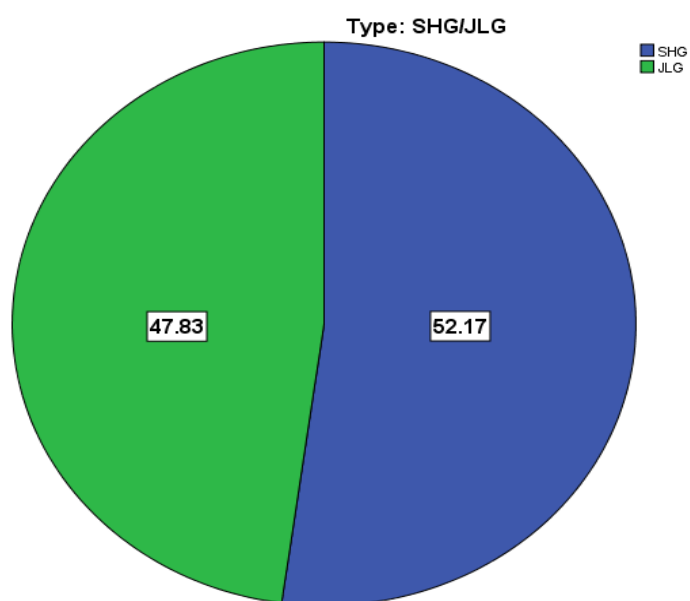
The chart above shows that 52.17 percent of the respondents were the one who was part of SHG groups while 47.83 percent belonged to the JLG groups.

➢ Caste: The number of responses classified by Caste is presented in the tabular form in the ***Appendix 10.*** The respondents were divided into three caste categories SC, ST and OBC. The percentage values are presented in the pie chart below:

Figure 8.4.5: Pie Chart- Percentage of Borrower Group respondents (Caste category)
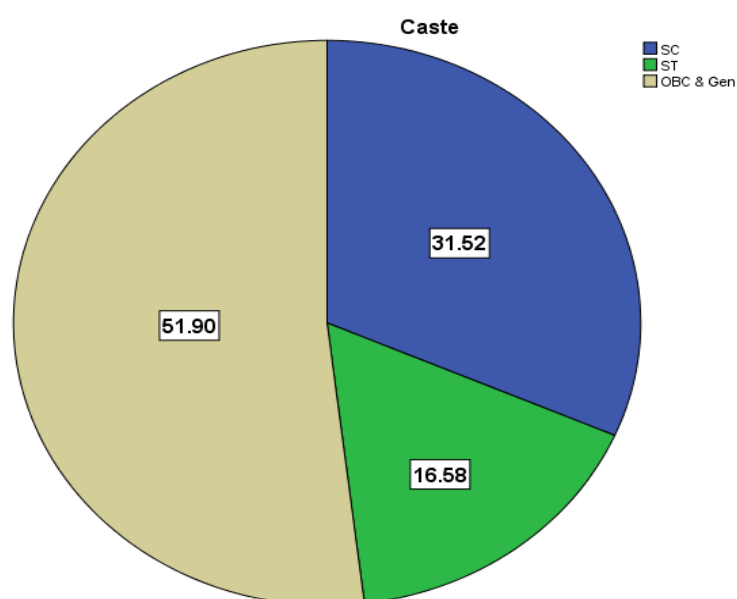
The pies chart above shows that 51.90 percent of the respondents i.e. the maximum count belonged to OBC caste. 31.52 percent of the respondents belonged to SC and 16.58 percent of the respondents were from ST caste. The stated castes were verified with the records of MFI's and NGO's who were involved with the functioning and nurturing of these groups.

➢ Age Group: The maximum responses were from the age group 31-40 years. Although the other age groups also had a significant representation. The details are given in the tabular form in *Appendix 11.* The percentage values are presented in the pie chart below:

Figure 8.4.6: Pie Chart- Percentage of Borrower Group respondents (Age Group)
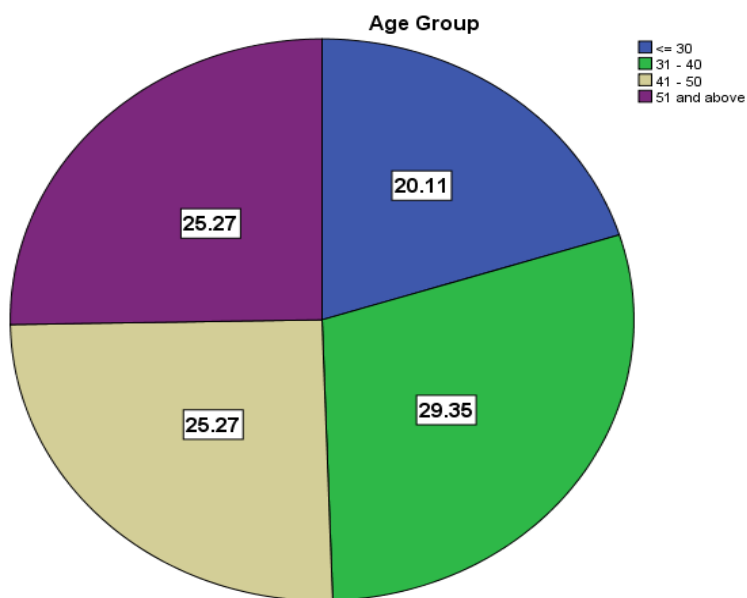
The pie chart above shows there is a fair representation of the entire age category however, the maximum respondents (29.35) belonged to age category 31-40 years.

➢ Education: The number of respondent having educational qualification less than class Xth were 226, Further details are given in the tabular form in *Appendix 12..*The percentage values are presented in the chart below:

Figure 8.4.7: Pie Chart- Percentage of Borrower Group respondents (Education level)
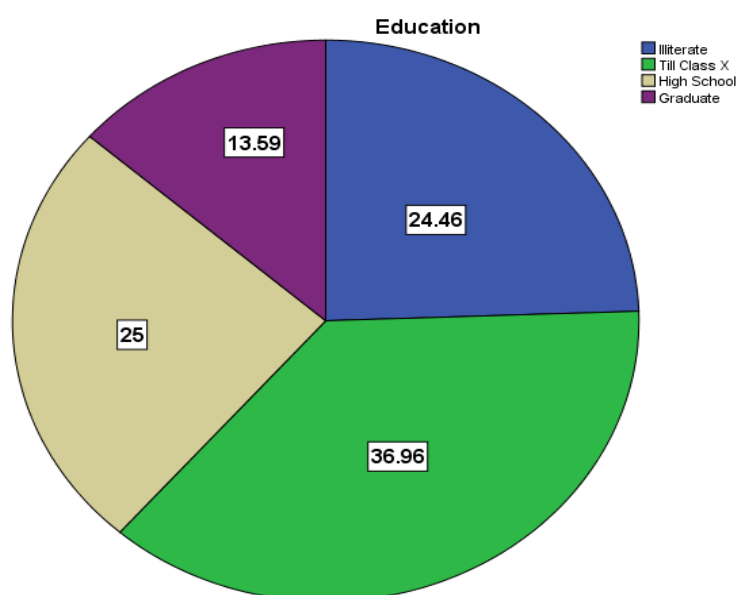
The pie chart above shows that the education level of the respondents, 24.46 percent of the borrowers were illiterate while the maximum number of the respondents was educated till Xth class.

➢

> ➤ Loan Cycle: The Table below shows the number of times the respondents have availed the loan amount. Here it must be noted that the data includes both SHG and JLG borrowers. As shown in the pie chart below the maximum respondents are the one who have borrowed money for the first time. The Tabular form for the same is given in *Appendix 13.*

Figure 8.4.8: Pie Chart- Percentage of Borrower Group respondents (Loan Cycle)
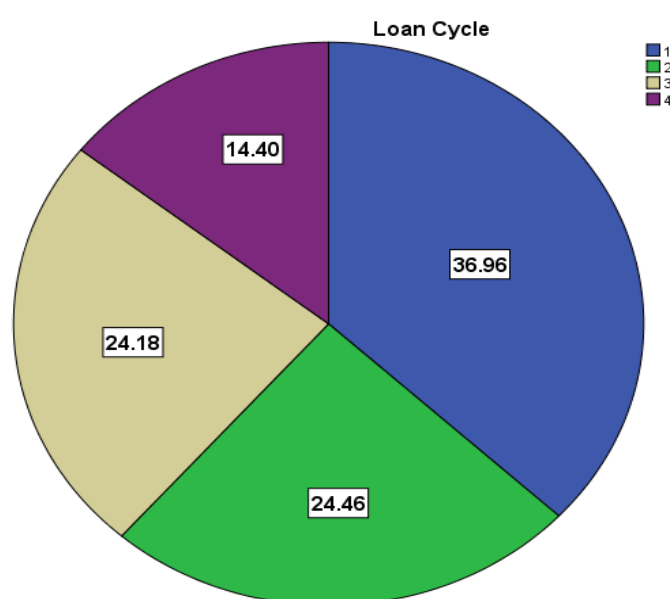
As the pie chart above suggests maximum respondents (36.96 percent) were still in their first cycle of followed by loan cycle 2&3.

8.5 DETAILS OF MICROFINANCE NON-BORROWER GROUP (CONTROL GROUP)

A total of 217 responses have been collected across four blocks (Deoghar, Devipur, Madhupur, and Sarwan) in Deoghar district of Jharkhand. These respondents are the one who were not the microfinance borrowers. The data was collected from the same set of the villages of the block from where the microfinance borrowers' data was collected.

A maximum number of respondents, i.e. 64 were from the Devipur block although Deoghar Madhupur and Sarwan had significant representations. The details of the data are given in *Appendix 14* in tabular form.

The percentage values are depicted in the pie chart below:

Figure 8.5.1: Pie Chart- Percentage of Non-Borrower Group respondents (Block)
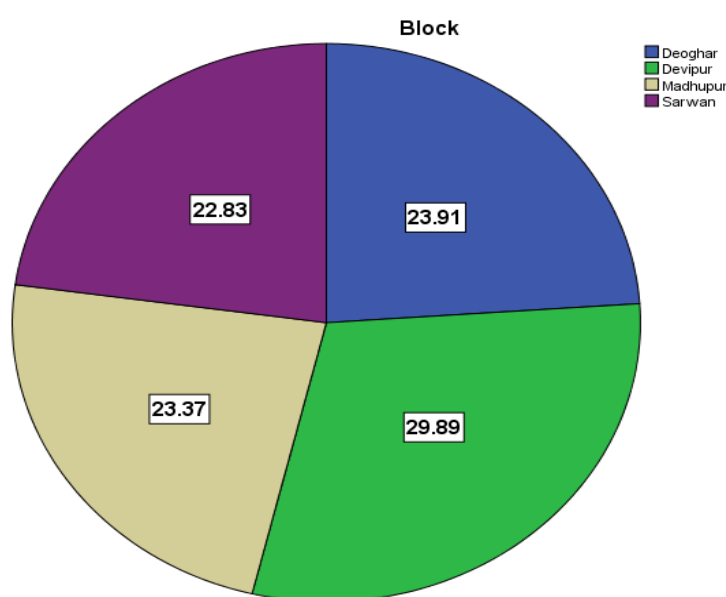
The details of the names of the villages (total number: 29) and the number of responses taken are given in *Appendix 15.*

The breakup of Microfinance non-borrower data based on various demographic variables like Distance from the city centre, caste, age group, education levels are presented below:

➤ Distance from District Headquarters:

To identify the difference in the economic, social and capability change were recorded in urban, semi-urban and rural locations, the distance of the area of study from the district headquarters were recorded.

District head quarter: Deoghar

Urban Area: Deoghar Block

Semi Urban Area: Devipur and Madhupur

Rural Area: Sarwan

The number of responses classified on distance from district headquarters is presented in

➢ Distance Code

Appendix 16 shows the distance of the respondents' village from the District headquarters which is Deoghar. As shown in the table maximum respondents i.e. 70 were residing between 21-30 Km from Deoghar district .The detailed table for the same is given in *Appendix 16*

The percentage values are depicted in the pie chart below.

Figure 8.5.2: Pie Chart- Percentage of Non Borrower Group respondents (Distance Code)
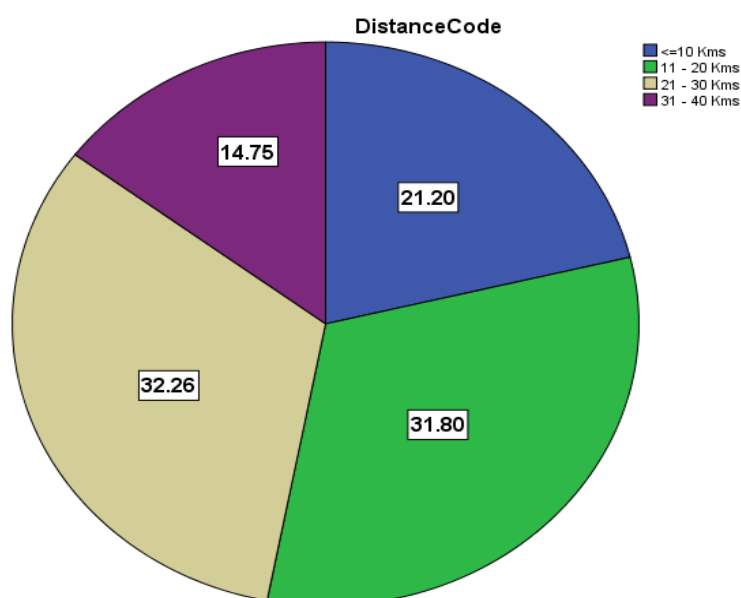
The pie chart above shows that the maximum respondents in the non-borrower category were the one residing between 21-30 km (32.26 percent)

➢ Caste:

The number of responses classified by Caste is presented in detail in tabular form in *Appendix 17.* The percentage values are presented in the pie chart below:

Figure 8.5.3: Pie Chart- Percentage of Non-Borrower Group respondents (Caste)
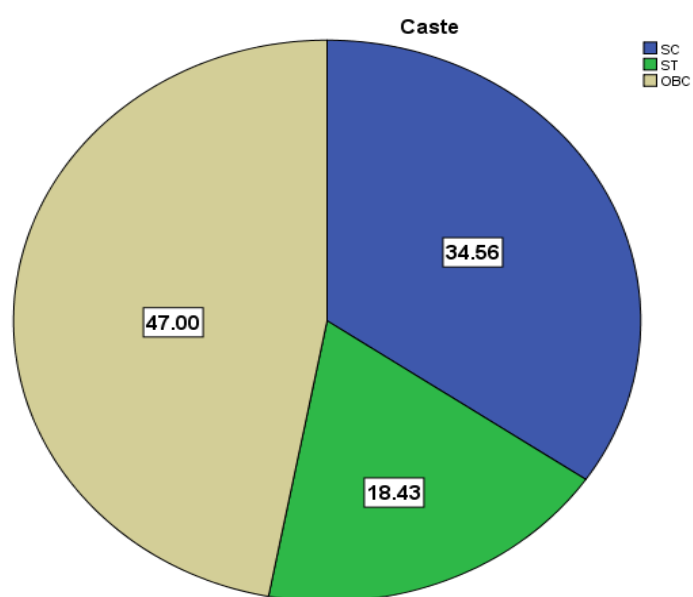
The pie chart above shows that the OBC caste the maximum respondents were from the non-borrower category i.e. 47 percent.

115

➢ Age Group:

The maximum responses were from the age group 31-40 years., although the other age groups also had a significant representation. The details are given in *Appendix 18* in tabular form

The percentage values are presented in the pie chart below:

Figure 8.5.4: Pie Chart- Percentage of Non-Borrower Group respondents (Age Group)
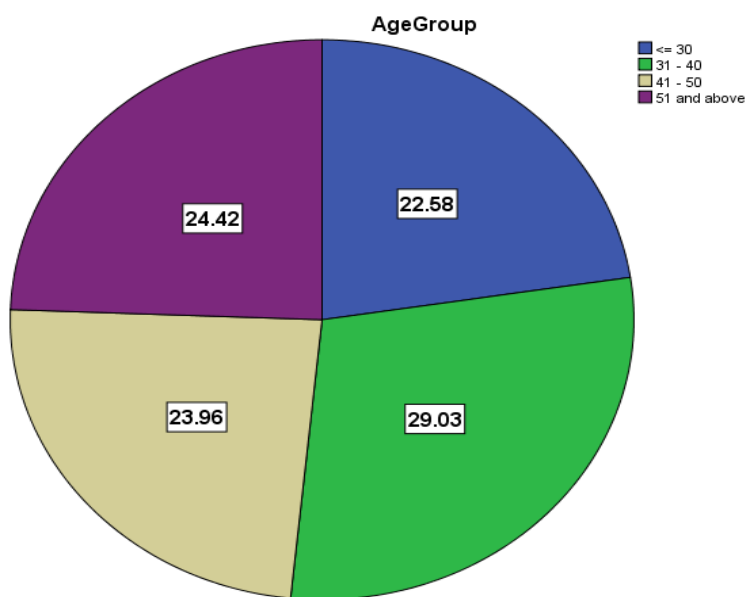
In the age category the chart above suggests that maximum non borrower respondents belonged to age group 31-40 years.

> Education Level:

The number of respondent having educational qualification less than class Xth were 131;

Further details are given in *Appendix 19* in tabular form

The percentage values are presented in the chart below:

Figure 8.5.5: Pie Chart- Percentage of Non-Borrower Group respondents (Education Level)
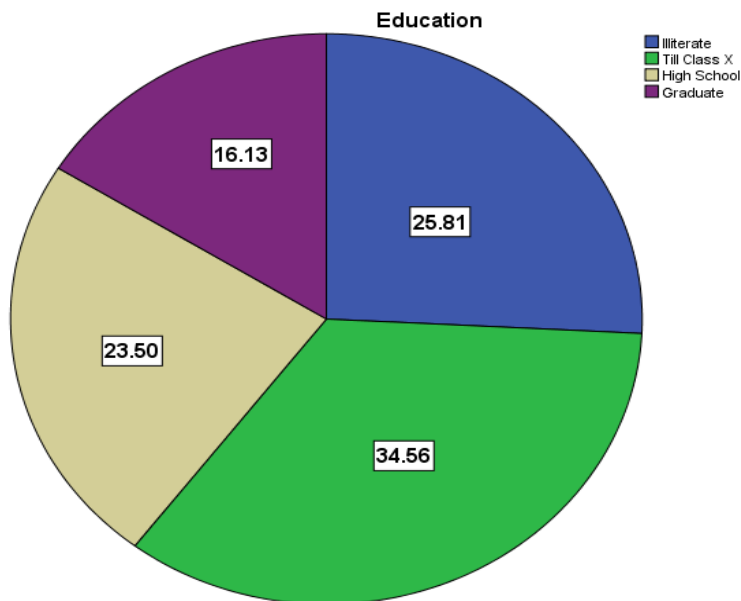
Education wise about 25.81 percent of the non-borrower respondents were illiterate whiles the maximum respondent i.e. 34.56 percent of the control group respondents were having educational qualification till class Xth.

Apart from the above detailed descriptive statistics, the anticipated and actual use of the funds by the microfinance borrowers is presented below:

> *Planned and Actual Use of the Fund*

The Planned use refers to the intended use of the fund at the time of borrowing, as shown in the data below out of the total data of 602 the maximum respondents had taken loan for agriculture purpose (517) which included buying equipment for pumping, threshing, ploughing, etc.

However, the other table shows that out of 517 only 453 had used the fund for agriculture as intended.

Table 8.5.1: Type of Planned Use of the Fund by the borrower group

Type of Planned Use	
Enterprise	53
Agriculture	517
Education	2
Health	17
Other Income Generating Purpose	6
Other Consumption purpose	5
Marriage	2
Total	**602**

Table 8.5.2: Type of Actual Use of the Fund by the borrow group

Type of Actual Use	
Enterprise	36
Agriculture	453
Education	7
Health	23
Other Income Generating Purpose	6
Other Consumption purpose	38
Marriage	39
Total	**602**

Figure 8.5.6: Pie Chart: Planned Use of Credit Funds by the borrower groups

118
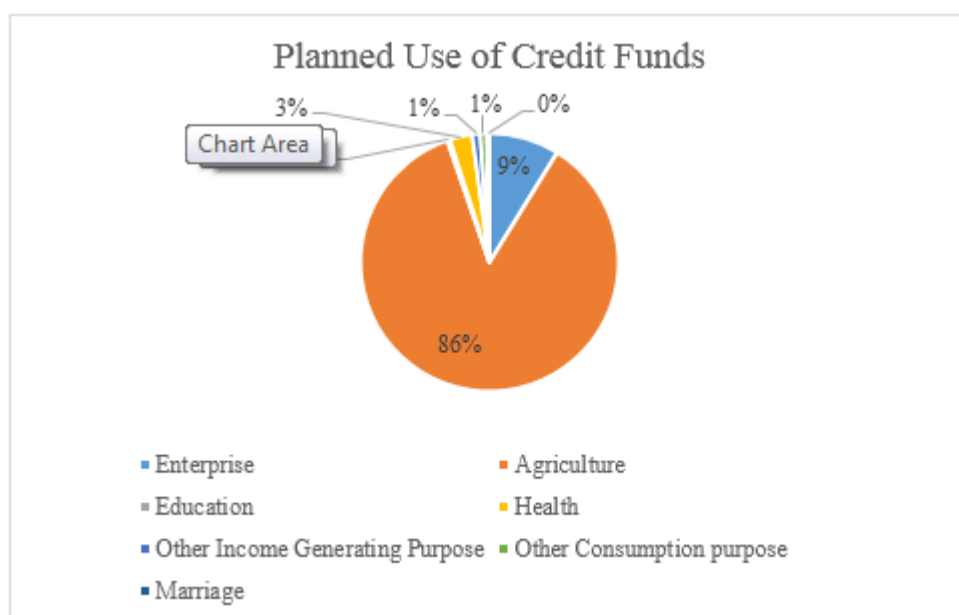
Figure 8.5.7: Pie Chart: Actual Use of Credit Funds by the borrower groups
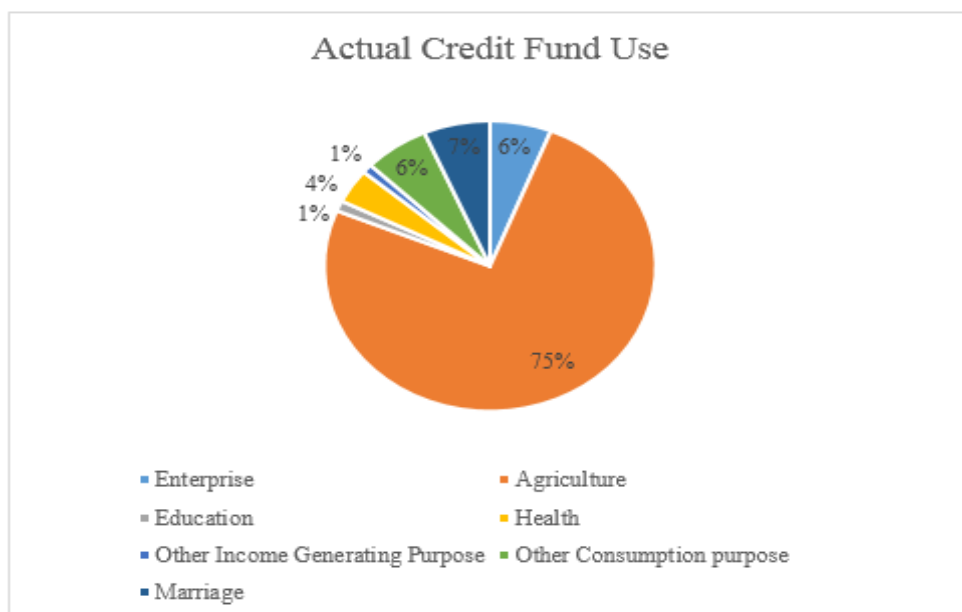
Table 8.5.3 Planned Use - Block wise breakup for the borrower groups

	Deoghar	Devipur	Madhupur	Sarwan
Enterprise	23	16	7	7
Agriculture	105	164	119	129
Education	0	0	2	0
Health	4	0	13	0
Other Income Generating Purpose	2	4	0	0
Other Consumption purpose	0	0	0	5
Marriage	0	0	2	0
Total	**134**	**184**	**143**	**141**

Table 8.5.4 Actual Use - Block wise breakup by the borrower groups

Actual Use - Block wise breakup				
	Deoghar	Devipur	Madhupur	Sarwan
Enterprise	14	16	3	3
Agriculture	90	145	117	101
Education	5	0	2	0
Health	6	2	11	4
Other Income Generating Purpose	2	4	0	0
Other Consumption purpose	0	10	2	26
Marriage	17	6	10	6

Totals	134	183	145	140

> Income Generating vs. Non Income Generating Actual Use

Table 8.5.5 Income generating vs. Non Income generating use of the fund by the borrower groups

Type of Actual Use	
Income Generating Use	495
Non Income Generating Use	107
Total	**602**

TABLE 8.5.6: Income generating vs. Non Income generating Actual use of the fund by the borrower groups

Actual Use - Block wise breakup					
	Deoghar	Devipur	Madhupur	Sarwan	Totals
Income Generating Use	106	165	120	104	**495**
Non Income Generating Use	28	18	25	36	**107**
Totals	**134**	**183**	**145**	**140**	**602**

8.6 DETAILS OF STATISTICAL TESTS APPLIED

One way ANOVA test was used in conjunction with Post Hoc Analysis for the grouping variables with more than two categories. For grouping variables with two categories, the analysis was done using Independent Sample t-test to ascertain whether the group means were significantly different from other groups.

The diagram below suggests the steps and the methods used for Post Hoc Analysis during the ANOVA testing.

Figure 8.6.1 Steps Used for One-Way ANOVA Analysis

Steps Used for One-Way ANOVA Analysis
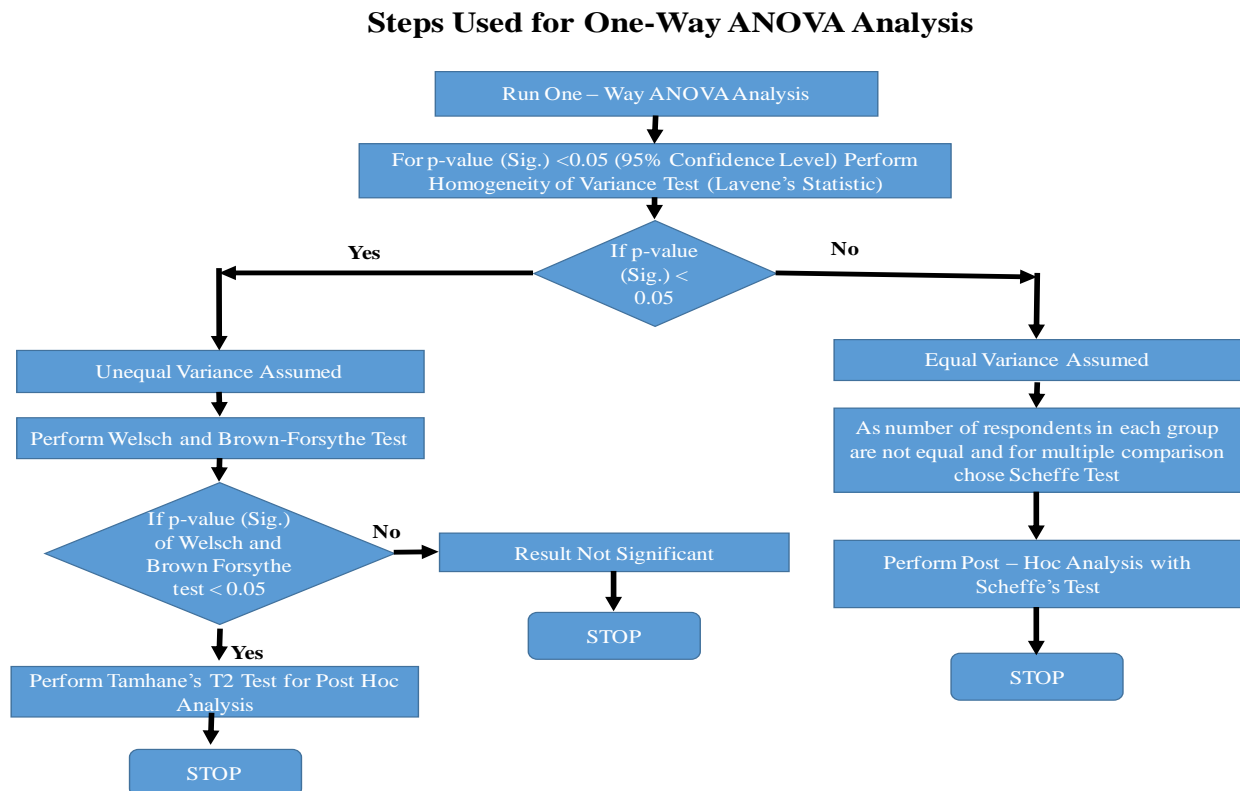
Source: Developed by the Researcher

8.7 STUDY 2 FINDINGS (CONTROL GROUP STUDY)

Study 2 deals with the comparison of 368 respondents group from the Microfinance Borrower category with the 217 respondents group belonging to the Non-Microfinance Borrower group. The first analysis directly compares impact variables between the two groups (borrowers vs. non- borrowers). An independent sample t-test is employed to find whether there is a significant difference between the two groups across eight impact variables covering Economic, Social and Capability Well-being.

The block wise descriptive statistics of respondents from Borrower and non-Borrower groups are presented first. This is followed by the comparison of results between Borrower and Non Borrower groups across all blocks.

This section discusses the block-wise comparison of descriptive as well as impact variables across the four Deoghar blocks studied.

TABLE: 8.7.1: Comparison of Results between Borrower and Non borrowers

Comparison of results between Loanees and Non Loanees (Control Group)										
Sample	Loanee?	N	Increase in support from Family (Mean)	Increase in Community Status (Mean)	Decrease in Migration (Mean)	Trained in Skill/Craft (Mean)	Increase in formal Education/training (Mean)	Increase in Savings (Mean)	Total Savings Change (Mean)	Increase in Income (Mean)
Total	Microfinance Loanee	368	2.54	2.81	2.05	.57	.29	2.46	3790.08	2.64
	Non Loanee	217	2.25	2.40	1.86	.48	.30	2.26	3257.25	2.29
	Significance		.001	.000	.009	.123	.838	.043	.026	.001

The table above displays the difference among the mean for the eight impact variables like an increase in income, increase in saving, decrease in migration, increase in family support, increase in community status etc. between the microfinance borrowers and non borrowers (control group).

Migration: The result of the decrease in migration in the Table 8.7.1 merits more explanation here. Although there was a significant difference (0.009) between borrowers and non-

borrowers groups, both the values (2.05 and 1.86) were found to be less than 2.5 (the mean of the likrate scale).This suggests that the borrower group is only marginally better in their decrease in migration in the last 3 years than the non-borrower group. However the results reported later in the study suggest that some borrowers used loan amount to aid migration in their family. These two findings suggest that microfinance loans can have dual impact with respect to migration. In some cases, it might act as a source aiding migration while in others it might lead to better economic well-being in their place of residence.

Increase in Community Status: To illustrate the latent understanding from the analysis of Table 8.7.1, increase in community status is briefly discussed below*:*

The analysis shows that there is a significant difference (0.000) between the borrower group (mean 2.81) and the non-borrower group (mean 2.40).As the mean for the borrower group is also above the mean of the Likert scale, it can be derived that the borrower group had better increase in community status in the last three years compared to the non-borrower groups. This increase in Community status can lead to enhanced social well-being.

A similar analysis was applied to all the 8 impact variables and their implication for the hypothesis discussed earlier is presented in the tables below.

The findings above suggest the following for our stated hypotheses:

TABLE 8.7.2: Hypotheses Testing: Borrower and Non Borrower

Srl Nbr	Hypotheses	Well-Being Category	Supported?
1	The use of Microfinance loans has led to an increase in the income of the respondents.	Economic	**Supported**
2a	The use of Microfinance loans has led to an increase in the savings of the respondents. (Likert Scale)	Economic	**Supported**
2b	The use of Microfinance loans has led to an increase in the savings of the respondents. (Savings Actual)	Economic	**Supported**
3	The use of Microfinance loans has led to a decrease in the migration of the respondents.	Economic	**Supported**
4	The use of Microfinance loans has led to an increase in the educational qualifications/ vocational training of the respondents.	Capability	Not Supported
5	The use of Microfinance loans has led to an increase in the working understanding of skill/trades/crafts by the respondents.	Capability	Not Supported
6	The use of Microfinance loans has led to an increase in the social status enjoyed by the respondents.	Social	**Supported**
7	The use of Microfinance loans has led to an increase in the status enjoyed by the respondents in the family.	Social	**Supported**

The above analysis suggests that the Economic and Social Well Being Impact variables have significant difference between the microfinance borrowers and the control group at 95% confidence level.

As an addition to the analysis on the overall respondents' data, the data was further classified based on caste and age group, and the findings are presented below.

8.7.1 Findings based on Caste:

The data were classified into the categories of Scheduled Caste (SC), Scheduled Tribe (ST) and Other Backward Classes (OBC). The data from each category of microfinance borrowers was then compared with the same category in the control group. The results are as follows:

TABLE 8.7.3: Comparison of results between Borrower and Non Borrower Groups (Control Group) based on Caste

Caste	Loanee?	N	Increase in support from Family (Mean)	Increase in Community Status (Mean)	Decrease in Migration (Mean)	Trained in Skill/Craft (Mean)	Increase in formal Education/training (Mean)	Increase in Savings (Mean)	Total Savings Change (Mean)	Increase in Income (Mean)
	Comparison of results between Loanees and Non Loanees (Control Group) based on Caste									
SC	Microfinance Loanee	116	2.50	**2.47**	2.08	.64	.35	2.34	3578.15	**2.50**
	Non Loanee	75	2.33	**2.11**	1.97	.53	.37	2.32	3262.73	**2.13**
	Significance		.313	**.032**	.356	.279	.782	.922	.423	**.044**
ST	Microfinance Loanee	61	**2.64**	**2.49**	**1.80**	.43	.25	2.72	3331.90	2.10
	Non Loanee	40	**2.10**	**1.95**	**1.50**	.35	.23	2.40	3071.20	1.93
	Significance		**.013**	**.030**	**.039**	.545	.848	.268	.675	.464
OBC	Microfinance Loanee	191	**2.53**	**3.12**	2.11	.57	.27	**2.45**	**4065.13**	**2.91**
	Non Loanee	102	**2.25**	**2.79**	1.91	.49	.27	**2.16**	**3326.18**	**2.56**
	Significance		**.018**	**.043**	.090	.353	.903	**.026**	**.031**	**.017**

The analysis is classified on each category of Caste group below.

> Scheduled Castes (SC): The findings above suggest the following for the stated hypotheses:

TABLE 8.7.4: Hypothesis Testing: Borrower and Non Borrower Groups (SC Caste)

Srl Nbr	Hypotheses	Well-Being Category	Supported?
1	The use of Microfinance loans has led to an increase in the income of the respondents.	Economic	**Supported**
2a	The use of Microfinance loans has led to an increase in the savings of the respondents. (Likert Scale)	Economic	Not Supported
2b	The use of Microfinance loans has led to an increase in the savings of the respondents. (Savings Actual)	Economic	Not Supported
3	The use of Microfinance loans has led to a decrease in the migration of the respondents.	Economic	Not Supported
4	The use of Microfinance loans has led to an increase in the educational qualifications/ vocational training of the respondents.	Capability	Not Supported
5	The use of Microfinance loans has led to an increase in the working understanding of skill/trades/crafts by the respondents.	Capability	Not Supported
6	The use of Microfinance loans has led to an increase in the social status enjoyed by the respondents.	Social	**Supported**
7	The use of Microfinance loans has led to an increase in the status enjoyed by the respondents in the family.	Social	Not Supported

The analysis suggests that only 2 out of the 7 hypotheses are supported for SC respondents based on the data. The supported hypotheses are Social/Community status and Increase in

Income. The analysis on the SC group suggests that overall there was less impact when compared to the overall impact variables analyzed before.

➢ Scheduled Tribes (ST):

The findings above suggest the following for our stated hypotheses:

TABLE 8.7.5: Hypothesis Testing: Borrower and Non Borrower Groups (ST Caste)

Srl Nbr	Hypotheses	Well-Being Category	Supported?
1	The use of Microfinance loans has led to an increase in the income of the respondents.	Economic	Not Supported
2a	The use of Microfinance loans has led to an increase in the savings of the respondents. (Likert Scale)	Economic	Not Supported
2b	The use of Microfinance loans has led to an increase in the savings of the respondents. (Savings Actual)	Economic	Not Supported
3	The use of Microfinance loans has led to a decrease in the migration of the respondents.	Economic	**Supported**
4	The use of Microfinance loans has led to an increase in the educational qualifications/ vocational training of the respondents.	Capability	Not Supported
5	The use of Microfinance loans has led to an increase in the working understanding of skill/trades/crafts by the respondents.	Capability	Not Supported
6	The use of Microfinance loans has led to an increase in the social status enjoyed by the respondents.	Social	**Supported**
7	The use of Microfinance loans has led to an increase in the status enjoyed by the respondents in the familty.	Social	**Supported**

The analysis suggests that only 3 out of the 7 hypotheses are supported for ST respondents based on the data. The supported hypotheses are Social/Community status, Family status and Decrease in Migration. The analysis on the ST group suggests that overall there was less impact when compared to the overall impact variables analyzed before.

➢ Other Backward Castes (OBC)

The findings above suggest the following for our stated hypotheses:

TABLE 8.7.6: Hypotheses Testing: Borrower and Non Borrower Groups (OBC Caste)

Srl Nbr	Hypotheses	Well-Being Category	Supported?
1	The use of Microfinance loans has led to an increase in the income of the respondents.	Economic	**Supported**
2a	The use of Microfinance loans has led to an increase in the savings of the respondents. (Likert Scale)	Economic	**Supported**
2b	The use of Microfinance loans has led to an increase in the savings of the respondents. (Savings Actual)	Economic	**Supported**
3	The use of Microfinance loans has led to a decrease in the migration of the respondents.	Economic	Not Supported
4	The use of Microfinance loans has led to an increase in the educational qualifications/ vocational training of the respondents.	Capability	Not Supported
5	The use of Microfinance loans has led to an increase in the working understanding of skill/trades/crafts by the respondents.	Capability	Not Supported
6	The use of Microfinance loans has led to an increase in the social status enjoyed by the respondents.	Social	**Supported**
7	The use of Microfinance loans has led to an increase in the status enjoyed by the respondents in the familty.	Social	**Supported**

This study suggests that 5 out of 7 hypotheses are supported for OBC respondents. The Economic and Social Well Being impact aspects are significantly different from those of the control group categories (except for Impact on Migration).

8.7.2 Findings based on Age Group:

The data was classified into the categories of <=30 years (Microfinance Borrowers : 74, Non Borrowers: 49), 31-40 years (Microfinance Borrowers : 108, Non Borrowers: 62), 41-50 years (Microfinance Borrowers : 93, Non Borrowers: 52) and >50 years (Microfinance Borrowers : 93, Non Borrowers: 53). The data from each category of Microfinance borrowers was then compared with the same category in the control group. The results are as follows:

TABLE 8.7.7: Comparison of Results between Borrower and Non Borrower (Control Group) based on Age

Comparison of results between Loanees and Non Loanees (Control Group) based on Age

Age Group	Loanee?	N	Increase in support from Family (Mean)	Increase in Community Status (Mean)	Decrease in Migration (Mean)	Trained in Skill/Craft (Mean)	Increase in formal Education/training (Mean)	Increase in Savings (Mean)	Total Savings Change (Mean)	Increase in Income (Mean)
<=30	Microfinance Loanee	74	**2.80**	**3.53**	**2.14**	.64	.41	2.96	3350.88	**2.51**
	Non Loanee	49	**2.35**	**2.71**	**1.71**	.55	.39	2.57	2914.59	**2.12**
	Significance		**.028**	**.001**	**.010**	.511	.874	.086	.336	**.040**
31-40	Microfinance Loanee	108	**2.82**	2.79	2.07	.56	.23	2.88	3700.37	**2.55**
	Non Loanee	62	**2.43**	2.52	1.94	.41	.24	2.79	3229.21	**2.16**
	Significance		**.020**	.212	.296	.169	.928	.627	.189	.032
41-50	Microfinance Loanee	93	2.30	2.58	2.14	.66	.33	2.01	3977.81	**2.70**
	Non Loanee	52	2.06	2.21	2.00	.56	.29	1.88	3514.19	**2.25**
	Significance		.104	.072	.332	.389	.604	.394	.333	**.036**
51 and above	Microfinance Loanee	93	2.24	2.49	1.86	.43	.23	2.01	4056.02	2.81
	Non Loanee	53	2.13	2.15	1.75	.42	.30	1.70	3355.28	2.66
	Significance		.554	.080	.499	.883	.326	.070	.261	.548

The analysis presented in the Table 8.7.7 above shows that there is a significant difference between the mean of the impact variable, increase in support from family,(for age group <=30 and 31-40) increase in community status(only for the age group <=30), decrease in migration (only for the age group <=30).

The analysis is classified on each category of Age group below.

➢ <=30 years

The findings above suggest the following for the stated hypotheses:

TABLE 8.7.8: Hypotheses Testing: Borrower and Non Borrower Groups (<=30 years)

Srl Nbr	Hypotheses	Well-Being Category	Supported?
1	The use of Microfinance loans has led to an increase in the income of the respondents.	Economic	**Supported**
2a	The use of Microfinance loans has led to an increase in the savings of the respondents. (Likert Scale)	Economic	Not Supported
2b	The use of Microfinance loans has led to an increase in the savings of the respondents. (Savings Actual)	Economic	Not Supported
3	The use of Microfinance loans has led to a decrease in the migration of the respondents.	Economic	**Supported**
4	The use of Microfinance loans has led to an increase in the educational qualifications/ vocational training of the respondents.	Capability	Not Supported
5	The use of Microfinance loans has led to an increase in the working understanding of skill/trades/crafts by the respondents.	Capability	Not Supported
6	The use of Microfinance loans has led to an increase in the social status enjoyed by the respondents.	Social	**Supported**
7	The use of Microfinance loans has led to an increase in the status enjoyed by the respondents in the familty.	Social	**Supported**

The analysis suggests that only 4 out of the 7 hypotheses are supported for <=30 respondents based on the data. The supported hypotheses are Social/Community status, Family status, Decrease in Migration and Increase in Income. The analysis of the <=30 category suggests that overall there was less impact when compared to the overall impact variables analyzed before.

The findings above suggest the following for our stated hypotheses:

TABLE: 8.7.9: Hypotheses Testing: Borrower and Non Borrower Groups (31-40 years)

Srl Nbr	Hypotheses	Well-Being Category	Supported?
1	The use of Microfinance loans has led to an increase in the income of the respondents.	Economic	**Supported**
2a	The use of Microfinance loans has led to an increase in the savings of the respondents. (Likert Scale)	Economic	Not Supported
2b	The use of Microfinance loans has led to an increase in the savings of the respondents. (Savings Actual)	Economic	Not Supported
3	The use of Microfinance loans has led to a decrease in the migration of the respondents.	Economic	Not Supported
4	The use of Microfinance loans has led to an increase in the educational qualifications/ vocational training of the respondents.	Capability	Not Supported
5	The use of Microfinance loans has led to an increase in the working understanding of skill/trades/crafts by the respondents.	Capability	Not Supported
6	The use of Microfinance loans has led to an increase in the social status enjoyed by the respondents.	Social	Not Supported
7	The use of Microfinance loans has led to an increase in the status enjoyed by the respondents in the familty.	Social	**Supported**

The study found that 2 out of the 7 hypotheses are supported for the age category (31-40 years). These are Increase in Income and Increase in family status. Again, the impact across all three well-being aspects was less in this age category.

The findings above suggest the following for our stated hypotheses:

TABLE: 8.7.10: Hypotheses Testing: Borrower and Non Borrower Groups (41-50 year)

Srl Nbr	Hypotheses	Well-Being Category	Supported?
1	The use of Microfinance loans has led to an increase in the income of the respondents.	Economic	**Supported**
2a	The use of Microfinance loans has led to an increase in the savings of the respondents. (Likert Scale)	Economic	Not Supported
2b	The use of Microfinance loans has led to an increase in the savings of the respondents. (Savings Actual)	Economic	Not Supported
3	The use of Microfinance loans has led to a decrease in the migration of the respondents.	Economic	Not Supported
4	The use of Microfinance loans has led to an increase in the educational qualifications/ vocational training of the respondents.	Capability	Not Supported
5	The use of Microfinance loans has led to an increase in the working understanding of skill/trades/crafts by the respondents.	Capability	Not Supported
6	The use of Microfinance loans has led to an increase in the social status enjoyed by the respondents.	Social	Not Supported
7	The use of Microfinance loans has led to an increase in the status enjoyed by the respondents in the familty.	Social	Not Supported

The study found that 1 (Increase in Income) out of the 7 hypotheses are supported for the age category (41-50 years). Again, the impact across all three well-being aspects was less in this age category.

➤ > 50 years

The findings above suggest the following for our stated hypotheses:

TABLE: 8.7.11: Hypotheses Testing: Borrower and Non Borrower Groups (>50 years)

Srl Nbr	Hypotheses	Well-Being Category	Supported?
1	The use of Microfinance loans has led to an increase in the income of the respondents.	Economic	Not Supported
2a	The use of Microfinance loans has led to an increase in the savings of the respondents. (Likert Scale)	Economic	Not Supported
2b	The use of Microfinance loans has led to an increase in the savings of the respondents. (Savings Actual)	Economic	Not Supported
3	The use of Microfinance loans has led to a decrease in the migration of the respondents.	Economic	Not Supported
4	The use of Microfinance loans has led to an increase in the educational qualifications/ vocational training of the respondents.	Capability	Not Supported
5	The use of Microfinance loans has led to an increase in the working understanding of skill/trades/crafts by the respondents.	Capability	Not Supported
6	The use of Microfinance loans has led to an increase in the social status enjoyed by the respondents.	Social	Not Supported
7	The use of Microfinance loans has led to an increase in the status enjoyed by the respondents in the familty.	Social	Not Supported

The study found that none out of the 7 hypotheses are supported for the age category (>50 years). Again, the impact across all three well-being aspects was less in this age category. It is to be noted that all the Hypotheses evaluation are done at a 95% confidence level.

8.8 STUDY 3 FINDINGS:

This chapter is structured into two separate sections based on the two studies done with and without the use of a Control Group for analysis.

This section (study 3) does not consider a control group and further analyses the borrower sample of 368 on the basis of the grouping variables like Distance for City Center, Loan Type, Age Group, etc. for the microfinance borrower group (368 respondents).

The findings of this section are presented below by discussing each grouping variable separately. Apart from the above stated objectives, this section also includes the difference in some of the impact variables across the four blocks selected for the study.

8.8.1 Grouping Variable: Distance from City Center

A One Way ANOVA analysis was done based on the four categories: <=10 Km, 11-20 Km, 21-30 Km and 31-40 Km across the eight impact variables discussed earlier.

The detailed results of the one way ANOVA analysis are presented in **Appendix 20.** The summary for the same is given below:

Table 8.8.1: One Way ANOVA: Distance from City Center <=10 Km, 11-20Km, 21-30 Km and 31-40 Km

	Variable Name	Type of Well Being	Significance
1	Increase in Family Support	Social	0.100
2	**Increase in Social Status**	**Social**	0.000
3	**Impact on Migration**	**Social**	0.000
4	**Increase in Training/Skill**	**Capability**	**0.001**
5	Change in Education	Capability	0.196
6	Increase in Savings	Economic	0.096
7	**Increase in Income**	**Economic**	0.000

As presented above, the impact variables: SOC_STAT (Social Status), IMP_MIGR (Impact on Migration), TRNG_SKL (Training in Skills) and INC_Inc(Increase in Income) were found to have significant differences between the four categories of the grouping variable Distance from City Center. However, the basic one way ANOVA analysis does not suggest which sub-category (-ies) is significantly different from other categories. For this determination, the study turned to the employment of Post-Hoc Analysis. However, for the choice of the apt Post Hoc analysis, we need to evaluate whether the variances across sub-categories are equal.

The Levene's statistic is used to test for homogeneity of variances among the categories. The results of the test are presented below:

TABLE 8.8.2: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
FAM_SUP	.797	3	364	.496
SOC_STAT	**1.695**	**3**	**364**	**.168**
IMP_MIGR	**2.551**	**3**	**364**	**.055**
TRNG_SKL	**1.975**	**3**	**364**	**.117**
CHG_EDUC	5.001	3	364	.002
INC_SAV	4.822	3	364	.003
SAV_DIFF	7.715	3	364	.000
INC_Inc	**2.219**	**3**	**364**	**.086**

As can be seen above, out of the four variables found having significant difference across the grouping variable sub-categories, all four variables have p-values >0.05 suggesting the assumption of equal variances for the four Impact variables in bold above and hence

Scheffe's test is selected for the Post Hoc Analysis. The same decision process is also presented in **Figure 8.6.1.**

The results of the Post Hoc Analysis using the Scheffe's test are presented below:

a) **SOC_STAT(Social Status):** The tabular description of Scheff's test on social status is given in the below:

TABLE 8.8.3: Post Hoc Analysis: Distance Code

Distance Code	No of Respondents	Subset for alpha = 0.05	
		1	2
21 - 30 Km	105	2.50	
31- 40 Km	77	2.62	
<= 10 Km	74	2.74	
11 - 20 Km	112		3.28
Sig.		*.616*	*1.000*

On the impact variable SOC_STAT (Increase in status within the community), the grouping variable category: 11-20 Km (mean: 3.28) is significantly different from the means of other categories at a 95 % confidence level. *It is interesting to note that respondents belonging to the 11-20 Km find their Community status increase significantly more than other sub-categories.* More analysis is needed to understand the ramifications of this finding.

134

b) IMP_MIGR:(Impact on Migration):

TABLE 8.8.4: Post Hoc Analysis: Impact on Migration

Distance Code	N	Subset for alpha = 0.05		
		1	2	3
21 - 30 Km	105	1.55		
31- 40 Km	77	1.75		
11 - 20 Km	112		2.26	
<= 10 Km	74			2.74
Sig.		*.418*	*1.000*	*1.000*

On the impact variable IMP_MIGR (Impact on Migration), the grouping variable category: 11-20 Km (mean: 2.26) and <=10 Km (mean: 2.74) is significantly different from the means of categories 21-30 Km and 31-40 Km at a 95 % confidence level. *This suggests that the reduction in migration has been more of respondents living closer to the city center*.

c) TRNG_SKL: (Training in Skill)

TABLE: 8.8.5: Post Hoc Analysis: Training Skills

Distance Code	N	Subset for alpha = 0.05	
		1	2
21 - 30 Km	105	.43	
31- 40 Km	77	.47	
11 - 20 Km	112	.59	.59
<= 10 Km	74		.82
Sig.		*.475*	*.149*

On the impact variable TRNG_SKL (Improvement in Skills), the grouping variable category: <= 10 Km (mean: 0.82) is significantly different from the means of categories 21-30 Km and 31-40 Km at a 95 % confidence level. However, the 11-20 Km sub-categories seems to be not significantly different from both groups (mean: 0.59). *This suggests that the Increase in skills is more for respondents living closer to the city center.*

d) INC_Inc: (Increase in Income):

TABLE 8.8.6: Post Hoc Analysis: Increase in Income

Distance Code	N	Subset for alpha = 0.05	
		1	2
21 - 30 Km	105	2.34	
31- 40 Km	77	2.43	
11 - 20 Km	112	2.74	2.74
<= 10 Km	74		3.15
Sig.		*.192*	*.175*

On the impact variable INC_Inc (Increase in Income), the grouping variable category: <=10 Km (mean: 3.15) is significantly different from the means of categories 21-30 Km and 31-40 Km at a 95 % confidence level. However, the 11-20 Km sub category seems to be not significantly different from both groups (mean: 2.74). *This suggests that the Increase in income is more for respondents living closer to the city center.*

8.8.2 Grouping Variable: Loan Type (Self Help Group [SHG]/Joint Liability Group [JLG])

As the Loan type grouping variable only has two categories: SHG/JLG, an independent sample t-test was used to find whether there is a significant difference between the Impact

variables across the two grouping variable categories. The detailed results of the independent

samples t-test are presented in *Appendix 21.* The summary of it is given below:

Table 8.8.7 Independent Samples Test

Srl Nbr	Variable Name	Type of Well Being	Significance
1	**Increase in Family Support**	**Social**	**0.000**
2	Increase in Social Status	Social	0.054
3	**Impact on Migration**	**Social**	**0.000**
4	**Increase in Training/Skill**	**Capability**	**0.041**
5	Change in Education	Capability	0.146
6	Increase in Savings	Economic	0.553
7	**Increase in Income**	**Economic**	**0.000**

(Note: Only **Equal variances assumed values are taken)**

○ **Group Statistics**

TABLE:8.8.8 One Way ANOVA: Loan Types

	Type: SHG/JLG	N	Mean	Std. Deviation	Std. Error Mean
FAM_SUP	**SHG**	**192**	**2.26**	**.961**	**.069**
	JLG	**176**	**2.85**	**1.197**	**.090**
SOC_STAT	SHG	192	2.69	1.325	.096
	JLG	176	2.94	1.199	.090
IMP_MIGR	**SHG**	**192**	**1.74**	**.713**	**.051**
	JLG	**176**	**2.39**	**.979**	**.074**
TRNG_SKL	**SHG**	**192**	**.49**	**.709**	**.051**
	JLG	**176**	**.64**	**.661**	**.050**
CHG_EDUC	SHG	192	.26	.472	.034
	JLG	176	.33	.506	.038
INC_SAV	SHG	192	2.42	1.204	.087
	JLG	176	2.49	1.131	.085
SAV_DIFF	SHG	192	3893.00	2988.632	215.686

	JLG	176	3677.81	3163.924	238.490
INC_Inc	**SHG**	**192**	**2.23**	**1.089**	**.079**
	JLG	**176**	**3.09**	**1.262**	**.095**

The findings in bold suggest that the variables: FAM_SUP, IMP_MIGR, TRNG_SKL, and INC_Inc are significantly different between the SHG and JLG groups. In all four cases, the means for the JLG respondents are higher than the SHG respondents.

8.8.3 Grouping Variable: Age Group

A one way ANOVA analysis was done based on the four categories: <=30 years, 31-40 years, 41-50 years and >=50 years across the eight impact variables discussed earlier.

The results of the One Way ANOVA analysis are presented below:

The detailed findings of one way ANOVA is given in tabular form in **Appendix 22**.The summary of it is given below:

Table 8.8.9 One Way ANOVA: Age Group

Srl Nbr	Variable Name	Type of Well Being	Significance
1	**Increase in Family Support**	**Social**	**0.000**
2	**Increase in Social Status**	**Social**	**0.000**
3	Impact on Migration	Social	0.128
4	Increase in Training/Skill	Capability	0.113
5	**Change in Education**	**Capability**	**0.046**
6	**Increase in Savings**	**Economic**	**0.000**
7	Increase in Income	Economic	0.360
8	Saving Differential	Economic	0.450

As presented above, the impact variables: SOC_STAT (Social Well Being), CHG_EDUC (Capability Well Being) and INC_SAV (Economic Well Being) were found to have significant differences between the four categories of the grouping variable Age Group. However, the basic one way ANOVA analysis does not suggest which sub-category (-ies) is

significantly different from other categories. For this determination, the researcher turned to the employment of Post-Hoc Analysis. However, for the choice of the apt Post Hoc analysis, there is a need to evaluate whether the variances across sub-categories are equal.

The Levene's statistic is used to test for homogeneity of variances among the categories. The results of the test are presented below:

TABLE:8.8.10: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
FAM_SUP	**1.826**	**3**	**364**	**.142**
SOC_STAT	**2.256**	**3**	**364**	**.082**
IMP_MIGR	2.952	3	364	.033
TRNG_SKL	1.432	3	364	.233
CHG_EDUC	**10.077**	**3**	**364**	**.000**
INC_SAV	**2.495**	**3**	**364**	**.060**
SAV_DIFF	3.969	3	364	.008
INC_Inc	2.098	3	364	.100

As can be seen above, out of the four variables found having significant difference across the grouping variable sub-categories, three of the variables: FAM_SUP, SOC_STAT and INC_SAV have p-values >0.05 suggesting the assumption of equal variances for the 3 Impact variables in bold above and hence Scheffe's test is selected for the Post Hoc Analysis.

For the variable CHG_EDUC, the p-value of the Levene's statistic is <0.05 and hence the null hypothesis has to be rejected leading to the use of Welsch and Brown-Forsythe test for the variable's Post Hoc analysis.

The results of the Post Hoc Analysis using the Scheffe's test (for three variables) and Welsch and Brown-Forsythe test (for 1 variable) are presented below:

a) **FAM_SUP: (Family Support)**

TABLE 8.8.11: Post Hoc Analysis (Scheffe test): Family Support

Age Group	N	Subset for alpha = 0.05	
		1	2
51 and above	93	2.24	
41 - 50	93	2.30	
<= 30	74		2.80
31 - 40	108		2.82
Sig.		*.984*	*.999*

On the impact variable FAM_SUP (Increase in family support), the grouping variable categories: <=30 years (2.80) and 31-40 years (mean: 2.82) are significantly different from the means of other categories at a 95 % confidence level. This finding suggests that a lower age corresponds to more increase in the support received by the family members.

b) **SOC_STAT: (Social Status)**

TABLE 8.8.12: Post Hoc Analysis (Scheffe test): Social Status

Age Group	N	Subset for alpha = 0.05	
		1	2
51 and above	93	2.49	
41 - 50	93	2.58	
31 - 40	108	2.79	
<= 30	74		3.53
Sig.		.458	1.000

On the impact variable SOC_STAT (Increase in Social/Community Status), the grouping variable category: <=30 years (mean: 3.53) is significantly different from the means of the other categories at a 95 % confidence level. This suggests that the increase in social status is significantly more for younger respondents. (Especially <=30 years)

(c) **INC_SAV: (Increase in Saving)**

TABLE 8.8.13: Post Hoc Analysis (Scheffe test): Increase in Savings

Age Group	N	Subset for alpha = 0.05	
		1	2
41 - 50	93	2.01	
51 and above	93	2.01	
31 - 40	108		2.88
<= 30	74		2.96
Sig.		1.000	.970

On the impact variable INC_SAV (Increase in Savings), the grouping variable categories: <= 30 years (mean: 2.96) and 31-40 years (mean: 2.88) are significantly different from the means of categories 41-50 years and 51 and above at a 95 % confidence level. *The finding suggests that the lower age group respondents had a significantly better increase in savings.*

(d) CHG_EDUC: (Change in Education)

Welsch and Brown-Forsythe Test for impact on education/training

TABLE: 8.8.14: Robust Tests of Equality of Means

		Statistic	df1	df2	Sig.
CHG_EDUC	**Welch**	**2.365**	**3**	**190.701**	**.072**
	Brown-Forsythe	**2.589**	**3**	**297.347**	**.053**

On the impact variable CHG_EDUC (Change in Education), the results of the Welsch and Brown Forsythe test suggest that the mean differences reported by the one way ANOVA are not significant and hence no further analysis are done in this case.

8.8.4 Grouping Variable: Caste

A one way ANOVA analysis was done based on the three categories: Scheduled Caste (SC), Scheduled Tribes (ST) and Other Backward Castes (OBC) across the eight impact variables discussed earlier. The detailed results of the one way ANOVA analysis is presented in **Appendix 23**.Given below table are the summary:

Table 8.8.15: One Way ANOVA: Caste

Srl Nbr	Variable Name	Type of Well Being	Significance
1	Increase in Family Support	Social	0.725
2	**Increase in Social Status**	**Social**	**0.000**
3	Impact on Migration	Social	0.066
4	Increase in Training/Skill	Capability	0.152
5	Change in Education	Capability	0.239
6	Increase in Savings	Economic	0.112
7	**Increase in Income**	**Economic**	**0.000**
8	Saving Differential	Economic	0.179

As presented above, the impact variables: SOC_STAT and INC_Inc were found to have significant differences between the three categories of the grouping variable Caste. However,

the basic one way ANOVA analysis does not suggest which sub-category (-ies) is significantly different from other categories. For this determination, we turn to the employment of Post-Hoc Analysis. However, for the choice of the apt Post Hoc analysis, it was needed to evaluate whether the variances across sub-categories are equal.

The Levene's statistic is used to test for homogeneity of variances among the categories. The results of the test are presented below:

TABLE 8.8.16: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
FAM_SUP	1.684	2	365	.187
SOC_STAT	**1.127**	**2**	**365**	**.325**
IMP_MIGR	3.535	2	365	.030
TRNG_SKL	.591	2	365	.554
CHG_EDUC	2.164	2	365	.116
INC_SAV	10.724	2	365	.000
SAV_DIFF	1.644	2	365	.195
INC_Inc	**2.837**	**2**	**365**	**.060**

As can be seen above, both variables found having significant difference across the grouping variable sub-categories (SOC_STAT and INC_Inc) have p-values >0.05 suggesting the assumption of equal variances for the two Impact variables in bold above and hence Scheffe's test is selected for the Post Hoc Analysis.

The results of the Post Hoc Analysis using the Scheffe's test are presented below:

a) **SOC_STAT: (Social Status)**

TABLE 8.8.17: Post Hoc Analysis (Scheffe test): Social Status

Caste Recoded	N	Subset for alpha = 0.05	
		1	2
SC	116	2.47	
ST	61	2.49	
OBC	191		3.12
Sig.		*.989*	*1.000*

On the impact variable SOC_STAT (Increase in status within the community), the grouping variable category: OBC (mean: 3.12) is significantly different from the means of other categories at a 95 % confidence level. This suggests that the OBC respondents had significantly higher increase in the social/community status than the other caste categories.

b) **INC_Inc: Increase in Income**

TABLE: 8.8.18: Post Hoc Analysis (Scheffe test): Increase in Income

Caste Recoded	N	Subset for alpha = 0.05	
		1	2
ST	61	2.10	
SC	116	2.50	2.50
OBC	191		2.91
Sig.		*.068*	*.064*

On the impact variable INC_Inc (Increase in Income), the grouping variable category: OBC (mean: 2.91) is significantly different from the means of SC category at a 95 % confidence level. The mean of the SC category appears in both subsets and lies in between ST and OBC categories.

8.8.5 Grouping Variable: Loan Cycle

A one way ANOVA analysis was done based on the 4 categories: Loan Cycle 1, 2, 3 and 4 across the 8 impact variables discussed earlier.

The detailed results of the one way ANOVA analysis is presented in *Appendix 24.*A brief summary of the analysis is given below:

Table 8.8.19: One Way ANOVA: Loan Cycle

Srl Nbr	Variable Name	Type of Well Being	Significance
1	**Increase in Family Support**	**Social**	**0.000**
2	**Increase in Social Status**	**Social**	**0.009**
3	**Impact on Migration**	**Social**	**0.000**
4	**Increase in Training/Skill**	**Capability**	**0.295**
5	Change in Education	Capability	0.182
6	Increase in Savings	Economic	0.093
7	**Increase in Income**	**Economic**	**0.000**
8	Saving Differential	Economic	0.129

As presented above, the impact variables: FAM_SUP and SOC_STAT (Social Well Being) and IMP_MIGR and INC_Inc (Economic Well Being) were found to have significant differences between the 4 categories of the grouping variable: Loan Cycle. However, the basic one way ANOVA analysis does not suggest which sub-category (-ies) is significantly different from other categories. For this determination, the researcher turned to the employment of Post-Hoc Analysis. However, for the choice of the apt Post Hoc analysis, one needs to evaluate whether the variances across sub-categories are equal.

The Levene's statistic is used to test for homogeneity of variances among the categories. The results of the test are presented below:

TABLE 8.8.20: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
FAM_SUP	**1.281**	**3**	**364**	**.281**
SOC_STAT	**.482**	**3**	**364**	**.695**
IMP_MIGR	**2.860**	**3**	**364**	**.037**
TRNG_SKL	.165	3	364	.920
CHG_EDUC	4.242	3	364	.006
INC_SAV	3.322	3	364	.020
SAV_DIFF	4.631	3	364	.003
INC_Inc	**5.477**	**3**	**364**	**.001**

As can be seen above, FAM_SUP and SOC_STAT have p-values >0.05 suggesting the assumption of equal variances for the two Impact variables and hence Scheffe's test is selected for the Post Hoc Analysis.

For the impact variables, IMP_MIGR and INC_Inc, the p-values are below 0.05 suggesting rejection of the null hypothesis and hence the application of the Welsch and Brown-Forsythe test for checking the robustness of the equality of means.

The results of the Post Hoc Analysis using the Scheffe's test are presented below:

a) **FAM_SUP: (Family Support)**

TABLE 8.8.21: Post Hoc Analysis (Scheffe test): Family Support

4.2 Loan Cycle	N	Subset for alpha = 0.05	
		1	2
1	136	2.28	
2	90	2.32	
4	53		2.91
3	89		2.93
Sig.		.996	.999

In the impact variable FAM_SUP (Family Support), the loan cycle category: 3 (mean: 2.93) and 4 (mean: 2.91) are found to be significantly different from the means of other categories at a 95 % confidence level. This suggests that higher loan cycles lead to higher family support in the respondents.

b) **SOC_STAT (Social Status)**

TABLE 8.8.22: Post Hoc Analysis (Scheffe test): Social Status

4.2 Loan Cycle	N	Subset for alpha = 0.05
		1
1	136	2.62
2	90	2.66
4	53	3.08
3	89	3.10

		Sig.		.109	

On the impact variable SOC_STAT (Increase in Social/Community Status), although the means of loan cycles 3 (mean: 3.10) and 4 (mean: 3.08) are greater than the other categories, the Scheffe's test does not place the higher loan cycles in a separate subset. For this reason, further analysis of the difference is not done.

For the two variables: IMP_MIGR (Impact on migration) and INC_Inc (Increase in Income) the Welch and Brown Forsythe tests are shown below:

TABLE 8.8.23: Robust Tests of Equality of Means

		Statistic[a]	df1	df2	Sig.
IMP_MIGR	Welch	8.554	3	166.577	.000
	Brown-Forsythe	9.455	3	305.332	.000
INC_Inc	Welch	18.285	3	159.973	.000
	Brown-Forsythe	17.867	3	261.576	.000

a. Asymptotically F distributed.

As the p-values of the two tests above are all <0.05, Tamhane's T2 test is chosen for Post Hoc Analysis. The results of the Post Hoc Test are presented below:

TABLE: 8.8.24: Multiple Comparison: Block

Multiple Comparisons							
Tamhane							
Dependent Variable	(I) 4.2 Loan Cycle	(J) 4.2 Loan Cycle	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
IMP_MIGR	1	2	-.635*	.127	.000	-.97	-.30
		3	-.281	.116	.095	-.59	.03
		4	-.270	.133	.243	-.63	.09
	2	1	.635*	.127	.000	.30	.97
		3	.355	.139	.068	-.02	.73
		4	.366	.154	.108	-.05	.78
	3	1	.281	.116	.095	-.03	.59
		2	-.355	.139	.068	-.73	.02
		4	.011	.145	1.000	-.38	.40
	4	1	.270	.133	.243	-.09	.63
		2	-.366	.154	.108	-.78	.05
		3	-.011	.145	1.000	-.40	.38
*. The mean difference is significant at the 0.05 level.							

c) **IMP_MIGR (Impact on Migration)**

As seen in the table above, in the impact variable: IMP_MIGR (Decrease in Migration), Tamhane's T2 test confirms that there is a significant difference between loan cycle 2 and loan cycle 1 (difference of 0.635). This suggests that the loan cycle 2 respondents felt that the reduction in migration was more than loan cycle 1. There are no significant findings concerning loan cycle 3 and 4.

Multiple Comparisons

TABLE: 8.8.25: Post Hoc Analysis (Tamhane Test)

Dependent Variable	Loan Cycle	Loan Cycle	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
INC_Inc(Increase in Income)	1	2	-.360	.150	.098	-.76	.04
		3	**-.894**[*]	**.162**	**.000**	-1.33	-.46
		4	**-1.234**[*]	**.200**	**.000**	-1.77	-.69
	2	1	.360	.150	.098	-.04	.76
		3	**-.534**[*]	**.182**	**.022**	-1.02	-.05
		4	**-.874**[*]	**.216**	**.001**	-1.45	-.29
	3	**1**	**.894**[*]	**.162**	**.000**	.46	1.33
		2	**.534**[*]	**.182**	**.022**	.05	1.02
		4	-.340	.225	.577	-.94	.26
	4	**1**	**1.234**[*]	**.200**	**.000**	.69	1.77
		2	**.874**[*]	**.216**	**.001**	.29	1.45
		3	.340	.225	.577	-.26	.94

*. The mean difference is significant at the 0.05 level.

d) INC_Inc (Increase in Income)

As seen in the Table 8.8.24 above, in the impact variable: INC_Inc (Increase in Income), Tamhane's T2 test confirms that there is a significant difference in loan cycles 3 and 4 as compared to loan cycle 1 and 2. This suggests that the respondents with higher loan cycle saw a greater increase in income as compared to lower loan cycles.

As discussed in the Survey Questionnaire section, this study collected impact data on three different dimensions of Economic Well Being, Capability Well Being and Social Well Being.

8.8.6 Grouping Variable: Education

A one way ANOVA analysis was done based on the 4 categories: Illiterate, Till Class X, High School and Graduate across the 8 impact variables discussed earlier.

The detailed results of the one way ANOVA analysis is presented in **Appendix 25**.A brief summary of it is given below:

Table 8.8.26: One Way ANOVA: Education

Srl Nbr	Variable Name	Type of Well Being	Significance
1	Increase in Family Support	Social	0.122
2	Increase in Social Status	Social	0.132
3	Impact on Migration	Social	0.244
4	Increase in Training/Skill	Capability	0.078
5	**Change in Education**	**Capability**	**0.022**
6	**Increase in Savings**	**Economic**	**0.043**
7	Increase in Income	Economic	0.596
8	**Saving Differential**	**Economic**	**0.002**

As presented above, the impact variables: CHG_EDUC (Capability Well Being), INC_SAV and SAV_DIFF (Economic Well Being) were found to have significant differences between the 4 categories of the grouping variable: Education.

However, the mean values of the impact variables do not show significant differences to warrant a further analysis. Hence, for this section, the descriptive of the impact variables are presented for all the categories of the grouping variable.

TABLE: 8.8.27: Descriptive Statistical Study of Grouping Variable : Education

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
FAM_SUP	Illiterate	90	2.76	1.154	.122	2.51	3.00	1	5
	Till Class X	136	2.47	1.081	.093	2.29	2.65	1	5
	High School	92	2.54	1.143	.119	2.31	2.78	1	5
	Graduate	50	2.32	1.077	.152	2.01	2.63	1	5
	Total	368	2.54	1.119	.058	2.42	2.65	1	5
SOC_STAT	Illiterate	90	2.84	1.235	.130	2.59	3.10	1	5
	Till Class X	136	2.63	1.222	.105	2.43	2.84	1	5
	High School	92	2.88	1.257	.131	2.62	3.14	1	5
	Graduate	50	3.10	1.446	.205	2.69	3.51	1	5
	Total	368	2.81	1.271	.066	2.68	2.94	1	5
IMP_MIGR	Illiterate	90	1.97	.917	.097	1.77	2.16	1	5
	Till Class X	136	1.99	.789	.068	1.85	2.12	1	5
	High School	92	2.12	1.015	.106	1.91	2.33	1	5
	Graduate	50	2.24	.981	.139	1.96	2.52	1	5
	Total	368	2.05	.909	.047	1.96	2.14	1	5
TRNG_SKL	Illiterate	90	.53	.640	.067	.40	.67	0	2

		N	Mean	Std. Deviation	Std. Error	Lower	Upper	Minimum	Maximum
	Till Class X	136	.62	.751	.064	.49	.74	0	2
	High School	92	.43	.599	.062	.31	.56	0	2
	Graduate	50	.72	.730	.103	.51	.93	0	2
	Total	368	.57	.689	.036	.49	.64	0	2
	Illiterate	**90**	**.23**	**.425**	**.045**	**.14**	**.32**	**0**	**1**
	Till Class X	**136**	**.33**	**.503**	**.043**	**.25**	**.42**	**0**	**2**
CHG_EDUC	**High School**	**92**	**.21**	**.433**	**.045**	**.12**	**.30**	**0**	**2**
	Graduate	**50**	**.44**	**.611**	**.086**	**.27**	**.61**	**0**	**2**
	Total	**368**	**.29**	**.489**	**.026**	**.24**	**.34**	**0**	**2**
	Illiterate	**90**	**2.26**	**1.147**	**.121**	**2.02**	**2.50**	**1**	**5**
	Till Class X	**136**	**2.49**	**1.241**	**.106**	**2.27**	**2.70**	**1**	**5**
INC_SAV	**High School**	**92**	**2.71**	**1.191**	**.124**	**2.46**	**2.95**	**1**	**5**
	Graduate	**50**	**2.28**	**.858**	**.121**	**2.04**	**2.52**	**1**	**5**
	Total	**368**	**2.46**	**1.169**	**.061**	**2.34**	**2.58**	**1**	**5**
	Illiterate	**90**	**3351.11**	**2743.294**	**289.169**	**2776.54**	**3925.68**	**0**	**15220**
	Till Class X	**136**	**4564.31**	**3337.125**	**286.156**	**3998.38**	**5130.24**	**0**	**18040**
SAV_DIFF	**High School**	**92**	**3108.70**	**2499.950**	**260.638**	**2590.97**	**3626.42**	**120**	**12700**
	Graduate	**50**	**3728.10**	**3435.631**	**485.872**	**2751.70**	**4704.50**	**0**	**14240**
	Total	**368**	**3790.08**	**3071.390**	**160.107**	**3475.24**	**4104.93**	**0**	**18040**
INC_Inc	Illiterate	90	2.63	1.249	.132	2.37	2.89	1	5

Till Class X	136	2.55	1.264	.108	2.34	2.77	1	5
High School	92	2.78	1.274	.133	2.52	3.05	1	5
Graduate	50	2.66	1.171	.166	2.33	2.99	1	5
Total	368	2.64	1.249	.065	2.52	2.77	1	5

As discussed in Chapter 4, before attempting the study six hypotheses were developed for testing. Although, the hypotheses grouped together all impact variables, the study actually considered each impact variable separately. Based on the results of the analysis, it can be said that 5 out of the 6 hypotheses presented reject the null hypothesis that there is no difference between the impact variables across the categories of the grouping variables.

8.9 BLOCK WISE COMPARISON OF GROUPING VARIABLES:

8.9.1   Change in Income after taking the loan

As given in the **Table 8.9.1** below 32 respondents out of total 368 believed that there was some substantial increase in their income after availing the loan Deoghar(12) and Devipur (12)both consists of equal number of respondents who felt that there was substantial increase in the income after availing the loan

A total of 124 respondents (maximum count) said that there was a slight decrease in the income after availing the loan, which is quite alarming; in this case also Devipur had the maximum respondents.

Table 8.9.1: Change in Income across Blocks

	Block				Total
	Deoghar	Devipur	Madhupur	Sarwan	
Decrease in Income	13	6	37	17	73

Slight Decrease in Income	26	45	28	25	124
No Change	14	24	8	18	64
Slight Increase in Income	23	23	8	21	75
Increase in Income	12	12	5	3	32
Total	88	110	86	84	368

8.9.2 Change in Incidence of migration after taking the loan:

From the data we can interpret that the Deoghar block has lower ratio of migration in comparison to other blocks

Table 8.9.2: Incidence of migration across Blocks

		Block				Total
		Deoghar	Devipur	Madhupur	Sarwan	
	No Migration	81	87	64	73	305
	Migration	7	23	22	11	63
Total		88	110	86	84	368

8.9.3 Probability of future Migration after taking Loan

Even though the incidence of migration in the data collected is relatively small but the data collected on the probability of future migration is quite alarming. The data collected also shows that even after availing the loan most respondents do not report a positive effect on migration.

Devipur among all the blocks shows more trends of future migration.

Table 8.9.3: Probability of future Migration across Blocks

		Block				Total
		Deoghar	Devipur	Madhupur	Sarwan	
	Increase in Migration Proabability	4	18	45	37	104
	Slight Increase	39	58	34	43	174
	No Effect	35	26	2	2	65
	Slight Decrease	8	7	2	1	18
	Decrease in Migration Probability	2	1	3	1	7
Total		88	110	86	84	368

8.9.4 Change in Training Skill after taking the loan

Maximum number of respondents (202) suggested no change in their training skill, however 124 respondents believed that there has been small change in their skill after availing the loan. Blockwise Deoghar has the maximum respondents who felt that there has been small change skill.

Table 8.9.4: Change in Training Skill across Block

		Block				Total
		Deoghar	Devipur	Madhupur	Sarwan	
	No Change	26	67	59	50	202
	Small Change in Skills	48	33	20	23	124
	Large Change in Skills	14	10	7	11	42
Total		88	110	86	84	368

Apart from the grouping variables analysis done above, this section also presents the descriptive detailing the migration of family members of the respondents. These descriptive are presented in the table below:

TABLE: 8.9.5: Current Migration Status in Family across Block

Status on Migration	No of Respondents	Percentage
Not migrated (0)	305	82.9
Migrated (1)	63	17.1
Total	*368*	*100.0*

It is important to note that 17.1 % of the sample had a family member that had migrated outside for work.

Also, this study looked at an interesting phenomenon. The respondents were asked if the funds received from microfinance loans were used to directly fund migration. The results of the question are presented below.

TABLE: 8.9.6: Funds used directly for migration across the Block

Status on Migration	No Of respondents	Percentage
Not Migrated	322	87.5
Migrated	46	12.5
Total	*368*	*100.0*

It is very interesting to note that 12.5 % of the respondents had used the Microfinance loan to fund or assist in the migration of some of their family members.

Table 8.9.7: Total Family Count across the Block

Total Family Members		Block				Total
		Deoghar	Devipur	Madhupur	Sarwan	
	3	17	2	3	0	22
	4	4	31	2	26	63
	5	29	37	34	15	115
	6	33	28	32	18	111
	7	5	10	7	18	40
	8	0	2	8	2	12
	9	0	0	0	5	5
Total		88	110	86	84	368

Table 8.9.8.Joint vs. Nuclear Family Count across the Block

Nuclear vs Joint Family						
Count						
		Block				Total
		Deoghar	Devipur	Madhupur	Sarwan	
Type of Family	Nuclear	58	76	51	48	233
	Joint	30	34	35	36	135
Total		88	110	86	84	368

8.10 FINDINGS OF THE STUDY 2 AND STUDY 3

This chapter presented two studies focused on measuring the impact of Microfinance on a sample of borrower respondents. The findings of the studies are summarized below:

Study 2:

1. The Economic and Social Well Being Impact variables of Increase in Income, Increase in Savings, Savings Differential, Reduction in Migration, Increase in

social/community status and Increase in Family Status are found to be significantly higher than that of the control group consisting of non-Microfinance borrowers.

2. On the basis of Caste, OBC respondents showed greater variance across the 8 Impact variables studied as compared to SC and ST respondents.

3. On the basis of Age group, the <=30 years category showed more significant differences from the control group respondents. Such differences were not seen for other Age group categories. (except exceptions detailed in the Findings)

Study 3:

1. <u>Impact Variables grouped on Distance from District Headquarters:</u>

Respondents living less than 10 Km from the District Headquarters were found to have significantly more means for Increase in Income (INC_Inc) and Training in Skills/Trades/Crafts (TRNG_SKL) than compared to other groups living more than 10 Km away from district headquarters.

This finding could be because of the shallow penetration of Microfinance in Deoghar district.

Further, the increase in social status (SOC_STAT) was found to be significantly higher for respondents living between 10-20 Km from the district headquarters. More research is needed to understand the significance of this finding.

2. <u>Impact Variables grouped on Loan Type (SHG/JLG):</u>

The means for Increase in Income (INC_Inc) and Reduction in Migration was higher for JLG respondents as compared to SHG respondents.

3. Impact Variables grouped on Age:

The Increase in Social Status (SOC_STAT) and Increase in savings (INC_SAV) was found to be significantly more for <30 years and 30-40 years than other groups. Hence a reverse relationship between age and increase in social status and Savings Increase is found.

4. Impact Variables grouped on Caste:

The Increase in Income (INC_Inc) and Increase in Social Status were found to be significantly higher for OBC respondents when compared to SC and ST respondents. This suggests that the impact of Microfinance is more positive on OBC respondents than compared to SC and ST respondents in Deoghar district.

5. Impact Variables grouped on Loan Cycle:

For loan cycles 3 and 4, the Increase in Family Support (FAM_SUP), Increase in Social Status (SOC_STAT), Increase in Savings (INC_SAV) and Increase in Income (INC_Inc) were found to be significantly higher. This confirms that the real impact of Microfinance loans emerges only after the initial loan cycle years.

6. Impact Variables grouped on Education:

No significant differences found between the groups.

7. It is also interesting to note that some respondents used the funds received due to the loans for migration purposes directly. This finding has not been highlighted in previous impact assessment literature on Microfinance.

CHAPTER 9

CUSTOMER SATISFACTION SURVEY RESULTS (STUDY 4)

CHAPTER 9 CUSTOMER SATISFACTION SURVEY (STUDY 4)

9.1 OVERVIEW

The present chapter attempts to study the customer satisfaction of Self Help Groups empirically- Bank Linkage Programme (a microfinance initiative in India). The responses in this study were taken from the same group of SHG-Bank Linked groups who were used in study 3 and 4. This study focuses on the role of three factors in determining the customer satisfaction of rural self-help group members in the Deoghar district of the Indian state of Jharkhand. These three factors are:

- Socio-Economic Profile including variables like Age, Caste, etc.

- Loan Dynamics including variables like SHG Age, Loan Amount, etc.

- Loan Use including variables measuring whether the loan Income Generating Use and New versus Existing Occupation/Business

Before the results of the study, the research setting is presented below.

9.2 MODEL, VARIABLES, AND HYPOTHESES:

 The base of the pyramid (BoP) scholars have recently been arguing that traditional marketing models and processes like franchising and legitimacy seem to work differently in BoP environments. (Gebauer & Reynoso, 2013) (Kistruck, Webb, Sutter, & Bailey, The double-edged sword of legitimacy in base-of-the-pyramid markets, 2015) (Kistruck, Webb, Sutter, & Ireland, 2011) . They underscore the need for understanding the processes and institutions operating in such markets and build new models to explain consumer purchase decisions and satisfaction. Further, as discussed earlier, the performance and impact of SHG-BLP programme in Jharkhand are underwhelming.

Considering the factors mentioned above, this study does not use existing advanced models of marketing to understand the satisfaction of SHG-BLP rural loan customers. Instead, it focuses on the underlying factors affecting the SHG-BLP process, namely Socio-Economic profile, Loan dynamics and Loan use. The variables are selected based on the importance of the variables on loan outcomes as well as existing academic literature. Three aspects of the SHG-BLP process namely: Socio-Economic Profile, Loan Dynamics, and Loan Use are used as independent variables in the study. Each group of variables and their corresponding hypotheses were discussed in chapter 4 in brief. For the reference purpose, the detailed hypotheses are discussed below again.

9.2.1 Hypotheses Based On Socio Economic Profile:

a. *Age*: Age of the customer is considered to be important in predicting a host of other related variables. It correlates positively with number of family members and total expenses of the household. (Barua & Sane, 2014) In such a setting, it is possible that with an increase in age, the expectations from SHG-BLP might be higher, hence possibly leading to a negative relationship with customer satisfaction. Hence, the hypothesis:

H_{1A}: There will be a negative relationship between customer age and Overall Customer Satisfaction.

Age is measured as a scale variable based on input from respondents.

b. *Caste*: Underprivileged caste microfinance customers (SC and ST) are found to be lacking in aspects of financial literacy as compared to other castes. (Barua & Sane,

2014) The lack of financial literacy might cause confusion and misinformation for such consumers and hence might affect customer satisfaction. Hence, the hypothesis:

H_{1B}: There will be a negative relationship between underprivileged caste membership and Overall Customer Satisfaction.

Caste is measured as a nominal variable with values of Scheduled Caste (1), Scheduled Tribe (2) and OBC/General (3). These values are later recast into two dummy variables Scheduled Caste and Scheduled Tribe for analysis.

c. *Education*: Although, education levels have been considered as a dependent variable in many microfinance impact studies. For ex. (Holvoet, 2004), existing education levels should positively affect financial literacy and understanding of legalities and formal documentation. Further, studies have found a significant relationship between education and income levels in microfinance loan use settings. (Saad & Duasa, 2011) Hence, the hypothesis:

H_{1C}: There will be a positive relationship between education level and Overall Customer Satisfaction.

Education level is captured by using the number of years of formal education.

d. *Monthly Per Capita Consumption Expenditure (MPCE):* Many academicians and practitioners have suggested the use of expense data for measuring poverty levels due to its reliability. Following, the expense approach, the study uses India's Tendulkar committee method for calculation of Poverty Levels. "As per Tendulkar Methodology, the poverty line has been expressed regarding MPCE based on Mixed Reference Period" (Government of India, Planning Commission, 2013, p. 2). Monthly

Per Capita Consumption Expenditure or MPCE is calculated by converting household level expense data to a per capita value. There are three main methods of calculating MPCE based on uniform reference period (URP), Mixed Reference Period (MRP) and Modified Mixed Reference Period (MMRP).

According to the National Sample Survey Office, Government of India, (National Sample Survey Office, Ministry of Statistics, Government of India, 2011) the Mixed Reference Period (MRP) "…is the measure of MPCE obtained…when household consumer expenditure on items of clothing and bedding, footwear, education, institutional medical care, and durable goods is recorded for a reference period of "last 365 days", and expenditure on all other items is recorded with a reference period of "last30 days". (National Sample Survey Office, Ministry of Statistics, Government of India, 2011, p. 3).

Following the recommendations of the Tendulkar committee, this study calculates the MPCE of sample respondents and converts them into per capita expense. *This was done because many sample respondents had either not applied for or received certification from the state government qualifying their below poverty line (BPL) status*. The questionnaire used for calculation was adapted from the standard questionnaire used by the Government of India to calculate MPCE. (National Sample Survey Office, Ministry of Statistics, Government of India, 2011) However, the final MPCE was retained in its Scale format rather than converting it into an Ordinal scale representing the respondents' status as above or below the poverty line (APL/BPL). This was done to avoid data loss. Further, the actual separating point between above and below the poverty line individuals have been a point of contention among many academics. (Panagariya & Mukim, 2014) (Dreze & Khera, 2010) (Subramanian,

2011) (Alkire & Seth, 2015) . The present approach eliminates the use of a sharp dividing line between APL and BPL respondents for understanding customer satisfaction.

Many studies have suggested that the impact of mainstream microfinance services not be significant for the ultra poor. (Carter, 2013) Hence, the hypothesis:

H_{1D}: There will be a negative relationship between MPCE and Overall Customer Satisfaction.

e. *Distance from city center*: While interacting with a pilot set of survey respondents, it was found that the income level and choice of occupations depended greatly on the distance from the marketplaces and city centers. Based on this input, the researcher decided to include the distance in Km. from the houses of respondents to the nearest big market or city center as an independent variable. Hence, the hypothesis:

H_{1E}: There will be a negative relationship between the distance from the city center of the survey respondent's address and Overall Customer Satisfaction.

9.2.2 Hypotheses Based On Loan Dynamics:

This section measures the variables that are not controlled directly by the respondents and are key elements of the quality and quantum of financial services they receive. The variables of SHG Age, loan amount, training provided and eases of processing/bureaucracy should have an immense impact on the satisfaction of the respondent. Each variable is discussed briefly below.

a. *SHG Age:* SHG Age has been studied earlier in reference to rural SHG impact and performance and has been found to affect SHG-BLP performance, and homogeneity positively. (Lavoori & Pramanik, 2014) (Puhazhendi & Badatya, 2002). Further, higher SHG Age will mean that the SHG is eligible for higher credit balance, hence assuring more variability in Loan amounts of existing SHG members. These factors should affect the satisfaction of SHG-BLP customers. Hence, our hypothesis:

H_{2A}: There will be a positive relationship between increasing SHG Age and Overall SHG-BLP Customer Satisfaction.

SHG Age is measured as a scale variable and recorded as the number of years since the start date of the SHG book keeping and the date of interview.

b. *Loan Amount:* Various impact measurement studies have used the loan amount as an independent variable. Ex. (Lavoori & Pramanik, 2014). The studies have found loan amount to be positively associated with performance and impact of Microfinance loans. Hence, the hypothesis:

H_{2B}: There will be a positive relationship between increasing Loan Amount and Overall SHG-BLP Customer Satisfaction.

c. *Training Provided*: NABARD and various NGOs actively initiate vocational trainings for SHG members to equip them with skills to start and sustain occupational ventures. The impact of such trainings has been studied in the context of microfinance. (Swain & Varghese, 2010) Improvements in business knowledge and increased client retention rates are some of the outcomes studied in the literature. (Karlan & Valdivia, 2011) Hence, the hypothesis:

H$_{2C}$: There will be a positive relationship between training provided and Overall SHG-BLP Customer Satisfaction.

Training provided was measured as a dichotomous variable with respondents voluntarily taking part in such trainings being graded as 1.

d. *Ease of Processing/Bureaucracy*: Some respondents claimed to face serious difficulties in getting their loan limits approved and processed by various governmental agencies. In fact, some respondents had to wait for over a year to get their SHGs audited, and the loan amounts to be disbursed. Ease of processing has also been previously studied while exploring customer satisfaction in microfinance. (Radhika & Anupriya,2011) Hence, the hypothesis:

H$_{2D}$: There will be a positive relationship between Ease of Processing/Bureaucracy and Overall SHG-BLP Customer Satisfaction.

The variable was measured on a 5 point Likert scale with respondents finding the processing extremely time taking grading the variable as 1, while respondents who found the processing to be extremely simple and short grading the variable as 5.

9.2.3 Hypotheses Based On Loan Use:

Apart from the factors of Socio-Economic profile and loan dynamics, another key element of the process of microfinance is the nature in which the loan funds are utilized. Elements of loan use include whether the loan was used for income generating or consumption purpose and whether the respondent utilized the funds in their existing occupation or a new occupation.

a. *Income Generating Use*: The purpose of the loan and whether it was used for its intended purpose has been explored in previous studies related to microfinance Customer Satisfaction. For ex. (Radhika & Anupriya, An empirical study on the impact of Microfinance Institutions in enhancing SHG in Karur District, Tamil Nadu - India, 2011) It has been argued that Income Generating Use should be positively related to Overall Customer Satisfaction. Hence, the hypothesis:

H_{3A}: There will be a positive relationship between Income Generating Use and Overall SHG-BLP Customer Satisfaction.

Income generating use was scored as a dichotomous variable with respondents using the loan amount towards productive use in their existing or new occupations graded as 1.

b. *New vs. Traditional Business*: It was noted from pilot respondents that the loan amount could be used either in the existing or new occupations. Further, it was possible that even though the Loan Amount was not directly used for setting up the new business, the training and other help from SHG members helped the respondents in initiating a new occupation. The respondents in the study were asked whether membership in SHG had helped them explore a new occupation. The variable used as a dichotomous variable graded as 1 for respondents starting a new occupation since joining the SHG

It is expected that a new occupation due to membership of an SHG could lead to better involvement and satisfaction of respondents. Hence, the hypothesis:

H_{3B}: There will be a positive relationship between the choice of a New Occupation (New vs. Traditional Business) and Overall SHG-BLP Customer Satisfaction.

The variable discussed above and the overall model is diagrammatically represented in Figure 9.2.1 below:

Figure 9.2.1 Determinants of Customer Satisfaction of Rural SHG-BPL customers

Determinants of Customer Satisfaction of rural SHG-BLP customers
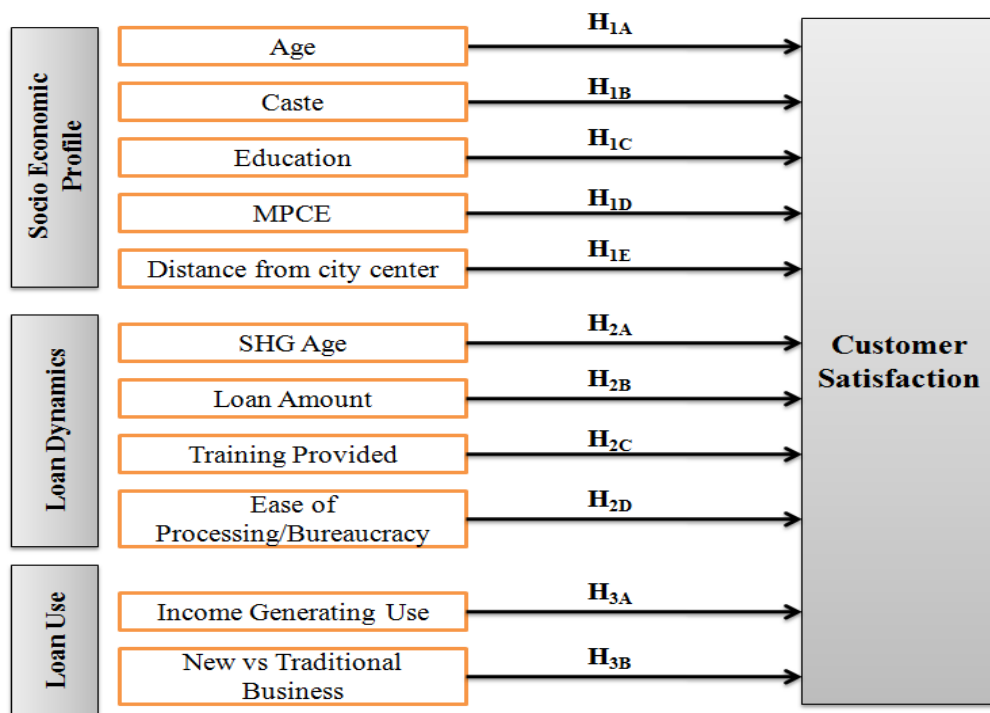
Source: Developed by the Researcher

This framework is developed to understand the various aspects of the process of microfinance service delivery and the eventual generation of customer satisfaction. It is assumed here that significant aspects affecting the delivery and use of microfinance loans by borrowers are the socio- economic profile of the consumers, the loan dynamics, and the actual loan use. Each of these three aspects can be measured by different variables like Age of the borrower, caste, loan amount, income generating use, etc.

9.3 METHODOLOGY:

This research focuses on the determinants of Overall Customer Satisfaction in rural SHG-BLP loan recipients in the rural sections of Deoghar district. Deoghar district consists of 10 administrative blocks as mentioned earlier. For this study, four blocks were randomly chosen. These blocks were: Sarwan, Devipur, Madhupur, and Deoghar.

The independent variables (discussed above) and the dependent variable (Overall Customer Satisfaction) were used to construct a structured questionnaire in English. Overall Customer Satisfaction was measured using a likert scale of five point (from extremely dissatisfied graded as 1 and extremely Satisfied graded as 5) this approach to the measurement of overall customer satisfaction is in line with earlier studies focusing on the same dependent variable (Jose & Buchanan, 2013) (Radhika & Anupriya, 2011). A face to face structured interview was conducted with respondents after the questionnaire was translated into the local language of Hindi.

The research was conducted in two phases. In the first phase, 30 respondents were chosen to represent the pilot sample. Based on the findings from the pilot survey, two more variables were added to the structured questionnaire, namely distance from city center and new vs. traditional Business. The reasons and literature support for these variables have been discussed above.

In the second phase, 145 respondents spread across 28 villages were surveyed. It was essential for the study to ensure the quality of the dependent variable: Overall Customer Satisfaction. This was important because BoP consumers were not well educated and might not be able to explicate their satisfaction levels properly. To overcome this challenge, customers were asked to qualitatively list their reasons explaining their choice of Overall Customer satisfaction on the Likert Scale. The responses which did not have any

171

accompanying qualitative reasons were excluded from analysis. This led to the exclusion of 11 responses. Further, one response was excluded due to being an outlier. This led to the total sample of 133 responses.

OLS Linear Multiple Regression was applied to understand the significance of the hypotheses presented above. The regression method has been used in previous studies of microfinance customer satisfaction (Jose & Buchanan, 2013) (Radhika & Anupriya, 2011). The statistical package SPSS version 20 Release 20.0.0 was used for the analysis of results. As there were no composite scores/factors used for the study, the Cronbach's Alpha measure of questionnaire reliability is not applicable. Major scale variables like MPCE, Age, and Loan Amount were tested for normality using the Shapiro Wilk statistics, histogram, and Q-Q plots. MPCE was found to be positively skewed. This was because of 1 (one) outlier with abnormally large MPCE. This outlier was removed from analysis to preserve normality. All other scale variables were found to be acceptably normal.

9.4 RESULTS:

The results of the various steps of the OLS Multiple Regression are presented below. Figure 9.4.1 represents the descriptive statistics and correlation coefficients of the variables. As can be seen, the highest significant correlation between independent variables is 0.467 between SHG Age and Ease in Processing/Bureaucracy. As all such correlations are below 0.5, the independent variables are acceptable for the next step in OLS multiple Regressions. As 5 of the variables measure demographics and Socio-Economic Profile, exploratory factor analysis is not applicable in this case.

Figure 9.4.1: Descriptive Statistics and Correlation Coefficients of variables

Variable	Mean	Standard Deviation	1	2	3	4	5	6	7	8	9	10	11	12	13
Overall Customer Satisfaction	2.50	1.247													
Age	41.76	9.846	-.180												
ScheduledCaste	.23	.420	-.259	-.025											
ScheduledTribe	.29	.453	.015	.005	-.341**										
Education	1.41	1.169	.139	-.294**	.148	-.139									
MPCE	1.512	.7360	.603	-.193	-.052	-.018	.247								
Distance to city center in km	6.89	2.771	.005	.058	-.011	.038	-.114	-.160							
SHG Age	3.47	2.032	.657	-.151	-.100	.025	.156	.379**	.121						
Loan Amount	7.564	3.6335	.169	-.019	.005	-.181	.150	.226	.045	.161					
Training Provided by SHG	.35	.477	.333	-.122	.024	-.110	.000	.155	.116	.275*	.079				
Ease in Processing/Bureaucracy	2.30	1.174	.715	-.173	-.154	.108	.135	.419**	.015	.467**	.129	.300**			
Income Generating Use	.75	.434	.005	.021	-.065	.094	-.035	.015	.021	-.072	-.084	-.021	.058		
Traditional Occupation vs New Occupation	.26	.438	.016	.062	.096	-.104	.029	.124	-.001	-.129	.042	.190	.026	.017	

Note: * - $p < 0.01$ ** - $p < 0.001$

The next step in the OLS Regression is the Analysis of Variance. Results of the same are presented in Table 9.4.1.

TABLE 9.4.1: ANOVA FOR CUSTOMER SATISFACTION

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	152.937	12	12.745	29.236	.000[b]
	Residual	52.311	120	.436		
	Total	205.248	132			

a. Dependent Variable: Overall Customer Satisfaction

b. Predictors: (Constant), Traditional Occupation vs New Occupation, Distance to city center in km, Income Generating Use, Ease in Processing/Bureaucracy, Loan Amount , ScheduledCaste, Age , Education, Training Provided by SHG, ScheduledTribe, MPCE, SHG Age

The results of the test of fit in the regression model in explaining variance is presented in Table 9.4.2

TABLE 9.4.2: MODEL SUMMARY FOR CUSTOMER SATISFACTION

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.863[a]	.745	.720	.660

a. Predictors: (Constant), Traditional Occupation vs New Occupation, Distance to city center in km, Income Generating Use, Ease in Processing/Bureaucracy, Loan Amount , ScheduledCaste, Age , Education, Training Provided by SHG, ScheduledTribe, MPCE, SHG Age

The R Square statistic came out to be 0.745 which suggests acceptable levels of variance explained in the dependent variable (Overall Customer Satisfaction) with the use of independent variables.

The OLS multiple regression results are presented in Table 9.4.3.

TABLE 9.4.3: OLS Multiple Regression Coefficients and Significance for Customer Satisfaction

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.317	.397		.799	.426
	Age	-.001	.006	-.008	-.153	.879
	ScheduledCaste	-.530	.149	-.178	-3.551	.001
	ScheduledTribe	-.249	.140	-.090	-1.773	.079
	Education	-.027	.054	-.026	-.506	.614
	MPCE	.501	.095	.296	5.278	.000
	Distance to city center in km	-.001	.022	-.001	-.025	.980
	SHG Age	.202	.035	.329	5.749	.000
	Loan Amount	-.007	.017	-.021	-.427	.670
	Training Provided by SHG	.181	.134	.069	1.351	.179
	Ease in Processing/Bureaucracy	.429	.060	.404	7.096	.000
	Income Generating Use	-.009	.135	-.003	-.068	.946
	Traditional Occupation vs New Occupation	.021	.140	.008	.153	.878

a. Dependent Variable: Overall Customer Satisfaction

The test of Hypothesis results are presented in the Table 9.4.4 below. As can be inferred from the Table 9.4.4 Hypotheses H_{1B}, H_{1D}, H_{2A} and H_{2D} are accepted at 95% confidence level. All VIF statistics for independent variables were found to be less than two hence ruling out the presence of multicollinearity

TABLE 9.4.4: Hypotheses Results: Customer Satisfaction

Srl Nbr	Hypothesis	Independent Variable	Dependent Variable	Coefficient	Accepted/Rejected
1	H1A	Age	Overall Customer Satisfaction	-0.001	Rejected
2	**H1B**	**Caste**	**Overall Customer Satisfaction**	**-0.53**	**Accepted for Schedule Castes**
3	H1C	Education	Overall Customer Satisfaction	-0.027	Rejected
4	**H1D**	**MPCE**	**Overall Customer Satisfaction**	**0.501**	**Accepted**
5	H1E	Distance from city center	Overall Customer Satisfaction	-0.001	Rejected
6	**H2A**	**SHG Age**	**Overall Customer Satisfaction**	**0.202**	**Accepted**
7	H2B	Loan Amount	Overall Customer Satisfaction	-0.007	Rejected
8	H2C	Training Provided	Overall Customer Satisfaction	0.181	Rejected
9	**H2D**	**Ease of Processing/Bureaucracy**	**Overall Customer Satisfaction**	**0.429**	**Accepted**
10	H3A	Income Generating Use	Overall Customer Satisfaction	-0.009	Rejected
11	H3B	New vs Traditional Business	Overall Customer Satisfaction	0.021	Rejected

9.5 FINDINGS:

The model results throw up some interesting results regarding the determinants of Overall Customer Satisfaction of SHG-BLP customers in rural areas of Deoghar district. Only four out of the 11 hypotheses tested: Caste, MPCE, SHG Age and Ease of Processing/Bureaucracy were found to be significant. However, these four significant determinants and hypotheses need further understanding.

The hypothesis H_{1B} is accepted only for Scheduled Castes. With a coefficient of -0.53, the model suggests that other factors remaining the same, a Scheduled Caste respondent in rural areas of Deoghar is less satisfied with her/his SHG-BLP performance than OBC/General respondents. This result needs more analysis to uncover factors that affect Underprivileged castes more than other castes. Some work on this topic has been done at a pan India level (Barua & Sane, 2014), however more detailed analysis might be required to understand caste dynamics in the state and village level. Also, banks/MFIs/SHGs need to focus more on why underprivileged castes do not perceive the benefits of SHG-BLP in the same way as other castes.

Many prior studies have suggested that microfinance activities don't have the same impact for ultra poor consumers. (Carter, 2013).The model developed by the researcher for this study also validates that MPCE (a proxy for poverty level) is positively associated with Customer Satisfaction. (Hypothesis: H_{1D}) The coefficient of 0.501 also suggests that the impact of the level of poverty is significant. Policy makers need to identify this issue and understand the effect of microfinance on extreme poverty in Deoghar as well as across India.

Further, the model suggests that SHG Age is a significant determinant of Overall Customer Satisfaction. (Hypothesis H_{2A}). Although the coefficient of 0.202 is lower compared to other significant determinants, the model confirms the positive relationship between SHG Age and Customer Satisfaction. This effect could be because of the better relationships created by old SHG groups with authorities. Also, with continuous involvement over a longer period, SHG members might better utilize the loan amounts with increased financial literacy. More research on this topic is required to explain the qualitative effects of SHG Age on Customer Satisfaction.

Given the underwhelming performance of microfinance activities in Jharkhand, it comes as no surprise that the Ease of Processing of Loans (Hypothesis: H_{2D}) comes up as a significant positive determinant of Customer Satisfaction. SHG-BLP loans offer considerable benefits of lower interest rates and scalability over time. However, given the bureaucratic delays and severe inefficiencies in the processing of loans in Jharkhand (Deoghar in particular), timely processing of SHG loans is a major factor affecting Customer Satisfaction. Policy makers, banks and the local level government need to prioritize the efficient processing of loans in Jharkhand and Deoghar.

This study presented a novel way of understanding the determinants of SHG-BLP Customer Satisfaction by focusing on the factors of Socio-Economic Profile, Loan Dynamics, and Loan

Use. It is also noted that none of the Loan Use variables were found to be significant in the model. Further research should further explore other Loan use variables over a larger sample to better understand the effect of Loan Use variables on Customer Satisfaction.

Another key factor of the loan process is loan repayment. There were two major issues with measuring Loan Repayment in our research setting. Firstly, the loan repayment rates in Jharkhand (especially for RRBs) are dismal. Further, the data collected from a group of pilot respondents showed that there was no way of validating the reliability of data as some of the respondents were financially illiterate. Such issues prevented this study to include Loan Repayment as a factor affecting Overall Customer Satisfaction. Future research should include variables from the factor of Loan Repayment in studying Overall Customer Satisfaction of microfinance customers.

CHAPTER 10

CONCLUSION AND SCOPE FOR FUTURE RESEARCH

CHAPTER 10: CONCLUSION AND SCOPE FOR FUTURE RESEARCH

10.1 OVERVIEW

This thesis proposed and verified a holistic approach towards measuring the impact of microfinance on the social, economic and capability well-being of low-income families in the Deoghar District in Jharkhand. Through the measurement of impact and its in-depth analysis, this thesis uncovered important, latent issues that determined the overall scale and scope of microfinance impact in one underdeveloped eastern district of India. As most extant studies on microfinance in India have focused on the more developed and established microfinance markets of southern and western India, this thesis provided a novel insight from a region where microfinance solutions need to be significantly altered to suit their lofty goals of mass scale poverty alleviation and empowerment. Using a mixed methods approach of qualitative/inductive as well as statistical validation techniques this thesis provided insights into the impact measurement techniques in the field of microfinance. The present chapter summarizes the research findings of all the four studies along with the research contributions, recommendations contribution, and limitations of the study.

10.2 SUMMARY OF RESEARCH FINDINGS

This research study consists of four studies focused on measuring the impact of microfinance on a sample of borrower respondents. The findings of the studies are summarized below:

10.2.1. Study 1: Qualitative Study- Research Findings

Before measuring the impact of microfinance, this thesis inductively ascertained key themes and grouping criteria which were required for the measurement study. This was done through a Qualitative approach using Interviews (Semi-structured and open) resulting in caselets. The

randomly selected identified cases were asked to identify key success /failure story of the respondents known to them. Some of such success /failure stories were also interviewed.

These study uncovered new variables like distance from the city centre that influence the overall socio-economic impact in the Deoghar district Jharkhand. These impact factors were previously not emphasized much in the microfinance literature. Further impacts on migration were also included in the study as Jharkhand is a state having large scale of migration. The study shows that the performance of microfinance with respect to substantial reduction of migration has been unsatisfactory. When these variables which came from the caselets were tested statistically in the further studies, they were found to be influential while accessing the overall impact of microfinance. Various Hypotheses on the impact on the socio-economic and capability well-being were also tested.

10.2.2 Study 2: Microfinance Impact Estimation Using Control Group- Research Findings

Based on the dataset of 585 respondents (consisting of 368 Microfinance borrowers and 217 non borrowers) following were important findings:

1. The Economic and Social Well Being Impact variables of Increase in Income, Increase in Savings, Savings Differential, Reduction in Migration, Increase in social/community status and Increase in Family Status were found to be significantly higher than that of the control group consisting of non-Microfinance borrowers.

2. On the basis of Caste, OBC respondents showed greater variance across the eight impact variables studied as compared to SC and ST respondents.

3. On the basis of Age group, the $<=30$ years category showed more significant differences from the control group respondents. Such differences were not seen for other Age group categories. (Except exceptions detailed in the findings)

10.2.3: Study 3: Microfinance Borrower Analysis Using Grouping Variables-Research Findings

The data collected from 368 microfinance borrowers were analyzed through the use of grouping variables listed below:

- Distance from the district headquarters

- Loan type SHG/JLG

- Caste

- Education

- Age Group

In this study, the focus was to extract key differences based on the subgroups within the grouping variables selected.Some of the important findings are:

1. Impact Variables grouped on Distance from District Headquarters: Respondents living less than 10 Km from the District Headquarters were found to have significantly more means for Increase in Income (INC_Inc) and Training in Skills/Trades/Crafts (TRNG_SKL) than compared to other groups living more than 10 Km away from district headquarters.

This finding could be attributed to the shallow penetration of microfinance in Deoghar district.

Further, the increase in social status (SOC_STAT) was found to be significantly higher for respondents living within 10-20 Km from the district headquarters. More research is needed to understand the significance of this finding.

2. Impact Variables grouped on Loan Type (SHG/JLG): The means for Increase in Income (INC_Inc) and Reduction in Migration were higher for JLG respondents as compared to SHG respondents.

3. Impact Variables grouped on Age: The Increase in Social Status (SOC_STAT) and Increase in savings (INC_SAV) were found to be significantly more for <30 years and 30-40 years than other groups. Hence a reverse relationship between age and increase in social status and Savings Increase is found.

4. Impact Variables grouped on Caste: The Increase in Income (INC_Inc) and Increase in Social Status were found to be significantly higher for OBC respondents when compared to SC and ST respondents. This suggests that the impact of Microfinance is more positive on OBC respondents than compared to SC and ST respondents in Deoghar district.

5. Impact Variables grouped on Loan Cycle: For loan cycles 3 and 4, the Increase in Family Support (FAM_SUP), Increase in Social Status (SOC_STAT), Increase in Savings (INC_SAV) and Increase in Income (INC_Inc) were found to be significantly higher. This confirms that the real impact of Microfinance loans emerges only after the initial loan cycle years.

6. Impact Variables grouped on Education: No significant differences found between the groups.

7. It is also interesting to note that some respondents used the funds received due to the loans for migration purposes directly. This finding has not been highlighted in previous impact assessment literature on Microfinance.

10.3 RESEARCH CONTRIBUTIONS

Between 2005 and 2010, microfinance has grown 62% annually in terms of the number of clients served and 88% annually in terms of the gross loan portfolio (M -Cril, 2011) making India the largest microfinance industry in the world. In this scenario where microfinance industry is booming and has been accepted worldwide as an important tool in alleviating

poverty, implementation of microfinance in Jharkhand, which is having significant infrastructure gap, poor social indicators and a high index of poverty, can be a boom.

Most studies of microfinance in India have been focused on the southern or the western part of India. These regions of India had a significant exposure to microfinance and academic studies focusing on the Socio-Economic Upliftment of people living below poverty line. However, the eastern region of India including the state of Jharkhand has not seen the same level of attention both in terms of exposure and academic studies, in this regard the present study makes a significant academic contribution

Further Deoghar "comes under 'C' category, i.e., the most backward district for industrial activities." (Government of India). Also, Deoghar receives the Backward Regions Grant Fund (BRGF) from the Government of India. (Ministry of Panchayati Raj, 2009). A reality check of the impact of this programme on the upliftment of the socio-economic factors namely Income, Savings, Expenditures, Employment, Literacy, and Migration will be of vital importance.

This research attempted to find whether this movement of microfinance has in reality uplifted the socio economic conditions of the BPL people of Jharkhand and Deoghar district in particular. This Study apart from accessing the impact of microfinance on the people residing below poverty line in the Deoghar District of Jharkhand has also studied the microfinance customer satisfaction from the similar set of respondents. The impact of Microfinance activities in low income households has seen considerable academic attention in the recent past. A few studies have focused on Microfinance customer satisfaction in India. However, such studies have largely focused on MFI based Microfinance in the western and southern states of India. The present study focuses on the determinants of customer satisfaction of the

Self Help Groups- Bank Linkage Programme in the rural areas of Deoghar District in the eastern state of Jharkhand.

As discussed above, this thesis provided some important contributions. **Firstly**, the thesis proposed and tested a robust and comprehensive framework for microfinance impact measurement. The comprehensive framework includes the dimensions of social, economic and capability well-being. **Secondly**, this thesis measured the impact of microfinance in a backward district of eastern India: a region which has seen a paucity of impact measurement studies. **Thirdly**, the conceptualization of distance from city center and the impact on migration made novel contributions to the academic understanding of microfinance impact. **Fourthly**, the findings suggested that the impact of microfinance is more positive for Other Backward Castes as compared to Scheduled Castes and Tribes. More analysis is needed as to why castes are the dominant influencers of microfinance impact. **Finally**, this thesis measured the determinants of overall customer satisfaction of microfinance borrowers in Deoghar. By doing so, this thesis provided unique insights in understanding the satisfaction of microfinance borrowers by visualizing them as customers of a financial service.

10.4 RECOMMENDATIONS

The recommendations provided by this thesis are aimed at microfinance practitioners/government agencies as well as the academic community.

The studies above suggested that microfinance positively impacts social and Economic well-being in Deoghar district. However, the capability well-being dimension shows no significant change. For practitioners/government agencies this thesis recommends to include capacity building measures like training and sensitization of borrowers. From an academic standpoint, we argue that the lack of increase in capability well-being is captured using the comprehensive impact framework used in the thesis.

Distance from the city center, identified in the qualitative portion of the thesis, has significant connotations on the overall impact of microfinance in Deoghar. This finding points at the shallow penetration of microfinance and its associated activities in Deoghar. From an academic standpoint, distance from city center is identified and tested as an important and novel grouping variable for microfinance impact measurement.

The analysis of the impact of microfinance on migration in Deoghar district reveals some interesting findings. In some cases, the thesis finds that the microfinance loans were used directly for migration. This finding, in some sense, raises questions especially for the state government as it defeats the purpose of improving the lives of borrowers in the villages and communities of Jharkhand. Academically, the impact on migration adds an important aspect for a robust microfinance impact measurement framework.

10.5 LIMITATIONS

This thesis and its interrelated four studies have some limitations.

- Firstly, the thesis focuses on the microfinance borrower respondents only in the Deoghar district of Jharkhand, India. The choice of Deoghar district as the focus area was made due to a variety of reasons mentioned above. However, due to the focus on only one district, generalization across other districts/states is limited.
- Secondly, the data were collected through in-depth interviews and surveys. These instruments were applied to respondents, some of whom were illiterate. Even though necessary precautions were taken, it is possible that few respondents' responses were not properly captured due to possible communication issues.
- Finally, this thesis focuses only on social, economic and capability well beings for evaluating the impact of microfinance. Other dimensions like environmental and psychological dimensions have not been considered.

10.6 SCOPE FOR FUTURE RESEARCH

This thesis uncovered and evaluated significant new dimensions with the aim of creating and testing a robust, holistic framework for microfinance impact measurement. Based on the contributions and limitations of the thesis (discussed above), various avenues of future research can be suggested.

Although, this thesis developed and tested a robust framework for microfinance impact measurement in Deoghar, Jharkhand; more research is required to test whether the suggested framework can be used successfully in other backward regions of India. Future studies should attempt to test the framework discussed in the thesis across other backward regions of India.

Identified variables like distance from city center and measurement of impact on migration are novel contributions of this thesis. These variables need to be tested further in other areas of India to understand their importance further.

Finally, this thesis considered three dimensions of well-being: economic, social and capability. Future works on this topic could possibly consider other impact dimensions like the impact on the environment and psychological well-being. Such impact dimensions are bound to shed more light on this important research topic.

The future researcher can further be undertaken in this regard in the following direction also:
- Focus on the relationship between migration and microfinance.
- Other statistical tools like SEM (Structural Equation Modeling) can be used.
- Comparative analysis of two or more Regions can be done.
- Meta-analysis of microfinance impact measurement analysis.

CHAPTER 11

APPENDIX

CHAPTER 11: APPENDIX

Appendix 1: THE ROTATED COMPONENT MATRIX RESULTS (PILOT STUDY)

Rotated Component Matrix^a

	Component 1	Component 2	Component 3
FAM_SUP	.479	.556	
SOC_STAT		.562	
IMP_MIGR		.893	
TRNG_SKL			.835
CHG_EDUC			.784
INC_SAV	.759		
INC_Inc	.737		

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Note: Component Loadings of less than 0.3 have been suppressed in the table above.

Appendix 2: One Way ANOVA results for Caste categories: SC, ST and OBC q(PILOT STUDY)

		Sum of Squares	df	Mean Square	F	Sig.
Family Support (FAM_SUP)	Between Groups	2.536	2	1.268	1.015	.368
	Within Groups	89.944	72	1.249		
	Total	92.480	74			
Social Status (SOC_STAT)	**Between Groups**	**9.097**	**2**	**4.549**	**2.569**	**.084**
	Within Groups	**127.489**	**72**	**1.771**		
	Total	**136.587**	**74**			
Impact on Migration (IMP_MIGR)	Between Groups	1.317	2	.659	1.106	.336
	Within Groups	42.869	72	.595		
	Total	44.187	74			
Training Provided/ Change in	**Between Groups**	**2.334**	**2**	**1.167**	**2.444**	**.094**
	Within Groups	**34.386**	**72**	**.478**		

Skill (TRNG_SKL)	Total	36.720	74			
Change in Education Level (CHG_EDUC)	Between Groups	.543	2	.271	.897	.412
	Within Groups	21.777	72	.302		
	Total	22.320	74			
Increase in Savings (INC_SAV)	Between Groups	3.209	2	1.604	.907	.408
	Within Groups	127.378	72	1.769		
	Total	130.587	74			
Increase in Income (INC_Inc)	Between Groups	1.369	2	.685	.650	.525
	Within Groups	75.777	72	1.052		
	Total	77.147	74			

Appendix 3: One Way ANOVA results for Age categories: <30, 31-40, 41-50 and 51 and above (PILOT STUDY)

		Sum of Squares	df	Mean Square	F	Sig.
Family Support (FAM_SUP)	Between Groups	22.105	3	7.368	7.434	.000
	Within Groups	70.375	71	.991		
	Total	92.480	74			
Social Status (SOC_STAT)	Between Groups	14.611	3	4.870	2.835	.044
	Within Groups	121.975	71	1.718		
	Total	136.587	74			
Impact on Migration (IMP_MIGR)	Between Groups	4.733	3	1.578	2.839	.044
	Within Groups	39.454	71	.556		
	Total	44.187	74			
Training Provided/ Change in Skill (TRNG_SKL)	Between Groups	3.694	3	1.231	2.647	.056
	Within Groups	33.026	71	.465		
	Total	36.720	74			
Change in Education Level	Between Groups	2.804	3	.935	3.400	.022

189

(CHG_EDUC)	Within Groups	19.516	71	.275		
	Total	22.320	74			
Increase in Savings (INC_SAV)	Between Groups	27.685	3	9.228	6.367	.001
	Within Groups	102.902	71	1.449		
	Total	130.587	74			
Increase in Income (INC_Inc)	Between Groups	.919	3	.306	.285	.836
	Within Groups	76.228	71	1.074		
	Total	77.147	74			

Appendix 4: Independent Sample t-test Results for Loan Type: SHG/JLG

	Type: SHG/JLG	N	Mean	Std. Deviation	Std. Error Mean
Family Support (FAM_SUP)	SHG	46	2.27	1.096	.143
	JLG	29	3.06	.998	.249
Social Status (SOC_STAT)	SHG	46	2.31	1.329	.173
	JLG	29	3.44	1.094	.273
Impact on Migration (IMP_MIGR)	SHG	46	1.56	.702	.091
	JLG	29	2.44	.629	.157
Training/ Change in Skills (TRNG_SKL)	SHG	46	.51	.751	.098
	JLG	29	.56	.512	.128
Change in Education (CHG_EDUC)	SHG	46	.24	.468	.061
	JLG	29	.63	.719	.180
Increase in Savings (INC_SAV)	SHG	46	2.37	1.244	.162
	JLG	29	2.75	1.612	.403
Increase in Income (INC_Inc)	SHG	46	1.68	.840	.109
	JLG	29	2.69	1.250	.313

Appendix 5: Independent Samples t-test (Equality of Variance and Significance

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
FAM_SUP	**Equal variances assumed**	**.429**	**.514**	**-2.608**	**73**	**.011**
	Equal variances not assumed			**-2.753**	**25.706**	**.011**
SOC_STAT	**Equal variances assumed**	**.757**	**.387**	**-3.128**	**73**	**.003**
	Equal variances not assumed			**-3.500**	**28.260**	**.002**
IMP_MIGR	**Equal variances assumed**	**.413**	**.523**	**-4.533**	**73**	**.000**
	Equal variances not assumed			**-4.828**	**26.053**	**.000**
TRNG_SKL	Equal variances assumed	3.249	.076	-.270	73	.788
	Equal variances not assumed			-.335	34.560	.739
CHG_EDUC	**Equal variances assumed**	**9.793**	**.003**	**-2.600**	**73**	**.011**
	Equal variances not assumed			**-2.044**	**18.576**	**.055**
INC_SAV	Equal variances assumed	3.697	.058	-1.007	73	.317
	Equal variances not assumed			-.868	20.100	.396
INC_Inc	**Equal variances assumed**	**5.184**	**.026**	**-3.816**	**73**	**.000**
	Equal variances not assumed			**-3.049**	**18.822**	**.007**

Appendix 6: Details of survey data (BLOCK) STUDY 2

BLOCK	No of Respondents.	Percentage
Deoghar	88	23.9
Devipur	110	29.9
Madhupur	86	23.4
Sarwan	84	22.8
Total	*368*	*100.0*

Appendix 7: Details of survey data (VILLAGES) STUDY 2

VILLAGES	No of Respondents	Percentage
Badhani	13	3.5
Badhmari	6	1.6
Banderbasa	8	2.2
Bandhanadih	18	4.9
Basuliya	14	3.8
Bhawaraydih	28	7.6
Birneya	16	4.3
Chiterpur	14	3.8
Dubjora	40	10.9
Dumardiha	3	.8
Gidhaiya	17	4.6
Harizan totla rohini	6	1.6
Jamani	2	.5

Jamani Kolhabad	4	1.1
Kanpur	25	6.8
Kapasiya	12	3.3
Karikado	2	.5
Kathara	4	1.1
Kenduadih	4	1.1
Mohanpur	10	2.7
Naiyadih	7	1.9
Padjori	2	.5
Raghunathpur	12	3.3
Rajasar Kolhabad	11	3.0
Ramsagar	21	5.7
Rohini	24	6.5
Sadhwadih	5	1.4
Sankarpur	2	.5
Sarpatta	26	7.1
Sikhtiya	6	1.6
Simrapoj	6	1.6
Total	*368*	*100.0*

Appendix 8: Details of survey data (Distance Code) STUDY 2

Distance	No of Responses	Percentage
<= 10 Km	74	20.1
11 - 20 Km	112	30.4
21 - 30 Km	105	28.5
31- 40 Km	77	20.9
Total	*368*	*100.0*

Appendix 9: Details of survey data (LOAN TYPE) STUDY 2

Type: SHG/JLG

Loan Type	No of respondents	Percentage
SHG	192	52.2
JLG	176	47.8
Total	*368*	*100.0*

Appendix 10: Details of survey data (CASTE) STUDY 2

Caste	No. of Responses	Percentage
SC	116	31.5
ST	61	16.6
OBC	191	51.9
Total	*368*	*100.0*

Appendix 11: Details of survey data (AGE GROUP) STUDY 2

Age Group	Frequency	Percentage
<= 30	74	20.1
31 - 40	108	29.3
41 - 50	93	25.3
51 and above	93	25.3
Total	*368*	*100.0*

Appendix 12: Details of survey data (Education level) STUDY 2

Education Level	No of Respondents	Percentage
Illiterate	90	24.5
Till Class X	136	37.0
High School	92	25.0

Graduate	50	13.6
Total	*368*	*100.0*

Appendix 13: Details of survey data (LOAN CYCLE) STUDY 2

Loan Cycle	No of Respondents	Percentage
1	136	37.0
2	90	24.5
3	89	24.2
4	53	14.4
Total	*368*	*100.0*

Appendix 14: Details of survey data (BLOCK) STUDY 2- CONTROL GROUP

BLOCK	No of Respondents	Percentage
Deoghar	57	26.3
Devipur	64	29.5
Madhupur	57	26.3
Sarwan	39	18.0
Total	*217*	*100.0*

Appendix 15: Details of survey data (VILLAGE) STUDY 2-CONTROL GROUP

Village

Name of the Villages	No of Responses	Percentage
Badhani	10	4.6
Badhmari	6	2.8
Banderbasa	4	1.8
Bandhanadih	9	4.1
Basuliya	7	3.2
Bhawaraydih	2	.9
Birneya	8	3.7
Chiterpur	10	4.6
Dubjora	30	13.8
Gidhaiya	11	5.1
Harizan tola rohini	3	1.4
Jamani	1	.5
Jamani Kolhabad	2	.9
Kanpur	19	8.8
Kapasiya	6	2.8
Karikado	1	.5
Kenduadih	2	.9
Mohanpur	6	2.8
Naiyadih	5	2.3
Padjori	1	.5
Raghunathpur	12	5.5
Rajasar Kolhabad	8	3.7

Ramsagar	14	6.5
Rohini	12	5.5
Sadhwadih	5	2.3
Sankarpur	1	.5
Sarpatta	13	6.0
Sikhtiya	6	2.8
Simrapoj	3	1.4
Total	*217*	*100.0*

Appendix 16: Details of survey data (Distance Code) STUDY 2- CONTROL GROUP

Distance Code

Distance	No of Responses	Percentage
<=10 Km	46	21.2
11 - 20 Km	69	31.8
21 - 30 Km	70	32.3
31 - 40 Km	32	14.7
Total	*217*	*100.0*

Appendix 17: Details of survey data (Caste) STUDY 2- CONTROL GROUP

Caste	No of Respondents	Percentage
SC	75	34.6

ST	40	18.4
OBC	102	47.0
Total	*217*	*100.0*

Appendix 18: Details of survey data (Age Group) STUDY 2- CONTROL GROUP

Age Group

Age Groups	No of Respondents	Percentage
<= 30	49	22.6
31 - 40	63	29.0
41 - 50	52	24.0
51 and above	53	24.4
Total	*217*	*100.0*

Appendix 19: Details of survey data (Education) STUDY 2- CONTROL GROUP

Education Level	No of Respondents	Percentage
Illiterate	56	25.8
Till Class X	75	34.6
High School	51	23.5
Graduate	35	16.1
Total	*217*	*100.0*

Appendix 20: One Way ANOVA-Study 3: Distance from Headquarters

ONE WAY ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Family Support (FAM_SUP)	Between Groups	7.824	3	2.608	2.102	.100
	Within Groups	451.643	364	1.241		
	Total	459.467	367			
Social Status (SOC_STAT)	**Between Groups**	**37.818**	**3**	**12.606**	**8.270**	**.000**
	Within Groups	**554.867**	**364**	**1.524**		
	Total	**592.685**	**367**			
Impact on Migration (IMP_MIGR)	**Between Groups**	**73.233**	**3**	**24.411**	**38.652**	**.000**
	Within Groups	**229.886**	**364**	**.632**		
	Total	**303.120**	**367**			
Training/ Change in Skills (TRNG_SKL)	**Between Groups**	**7.728**	**3**	**2.576**	**5.625**	**.001**
	Within Groups	**166.706**	**364**	**.458**		
	Total	**174.435**	**367**			
Change in Education (CHG_EDUC)	Between Groups	1.123	3	.374	1.571	.196
	Within Groups	86.765	364	.238		
	Total	87.889	367			
Increase in Savings (INC_SAV)	Between Groups	3.411	3	1.137	.831	.477
	Within Groups	497.893	364	1.368		
	Total	501.304	367			
Actual Savings Differential (SAV_DIFF)	Between Groups	59842137.950	3	19947379.317	2.134	.096
	Within Groups	3402229522.438	364	9346784.402		
	Total	3462071660.389	367			

Increase in Income (INC_Inc)	Between Groups	32.997	3	10.999	7.423	.000
	Within Groups	539.370	364	1.482		
	Total	572.367	367			

Appendix 21: Independent Samples t-Test-STUDY 3

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Family Support (FAM_SUP)	**Equal variances assumed**	17.508	.000	-5.244	366	.000	-.591	.113	-.813	-.370
	Equal variances not assumed			-5.195	335.568	.000	-.591	.114	-.815	-.367
Social Status (SOC_STAT)	Equal variances assumed	4.821	.029	-1.935	366	.054	-.256	.132	-.515	.004
	Equal variances not assumed			-1.944	365.940	.053	-.256	.132	-.514	.003
Impact on Migration (IMP_MIGR)	**Equal variances assumed**	24.693	.000	-7.288	366	.000	-.647	.089	-.821	-.472
	Equal variances not assumed			-7.191	317.609	.000	-.647	.090	-.824	-.470
Training/ Change in Skills (TRNG_SKL)	**Equal variances assumed**	.988	.321	-2.056	366	.041	-.147	.072	-.288	-.006
	Equal variances not assumed			-2.062	365.892	.040	-.147	.071	-.288	-.007
Change in	Equal variances assumed	6.361	.012	-1.458	366	.146	-.074	.051	-.175	.026

		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Education (CHG_EDUC)	Equal variances not assumed			-1.453	357.086	.147	-.074	.051	-.175	.026
Increase in Savings (INC_SAV)	Equal variances assumed	1.460	.228	-.593	366	.553	-.072	.122	-.312	.168
	Equal variances not assumed			-.595	365.770	.552	-.072	.122	-.312	.167
Actual Savings Differential (SAV_DIFF)	Equal variances assumed	.466	.495	.671	366	.503	215.188	320.758	-415.573	845.948
	Equal variances not assumed			.669	358.563	.504	215.188	321.555	-417.184	847.559
Increase in Income (INC_Inc)	**Equal variances assumed**	**8.770**	**.003**	**-6.988**	**366**	**.000**	**-.857**	**.123**	**-1.098**	**-.615**
	Equal variances not assumed			**-6.943**	**347.241**	**.000**	**-.857**	**.123**	**-1.099**	**-.614**

Appendix 22: One Way ANOVA Findings-STUDY 3: Age Group

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Family Support (FAM_SUP)	**Between Groups**	**27.485**	**3**	**9.162**	**7.720**	**.000**
	Within Groups	**431.982**	**364**	**1.187**		
	Total	**459.467**	**367**			
Social Status (SOC_STAT)	**Between Groups**	**52.245**	**3**	**17.415**	**11.729**	**.000**
	Within Groups	**540.440**	**364**	**1.485**		
	Total	**592.685**	**367**			
Impact on Migration (IMP_MIGR)	Between Groups	4.698	3	1.566	1.910	.128
	Within Groups	298.422	364	.820		
	Total	303.120	367			
Training/ Change in Skills (TRNG_SKL)	Between Groups	2.835	3	.945	2.004	.113
	Within Groups	171.600	364	.471		
	Total	174.435	367			
Change in Education (CHG_EDUC)	**Between Groups**	**1.913**	**3**	**.638**	**2.700**	**.046**
	Within Groups	**85.976**	**364**	**.236**		
	Total	**87.889**	**367**			
Increase in Savings (INC_SAV)	**Between Groups**	**75.012**	**3**	**25.004**	**21.350**	**.000**
	Within Groups	**426.292**	**364**	**1.171**		
	Total	**501.304**	**367**			
Actual Savings Differential (SAV_DIFF)	Between Groups	24998468.825	3	8332822.942	.882	.450
	Within Groups	3437073191.564	364	9442508.768		
	Total	3462071660.389	367			
Increase in Income (INC_Inc)	Between Groups	5.026	3	1.675	1.075	.360
	Within Groups	567.341	364	1.559		
	Total	572.367	367			

Appendix 23: One Way ANOVA – Study 3: Caste

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Family Support (FAM_SUP)	Between Groups	.810	2	.405	.322	.725
	Within Groups	458.657	365	1.257		
	Total	459.467	367			
Social Status (SOC_STAT)	**Between Groups**	**38.346**	**2**	**19.173**	**12.624**	**.000**
	Within Groups	**554.338**	**365**	**1.519**		
	Total	**592.685**	**367**			
Impact in Migration (IMP_MIGR)	Between Groups	4.487	2	2.244	2.742	.066
	Within Groups	298.632	365	.818		
	Total	303.120	367			
Training/ Change in Skills (TRNG_SKL)	Between Groups	1.792	2	.896	1.894	.152
	Within Groups	172.643	365	.473		
	Total	174.435	367			
Change in Education (CHG_EDUC)	Between Groups	.686	2	.343	1.436	.239
	Within Groups	87.202	365	.239		
	Total	87.889	367			
Increase in Savings (INC_SAV)	Between Groups	5.981	2	2.991	2.204	.112
	Within Groups	495.323	365	1.357		
	Total	501.304	367			
Actual Savings Differential (SAV_DIFF)	Between Groups	32465524.742	2	16232762.371	1.728	.179
	Within Groups	3429606135.646	365	9396181.194		
	Total	3462071660.389	367			
Increase in Income (INC_Inc)	**Between Groups**	**33.653**	**2**	**16.827**	**11.401**	**.000**
	Within Groups	**538.714**	**365**	**1.476**		
	Total	**572.367**	**367**			

Appendix 24: One Way ANOVA- Study 3: Loan Cycle

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Family Support (FAM_SUP)	**Between Groups**	**34.306**	**3**	**11.435**	**9.790**	**.000**
	Within Groups	**425.162**	**364**	**1.168**		
	Total	**459.467**	**367**			
Social Status (SOC_STAT)	**Between Groups**	**18.457**	**3**	**6.152**	**3.900**	**.009**
	Within Groups	**574.228**	**364**	**1.578**		
	Total	**592.685**	**367**			
Impact on Migration (IMP_MIGR)	**Between Groups**	**21.922**	**3**	**7.307**	**9.459**	**.000**
	Within Groups	**281.197**	**364**	**.773**		
	Total	303.120	367			
Training / Change in Skills (TRNG_SKL)	Between Groups	1.765	3	.588	1.240	.295
	Within Groups	172.670	364	.474		
	Total	174.435	367			
Change in Education (CHG_EDUC)	Between Groups	1.166	3	.389	1.632	.182
	Within Groups	86.722	364	.238		
	Total	87.889	367			
Increase in Savings (INC_SAV)	Between Groups	8.754	3	2.918	2.156	.093
	Within Groups	492.551	364	1.353		
	Total	501.304	367			
Actual Savings Differential (SAV_DIFF)	Between Groups	53452929.020	3	17817643.007	1.903	.129
	Within Groups	3408618731.369	364	9364337.174		
	Total	3462071660.389	367			
Increase in Income (INC_Inc)	**Between Groups**	**78.072**	**3**	**26.024**	**19.164**	**.000**
	Within Groups	**494.295**	**364**	**1.358**		
	Total	**572.367**	**367**			

Appendix 25: One Way ANOVA- Study 3: Education

ANOVA

One Way ANOVA Findings

		Sum of Squares	df	Mean Square	F	Sig.
Family Support (FAM_SUP)	Between Groups	7.257	3	2.419	1.947	.122
	Within Groups	452.211	364	1.242		
	Total	459.467	367			
Social Status (SOC_STAT)	Between Groups	9.060	3	3.020	1.884	.132
	Within Groups	583.625	364	1.603		
	Total	592.685	367			
Impact on Migration (IMP_MIGR)	Between Groups	3.444	3	1.148	1.394	.244
	Within Groups	299.675	364	.823		
	Total	303.120	367			
Training/ Change in Skills (TRNG_SKL)	Between Groups	3.228	3	1.076	2.288	.078
	Within Groups	171.206	364	.470		
	Total	174.435	367			
Change in Education (CHG_EDUC)	**Between Groups**	**2.282**	**3**	**.761**	**3.235**	**.022**
	Within Groups	**85.606**	**364**	**.235**		
	Total	**87.889**	**367**			
Increase in Savings (INC_SAV)	**Between Groups**	**11.055**	**3**	**3.685**	**2.736**	**.043**
	Within Groups	**490.249**	**364**	**1.347**		
	Total	**501.304**	**367**			
Actual Savings Differential (SAV_DIFF)	**Between Groups**	**141771210.492**	**3**	**47257070.164**	**5.181**	**.002**
	Within Groups	**3320300449.897**	**364**	**9121704.533**		
	Total	**3462071660.389**	**367**			

Increase in Income (INC_Inc)	Between Groups	2.955	3	.985	.630	.596
	Within Groups	569.412	364	1.564		
	Total	572.367	367			

Appendix 26: Block wise comparison of Credit amount, Income, Expenses and Savings

Block		Family Member Count	Credit Amount from MFI 1	Credit Amount from MFI 2	Credit Amount from Bank 1	Credit Amount from Bank 2	Annual Income from Agriculture	Monthly Income from Trade	Daily Income from Labour	Monthly Income from Pension	Monthly Income from Services	Monthly Expense	Savings Difference in last 3 years
Deoghar	Mean	5.06	10579.55	1000.00	4659.09	2481.93	65314.55	0.00	0.00	2454.55	11250.00	7749.583333	3345.34
	Std. Deviation	1.197	4078.882	3339.900	5506.290	4467.666	7287.18	0.000	0.000	3432.465	38679.719	3392.0267515	3620.694
Devipur	Mean	5.17	5218.18	563.65	6195.45	3768.52	55771.14	1309.09	727.27	5172.00	7636.36	8187.818182	4882.82
	Std. Deviation	1.057	5739.581	2375.433	4733.298	5329.527	6277.33	6769.800	5368.801	19400.501	36445.945	5698.5308511	3270.558
Madhupur	Mean	5.72	3116.28	0.00	6186.05	5039.47	55239.19	0.00	446.51	2260.47	0.00	7549.699612	3093.97
	Std. Deviation	1.092	5247.786	0.000	4117.771	5428.789	9257.42	0.000	1249.065	3867.338	0.000	2413.8131968	2593.679
Sarwan	Mean	5.64	1666.67	.01	7053.57	6225.00	58923.16	428.57	0.00	2715.00	4285.71	7165.6746 03	3537.74
	Std. Deviation	1.470	3749.163	.109	3298.428	5435.409	4320.14	3927.922	0.000	13244.360	27606.779	5939.7605814	2162.222
Total	Mean	5.38	5198.37	380.69	6021.74	4305.48	58812.01	489.13	321.74	3280.92	5951.09	7700.5819 75	3790.08
	Std. Deviation	1.232	5839.478	2041.581	4575.306	5339.113	9257.42	4173.341	3003.933	12620.091	30627.725	4673.6741900	3071.390

GLOSSARY

TERM	DEFINITION
Block	Block is a sub-division of a District, intermediate level of governing body for a group of Panchayats
JLG	The JLG is an informal group of 4-10 members, broadly developed, organized and nurtured by an intermediary.
Financial services	Services provided to individuals and firms by the financial system.
Financial system	The financial system in a country is defined to include financial institutions (banks, insurance companies, and other nonbank financial institutions) and financial markets (such as those in stocks, bonds, and financial derivatives). It also encompasses the financial infrastructure (for example, credit information sharing systems and payments and settlement systems)
Panchayat	Traditionally a body of five elders (panch means five) who were responsible for all village decisions. Now a village council of elected members responsible for taking decision on key issues relating to a village's social, political and economic activities headed by a President/Sarpanch. It is the lowest tier of local government i.e. PRI.
PRI	A three-tiered system of local self-governance in India, consisting of : a) Gram Panchayat, or village council. b) Panchayat Samiti, or representatives from a group of Gram Panchayats. c) Zila Parishad or District Panchayat district-level representation from several Panchayat Samiti.
Grameen Bank	Village Bank
MFI	Microfinance Institution, any NGO or private organization that provides microfinance loans. MFIs can take many legal forms, including non-profit societies and for-profit NBFCs.
NABARD	National Bank for Agriculture and Rural Development, the apex development bank responsible for regulating credit flow and promoting integrated development in rural areas. During 1992, NABARD has promoted India's largest microfinance program, the SHG Bank Linkage Programme
SHG	Self Help Group, (SHGs) generally consist of 10-20 members that save regularly and extend internal loans through group savings. Groups will get external loans after grading by the banks
Swarna Jayanti Gram Swarozgar Yojana (SGSY)	A Programme for Skill and Capacity Building and self-employment. Swaranjayanti Gram Swarojgar Yojana, a centrally-sponsored program launched in 1999 to support poor families through the provision of subsidies and bank credit distributed via SHGs
SBLP	SHG-Bank Linkage Programme, a program sponsored by NABARD to promote and provide credit to SHGs nationally. Through SBLP, banks Provides SHGs with credit after an initial period of saving and internal

	lending.
Unbanked	A person who does not use or does not have access to commercial banking services.

Bibliography

(MOSPI), N. S.-M. (2013, 9 15). *India - National Sample Survey 2011-2012 (68th round) - Schedule 1.0 (Type 1) - Consumer Expenditure.* Retrieved 02 4, 2015, from International Household Survey Network: http://catalog.ihsn.org/index.php/catalog/3281/download/48293

Abate, G. T., Borzaga, C., & Getnet, K. (2014). Cost- efficiency and outreach of microfinance institutions: Trade- offs and the role of ownership. *Journal of International Development, 26*(6), 923-932.

Ageba, G., & Amha. (2006). Micro and small enterprise Finance in Ethopia:Empirical Evidence". *EASSRR XXII (1)*, 63-86.

Agricultural Finance Corporation, L. (2008). *"Assessing Development Impact of Microfinance Programmes"A Study Commissioned by SIDBI.* Retrieved from www.sidbi.in

AIMS. (2001). *Conceptual Framework for Assessing the Impacts of Microenterprise Services.* Washington D.C.: Assessing the Impact of Microenterprise Services (AIMS), USAID.

Albino, M., & Subramanian. (2008). "Reaching out to the Unbanked in Jharkhand". *Institute of Financial Management and Research- Centre for Micro Finance, Case Study.*

Alkire, S., & Seth, S. (2015). Multidimensional Poverty Reduction in India. *World Development, 72*, 93-108.

Alpana, V. (2007). Promoting financial inclusion: an analysis of the role of banks. *Indian Journal of Social Development*, 107-127.

Amaeshi, K. M. (2006). Financial exclusion, financial institutions and corporate social responsibility: a developing country perspective. *Social Science Research Network (SSRN).*

Anitha, H. S., & Revenkar, A. D. (2007). Micro Credit through SHG for Rural Development. *Southern Economist, 46*(8).

Arora, S., & Meenu. (2011). Women empowerment through microfinance intervention in the commercial banks. *International Journal of Economics and Research, 2*(2), 35-45.

ATHENA, C. (2009). A STUDY ON THE LEVELS OF LIVING OF SELF-HELP GROUPS IN COIMBATORE DISTRICT WITH PARTICULAR REFERENCE TO THONDAMUTHUR AND PERIYANAICKENPALAYAM BLOCKS. *LANGUAGE IN INDIA, 9.*

Barnes, C. (1996). *Assets and the Impact of Microenterprise Finance Programs.* Washington D.C.: AIMS project report, USAID.

Barua, R., & Sane, R. (2014, May). *Discussion Papers in Economics Repayment in microfinance:The role of financial literacy and caste.* Retrieved 04 16, 2016, from Indian Statistical Institute, Delhi: http://www.isid.ac.in/~pu/dispapers/dp14-06.pdf

Bihari, S. C., Roy, S. K., & Bhattacharya, K. (2006). *CUSTOMER SATISFACTION SURVEY IN SELECTED MICRO FINANCE INSTITUTIONS.* Retrieved 04 12, 2016, from Indian Institute of Banking and Finance: http://www.iibf.org.in/documents/reseach-report/Report-21.pdf

Bylander, M., & Hamilton, E. R. (2015). Loans and leaving: migration and the expansion of microcredit in Cambodia. *Population Research and Policy Review*, *34*(5), 687-708

Carter, R. (2013). *Evidence on microcredit for the ultra-poor (GSDRC Helpdesk Research Report).* University of Birmingham. Birmingham, UK: Governance and Social Development Resource Centre.

Chandrakumarmangalam, S., & Vetrivel, s. c. (2012). Impact of Group-Based Microfinance on Rural Households in India. *The IUP Journal of Management Research, Vol. XI*(No 2).

Chibba, M. (2011). Financial Inclusion, Poverty Reduction and the millennium development goals. *Journal of Micro Credit, 4*(9), 47-99.

Chidambaranathan, M., Premchander, S., & Raj, M. (2013, June). Community-based microfinance: The potential and challenges of self-reliant, self-help group cooperatives. *Enterprise Development and Microfinance, 24*(2), 118-134.

Chowdhury, S. S., & Chowdhury, S. A. (2011). Microfinance and women empowerment: A panel data analysis using evidence from rural bangladesh. *International Journal of Economics and Finance, 3*(5), 86-96.

Citro, C. F., & Michael, R. T. (1995). Measuring Poverty. A New Approach, Panel on Poverty and Family Assistance: Concepts, Information Needs, and Measurement Methods. *National Research Council. Available online from http://www. nap. edu/catalog/4759. html.*

Department of Planning and Development, Government of Jharkhand. (2014, 11 17). *Jharkhand Social Sector Statistics 2014.* Retrieved 04 15, 2016, from Department of Planning and Development, Government of Jharkhand: http://www.jharkhand.gov.in/documents/10179/54327/Social%20Sector%20Statistics-Jharkhand%202014

Directorate of Statistics & Evaluation. (2006). *Statistical Profile of Jharkhand-2006.* Retrieved 02 16, 2014, from Directorate of Economics & Statistics: https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CCcQFjAA&url=http%3A%2F%2Fdesjharkhand.nic.in%2Ffiles%2FStatistical%2520Profile%2520of%2520Jharkhand%2520-2006%2FStatistical%2520Profile%2520of%2520Jharkhand-2006.xls&ei=IfUAU-

Dogra, B. (2005). Rural Employment Schemes: Rhetoric and Reality. *Economic and Political Weekly*, 1809-1810.Dreze, J., & Khera, R. (2010). The BPL Census and a Possible Alternative. *Economic & Political Weekly, 45*(9), 54-63.

Cohen, M., Dunn, E., Kalaitzandonakes, N., & Valdivia, C. (1996). RISK AND THE IMPACTS OF MICROENTERPRISE SERVICES.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of management review*, *14*(4), 532-550.

Farida, F., Siregar, H., Nuryartono, N., & Intan, K. P. (2016). An Impact Estimator Using Propensity Score Matching: People's Business Credit Program to Micro Entrepreneurs in Indonesia.*Iranian Economic Review*,*20*(4), 599-615.

Feigenberg, B., Field, E. M., & Pande, R. (2010).*Building social capital through microfinance* (No. w16018). National Bureau of Economic Research.

Gebauer, H., & Reynoso, J. (2013). An agenda for service research at the base of the pyramid. *Journal of Service Management, 24*(5), 482-501.

Getaneh, G. (2006, april 6). Gender, Poverty and Micro-enterprise Services in Ethiopia: Why a only Few Women are joining. *Women's Empowerment in the New Millennium 2006 (organized by the Women Development Initiative Programme (WDIP*. Ethiopia.

Ghalib, A. K. (2013, 06). How effective is microfinance in reaching the poorest? Empirical evidence on programme outreach in rural Pakistan. *Journal of Business Economics and Management, 14*(3), 467-480.

Ghatak, M., & Guinnane, T. W. (1999). The economics of lending with joint liability: theory and practice.*Journal of development economics*, *60*(1), 195-228

Ghosal, Souren l, (2009) "Microfinancing – One of the Tools to Manage Downturn", The Indian Banker, January Issue, Vol IV, No 7.

Giné, X., Krishnaswamy, K., & Ponce, A. (2011). Strategic Default in joint liability groups: Evidence from a natural experiment in India.*Work in Progress*.

Girabi, F., & Mwakaje, A. E. G. (2013). Impact of microfinance on smallholder farm productivity in Tanzania: The case of Iramba district. *Asian Economic and Financial Review*,*3*(2), 227.

Gobezie, G. (2004, January). Microfinance Development: Can Impact on Poverty and Food In-Security be Improved Upon?. In *International Conference on Microfinance Development in Ethiopia* (Vol. 21, p. 23).

Gobezie, G. (2005, June). Livelihoods through micro-enterprise services? assessing supply and demand constraints for microfinance in ethiopia (with particular reference to the amhara region). In *3rd International Conference on the Ethiopian Economy, Organized by the Ethiopian Economic Association June* (pp. 2-4).

Gobezie, G. (2010). Empowerment of women in rural Ethiopia: A review of two microfinance models. *Praxis: The Fletcher Journal of Human Security*, *25*, 23-38.

Goetz, A. M. (2001).Women development workers: Implementing rural credit programmes in Bangladesh. SAGE Publications Pvt. Limited.

Goetz, A. M., & Gupta, R. S. (1996). Who takes the credit? Gender, power, and control over loan use in rural credit programs in Bangladesh.*World development*, *24*(1), 45-6

Government of India. (2012). *State Annual Plan 2012-13*. Retrieved 02 16, 2014, from Planning Commision, Government of India: http://planningcommission.nic.in/plans/stateplan/Presentations12_13/jharkhand12_13.pdf

Government of India. (n.d.). *Brief Industrial Profile of Deoghar District*. Retrieved 02 16, 2014, from Ministry of Micro, Small & Medium Enterprises: http://dcmsme.gov.in/dips/DIPS%20Deoghar.pdf

Government of India, Planning Commission. (2013, July 22). *Press Note on Poverty Estimates, 2011-12*. Retrieved 04 04, 2016, from Planning Commission: http://planningcommission.nic.in/news/pre_pov2307.pdf

Government of Jharkhand. (2013, May 10). *Jharkhand at a glance*. Retrieved 04 14, 2016, from Government of Jharkhand: http://www.jharkhand.gov.in/about

Government of Jharkhand. (2016, 04 06). *Deoghar District - Home*. Retrieved 04 16, 2016, from Deoghar District: http://deoghar.nic.in/

Government of Jharkhand. (2016, February 15). *Minerals in Jharkhand*. Retrieved 04 16, 2016, from Government of Jharkhand: http://www.jharkhand.gov.in/web/guest/minerals

Government of Jharkhand. (2016, February 15). *Tribals in Jharkhand*. Retrieved 04 13, 2016, from Government of Jharkhand: http://www.jharkhand.gov.in/web/guest/tribals

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a Conceptual Framework for Mixed-Method Evaluation Designs. In *Toward a Conceptual Framework for Mixed-Method Evaluation Designs* (pp. 255-274). Educational Evaluation and Policy Analysis.

Grunewald, D., & Baron, P. (2011). A tale of two banks: Grameen bank and SKS microfinance. *Journal of Leadership, Accountability and Ethics, 8*(4), 119.

| Haldar, A., & Stiglitz, J. (2015). Taking stock of microfinance. *World Economics*, *16*(2), 1-10.

Haub, C., & Sharma, O. P. (2010). What is poverty really? The case of India. *Population Reference Bureau visited online on October*, *5*, 2010.

Hiatt, S., & Woodworth, W. (2006). "Alleviating Poverty through Microfinance: Village Banking Outcomes in Central America". *The Social Science Journal, 43*(3), 471-477.

Holvoet, N. (2004). Impact of microfinance programs on children's education. *ESR Review, 6*(2), 27.

Hudak, K. (2012). What next for microfinance? how the broader financial context matters for effective microfinance outreach. *Journal of Developmental Entrepreneurship, 17*(4), 1-12.

INTERNATIONAL MONETARY FUND. (2017). Retrieved 2 6, 2017, from /www.imf.org/external/pubs/ft/weo/2016/02/weodata/weorept.aspx?pr.x=54&pr.y=8&sy=2 016&ey=2020&scsm=1&ssd=1&sort=country&ds=.&br=1&c=534&s=PPPSH&grp=0&a=

Johnson, S. (1998). Programme Impact Assessment in Microfinance: the Need for Analysis of the Real Market. *IDS Bulletin, 29*, 21-30.

Jose, S., & Buchanan, F. R. (2013). Marketing at the bottom of the pyramid: service quality sensitivity of captive microfinance borrowers. *Journal of Consumer Marketing, 30*(7), 573-582.

Jothi, V. N. (2010, jan-march). Socio-Economic Impact: Micro financing of Self Help Groups. *SCMS Journal of Indian Management*.

Kabeer, N. (2001). "Conflicts Over Credit: Reevaluating the Empowerment Potential of Loans to Women in Rural Bangladesh". *World Development, 29*(1), 63-84.

Kabeer, N. (2005). "Is Microfinance a Magic Bullet for Women's Empowerment?Analysis of Findings from South Asia". *Economic and Political Weekly, XL*(44 & 45), pp. 4709-4718.

Kamble, H. K., & Sonar, B. G. (2006). "The Role of SHGs in Women Empowerment: a case study on selected SHGs promoted by voluntary organizations in Gulbarga district of Karnataka". *Journal of Global Economy,*, 216-221.

Kar, A. K. (2011). Microfinance Institutions: A Cross-Country Empirical Investigation of Outreach and Sustainability. *Journal of Small Business and Entrepreneurship, 24*(3).

Kar, A. K. (2011). Microfinance Institutions: A Cross-Country Empirical Investigation of Outreach and Sustainability. *Journal of Small Business and Entrepreneurship, 24*(3), 427-447.

Kar, A., & Bali Swain, R. (2014). Interest rates and financial performance of microfinance institutions: Recent global evidence. *European Journal of Development Research, 26*(1), 87-99.

Karlan, D., & Valdivia, M. (2011, May). Teaching Entrepreneurship: Impact of business training on microfinance clients and institutions. *The Review of Economics and Statistics, 93*(2), 510-527.

Karmakar, K. G. (Ed.). (2008).*Microfinance in India*. SAGE Publications India.

Karuppannan, Rajendran, Micro Finance through Self Help Groups – A Survey of Recent Literature in India (October 23, 2014). International Journal of Marketing, Financial Services & Management Research Vol.1, Issue 12, December 2012; Humanistic

Management Network, Research Paper Series No. 2513704. Available at SSRN:https://ssrn.com/abstract=2513704

Kistruck, G. M., Webb, J. W., Sutter, C. J., & Bailey, A. V. (2015). The double-edged sword of legitimacy in base-of-the-pyramid markets. *Journal of Business Venturing, 30*, 436-451.

Kistruck, G. M., Webb, J. W., Sutter, C. J., & Ireland, R. D. (2011, May). Microfranchising in Base-of-the-Pyramid Markets: Institutional Challenges and Adaptations to the Franchise Model. *Entrepreneurship Theory and Practice*, 503-532.

Kumar, R. (2005). Sustaining rural development: Micro finance in Haryana. (S. Singh, Ed.) *Strategies for Sustainable Rural Development*, 268-281.

Laha, A., & Kuri, P. K. (2015, January). Measuring Access of Microfinance on Poverty in India: Towards a Comprehensive Index. *International Journal of Financial Management, 5*(1), 11-18.

Lakshmanan, S. (2008, April-June). Expanding Access to Urban Poor through Microsate Branches. *CAB Calling*, 36-37.

Lalitha, B., & Nagarjun, B. S. (2004). Empowerment of Rural Women through SHGs: A study in Tamil Nadu.*Empowerment of people*, 73-85.

Lavoori, V., & Pramanik, R. N. (2014). Microfinance impact on women's decision making: a case study of Andhra Pradesh. *Journal of Global Entrepreneurship Research, 4*(11).

Ledgerwood, J. (1999). *Sustainable Banking with the Poor: Microfinance Handbook An Institutional and Financial Perspective.* Washington D.C.: The International Bank for Reconstruction and Development/THE WORLD BANK.

(2011). *M -Cril.*

MacPherson, S., & Silburn, R. (1998). The meaning and measurement of poverty. In J. Dixon, & D. Macarov (Eds.), *Poverty: A Persistent Global Reality.* New York, NY, USA: Routledge.

Madan, G. R. (1990). *India's developing villages.* Allied Publishers.

Mahajan, V., & Ramola, B. G. (1996). Financial services for the rural poor and women in India: Access and sustainability. *Journal of International Development, 8*(2), 211-224.

Manimekalai, M., & Rajeswari, G. (2001). Nature and performance of informal self-help groups-A case from Tamil Nadu. *Indian Journal of Agricultural Economics,56*(3), 453.

Merz, J., & Rathjen, T. (2014). Multidimensional time and income poverty: well being gap and minimum 2DGAP poverty intensity - German evidence. *The Journal of Economic Inequality, 12*(4), 555-580.

Mettei, D. K. (2008). Micro finance through self help group- The Realities in Economic Operations. *Indian Co-operative Review*.

Ministry of Panchayati Raj. (2009, 09 08). *A Note on the Backward Regions Grant Fund Programme.* Retrieved 02 16, 2014, from National Institute of Rural Development: http://www.nird.org.in/brgf/doc/brgf_BackgroundNote.pdf

Mnistry of Rural Development, Government of India. (2016, April 13). *FAQ.* Retrieved April 16, 2016, from Deen Dayal Antyodaya Yojana - NRLM: http://aajeevika.gov.in/content/faq

Mohan, L., & & Potnis, D. (2010). Catalytic innovation in microfinance for inclusive growth: Insights from SKS microfinance. *Journal of Asia-Pacific Business, 11*(3), 218-239.

Morduch, J. (1999). The Microfinance Promise. *Journal of Economic Literature, XXXVII*, 1569–1614.

Morduch, J., & Rutherford, S. (2003, april 2). *Microfinance: Analytical Issues for India.* Retrieved january 2015, from http://www.safesave.org/MorduchandRutherfordMicrofinanceinIndiaThinkpieceApril22003.pdf

(MOSPI), N. S.-M. (2013, 9 15). *India - National Sample Survey 2011-2012 (68th round) - Schedule 1.0 (Type 1) - Consumer Expenditure.* Retrieved 02 4, 2015, from International Household Survey Network: http://catalog.ihsn.org/index.php/catalog/3281/download/48293

Murthy, R. K., Raju, K., & Kamath, A. (2005). Towards Women's Empowerment and Poverty Reduction: Lessons from the Andhra Pradesh South Asia Poverty Alleviation Programme.*Micro-Credit, Poverty and Empowerment: Linking the Triad*, 61.

NABARD. (2011). *Status of Microfinance 2009-10.* Mumbai: NABARD.

NABARD. (2012, 03 31). *District Profile - Deoghar.* Retrieved 04 13, 2016, from NABARD: https://www.nabard.org/pdf/Deoghar_District_and_Banking_Profile.pdf

NABARD. (2015). *Status of Microfinance in India 2014-15.* Retrieved 04 03, 2016, from National Bank for Agriculture and Rural Development: https://www.nabard.org/Publication/SMFI-2015r-new.pdf

NABARD. (2015-16). *Status of microfinance in India.* MUMBAI: NABARD.

NABARD. (2015-2016). *STATUS OF MICROFIANCE IN INDIA.* NABARD.

NABARD. (n.d.). *EShakti.NABARD.* Retrieved 2 10, 2017, from https://eshakti.nabard.org/Aboutus.aspx

National Sample Survey Office, Ministry of Statistics, Government of India. (2011, July). *Appendix A: Concepts and Definitions, NSS KI(66/1.0): Key Indicators of Household Consumer Expenditure in India, 2009-10.* Retrieved 04 03, 2016, from International Labour Organization: www.ilo.org/surveydata/index.php/catalog/210/download/2246

National Sample Survey Office, Ministry of Statistics, Government of India. (2011, July). *Schedule 1.0: Consumer Expenditure, NATIONAL SAMPLE SURVEY ORGANISATION, SOCIO-ECONOMIC SURVEY, SIXTY-SIXTH ROUND: JULY 2009 - JUNE 2010.* Retrieved 04 03, 2016, from International Labour Organization: www.ilo.org/surveydata/index.php/catalog/211/download/2259

Nedumaran, S., Palanisami, K., & Swaninathan, L. P. (2001). Performance and impact of self-help groups in Tamil Nadu.*Indian Journal of Agricultural Economics*,*56*(3), 471

Ngo, T. V., Mullineux, A. W., & Ly, A. H. (2014). The impact of scale of operation on financial performance in microfinance. *Eurasian Economic Review, 4*(2), 177-198.

Panagariya, A., & Mukim, M. (2014). A Comprehensive Analysis of Poverty in India. *Asian Development Review, 31*(1), 1-52.

Panda, K. D. (2009). Participation in the Group Based Microfinance and its Impact on Rural Households: A Quasiexperimental Evidence from an Indian State. *Global Journal of Finance and Management*, *1*(2), 171-183.

Pandey, M. (2008). Micro Financing: A Blessing for the Poor. *The Indian Journal of Commerce*, 48-52.

Pandian, P., & Eswaran, S. R. (2006, NOVEMBER). "Empowerment of Women through Micro-Credit". *Yojana, 46*, 47-50.

Parameswaran, M.P. (2005).*Empowering People*. Delhi: Daanish Books, 169-170

Planning Commission, Government of India. (2013, May 10). *Twelfth Five Year Plan (2012–2017) Faster, More Inclusive and Sustainable Growth Vol 1.* Retrieved 04 14, 2016, from Planning Commission: http://planningcommission.gov.in/plans/planrel/12thplan/pdf/12fyp_vol1.pdf

Planning Commission. (2011-12). . National Sample Survey Organization (NSSO). Retrieved 2 12, 2017, from RBI.ORG.IN: rbi.org.in/scripts/PublicationsView.aspx?Id=16995

Prahalad, C. K. (2005). *The Fortune at the Bottom of the Pyramid: Eradicating Poverty through profits.* Upper Saddle River, NJ: Wharton School Publishing,2004.

Prasad, B. (2006). "Cooperative Sector Changes required to Operationally Internalize concept of Micro-finance". *The Cooperator, NCUI*, 356.

Press Information Bureau, Government of India. (2013, August 8). *Objectives of National Urban Livelihoods Mission*. Retrieved 04 14, 2016, from Press Information Bureau: http://pib.nic.in/newsite/PrintRelease.aspx?relid=97908

Puhazhendi, V., & Badatya, K. (2002). SHG-Bank Linkage Programme for Rural Poor - An Impact Assessment. *Seminar on SHG-bank Linkage Programme* (pp. 1-68). New Delhi: microCredit Innovations Department, NABARD.

Qureshi, M. U. (2004). *India S Social Problems In Twenty First Century*. Anmol Publications Pvt. Ltd..

Radhika, S., & Anupriya, S. (2011). An empirical study on the impact of Microfinance Institutions in enhancing. *Institute of Interdisciplinary Business Research, VOL 3*(NO 4).

Radhika, S., & Anupriya, S. (2011). An empirical study on the impact of Microfinance Institutions in enhancing SHG in Karur District, Tamil Nadu - India. *INTERDISCIPLINARY JOURNAL OF CONTEMPORARY RESEARCH IN BUSINESS, 3*(4), 563-572.

RAJENDRAN, K. (2012). MICRO FINANCE THROUGH SELF HELP GROUPS –A SURVEY OF RECENT LITERATURE IN INDIA. *International Journal of Marketing, Financial Services & Management Research, 1*(12), 110-125.

Rai, A., & Sjöström, T. (2010). Redesigning microfinance. *Oxford Handbook of Market Design, forthcoming*.

Rajendran, K., & Raya, R. P. (2010). Impact of Micro Finance - An empirical Study on the Attitude of SHG Leaders in Vellore District. *Global Journal of Finance and Management, 2*(1), 59-68.

Ranjani, K. S. (2012). Regulating Microfinance Institutions in India: A Conceptual Framework.*Synergy (0973-8819),10*(1)

Rao, P. S., & Priyadarshini, Y. J. (2013, march). Microfinance and Rural Credit: Is it an Alternative Source of Rural Credit. *International Journal of Humanities and Social Science Invention, 2*(3), 28-39.

Ravallion, M., Chen, S., & Sangraula, P. (2008). *Dollar a Day Revisited.* The World Bank Development Research Group.

Ray, S. (2004). Linking Self Help Group under SGSY Scheme with Cooperators-Prospects and Concern. *The Cooperator, NCUI*, 128.

RBI . (n.d.). Retrieved 2 6, 2017, from Reserve bank of india: https://www.rbi.org.in/scripts/PublicationsView.aspx?id=15283

Reddy, C. S., & Manak, S. (2005). Self-help groups: A keystone of microfinance in India-women empowerment and social security.*Andhra Pradesh Mahila Abhivruddhi Society (APMAS). India: Hyderabad*.

Rein, M. (1970). Problems in the Definition and Measurement of Poverty. *The Concept of Poverty*, 46-63.

Reserve Bank of India. (2011, January 19). *Report of the Sub-Committee of the Central Board of Directors of of Reserve Bank of India to Study Issues and Concerns in the MFI Sector*. Retrieved April 04, 2016, from Reserve Bank Of India: https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?ID=608#L2

Reserve Bank of India. (2015, July 30). *Master Circular - National Urban Livelihoods Mission (NULM).* Retrieved 04 12, 2016, from Reserve Bank of India: https://rbi.org.in/Scripts/NotificationUser.aspx?Id=9967&Mode=0

Reserve Bank of India. (2016, 4). Retrieved from Reserve bank of India: https://www.rbi.org.in/

RESERVE BANK OF INDIA. (n.d.). *Defeating Poverty: Issues and Challenges.* Retrieved 2 12, 2017, from RESERVE BANK OF INDIA: https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/04SP_BULL10042015.PDF

Rutherford, S. (2003). "Money Talks-Conversation with poor households in Bangladesh about managing money. *Journal of Microfinance*, 43-75.

Saad, N., & Duasa, J. (2011). An economic impact assessment of a microcredit program in Malaysia: the case of Amanah Ikhtiar Malaysia (AIM). *International Journal of Business and Society, 12*(1), 1.

Sa-Dhan. (2014, September). *Directory of Microfinance Institutions (MFIs) in India.* Retrieved 04 12, 2016, from Sa-Dhan: http://www.sa-dhan.net/Resources/Final%20MFI%20Directory%20Report%2020%20Nov%202014.pdf

Sama, L. M., & C. M. (2013). rofiting from poverty: Ethics of microfinance in BOP. *South Asian Journal of Global Business Research, 2*(1), 82-103.

Sarkar, A. N. (2003). Innovations in Self Help Group led Micro finance Development:Programmes Sharing of global experience. *Indian Cooperative Review, 4*(1), 12-31.

Satyasai, K. J. S. (2003). Microfinance in India: Progress and Perspectives. *Institutional Change in Indian Agriculture*, 305.

Schmidt, R. H. (2010). Microfinance, commercialization and ethics. *Poverty & Public Policy, 2*(1), 6-130.

Schreiner, M. (2003). *The Performance of Subsidized Microfinance Organizations: BancoSol of Bolivia and the Grameen Bank of Bangladesh.* Edwin Mellen Press.

Scoones, I. (1998). Sustainable Rural Livelihoods: A Framework for Analysis. *Brighton Institute of Development Studies:IDS Working Paper 72.*

Sebstad, J., Neil, C., Barnes, C., & Chen, G. (1995). Assessing the Impacts of Microenterprise Interventions: A Framework for Analysis. USAID.

Sekaran, U. (2003). *Research Method for Business: A Skill Building Approach (4th ed.).* New York: John Wiley & Sons.

Selome, J., & Tshuma, N. (2014). Microfinance and women empowerment in zimbabwe: A case of women development fund in umguza district. *International Letters of Social and Humanistic Sciences, 35*, 74-85.

Sen, A. (1992). *Inequality reexamined.* Clarendon Press.

Sen, A. (1999). Development as Freedom New York.

Sharma, K. C. (2007, December). Micro finance through Self Help Groups. *Professional Banker, VII*(12), 29-36.

Shetty, N. K., & Veerashekharappa. (2009). The Microfinance Promise in Financial. *The IUP Journal of Applied Economics, Vol. VIII*(Nos. 5 & 6).

Shetty, N. K., & Veerashekharappa. (2009). The Microfinance Promise in Financial Inclusion: Evidence from India. *IUP Journal of Applied Economics,, viii*(5&6), 174-189.

Silver, H. (1994). Social exclusion and social solidarity: three paradigms. *International Labor Review, 133*, 5-6.

Silver, H. (1995). Reconceptualizing social disadvantage: three paradigms of social exclusion. In G. Rodgers, C. Gore, & J. Figueiredo (Eds.), *Social Exclusion: Rhetoric, Reality, Responses* (pp. 531-578). Geneva: International Institute for Labour Studies.

SINGH, G. T. (2014). MICROFINANCE:A Tool for Poverty Alleviation. *Journal of Business and Management*, 21-30.

Singhal, K. C., & Gill, H. (1991). Poverty per Capita Income and Per Worker Sectoral Incomes. *Indian Journal of Regional Science, Vol. 223,*(2), , p. 1.

Sriram, M., & Parhi. (2006). Financial Status of Rural Poor: A Study in Udaipur District. *Economic and Political weekly*, 5269-5275.

Stake, R. E. (1995). *The art of case study research.* Sage.

Subramanian, S. (2011). The Poverty Line: Getting it Wrong again. *Economic & Political Weekly (Perspectives), XLVI*(48), 37-42.

Sundarapandian, M. (2006). "Microfinance for Rural Entrepreneurs: Issues and Strategies". *Kurukshetra, 54*(10), 14-16.

Swain, R. B., & Varghese, A. (2010). *Being Patient with Microfinance: The Impact of Training on Indian Self Help Groups.* Retrieved 04 4, 2016, from Uppsala University: http://www.nek.uu.se

Tamizoli.P.,(2004).Mainstreaming Gender concerns in Mangrove Conservation and Management: The Pichavaram coast, Tamil Nadu. In Sumi. Krishna. (Ed.) Livelihoods & Gender (pp92-108).New Delhi: Sage publications

Tankha, A. (2012). *Banking on Self Help Groups: Twenty Years On.* New Delhi, India: Sage Publications India Pvt Ltd and ACCESS Development Services.

The AIMS Team. (2001). *Assessing the Impact of Microenterprise Services (AIMS).* Washington: Management Systems International.

The Committee on Financial Inclusion (Chariman: C. Rangarajan). (2008, February). *Report of the Committee on Financial Inclusion (Chariman: C. Rangarajan).* Retrieved 03 17, 2016, from National Bank for Agriculture and Rural Development: https://www.nabard.org/pdf/Full_Report.pdf

THE WORLD BANK. (n.d.). Retrieved 2 6, 2017, from http://data.worldbank.org/country/india

Tiwari, A., Khandelwal, A., & Ramji, M. (2008). "How do Microfinance clients understand their loans?". *working paper*.

Tripathi, S. (2006, OCTOBER 7). *"Microcredit Won't Make Poverty History".* Retrieved from http://business.guardian. co.uk/comment/story/0,,1924509,00.html

Tushir, M., Chadda, S., & Ahlawat, P. (2007). "Role of Micro Finance to Uplift the Economic Condition of Women Households in Haryana through SHG. *Southern Economist*, 29-32.

United Nations. (2004, November 18). *Meeting Coverages and Press Releases*. Retrieved 04 03, 2016, from United Nations: http://www.un.org/press/en/2004/dev2493.doc.htm

United Nations. (2016, oct). *Sustainable Development Goals*. Retrieved from United Nations: http://www.un.org/sustainabledevelopment/poverty/

Urban Development and Housing Department, Government of Jharkhand. (n.d.). *National Rural Livelihoods Mission.* Retrieved 04 14, 2016, from Urban Development and Housing Department, Government of Jharkhand: http://udd.vgenesis.in/NULM.aspx

Wagle, U. (2005). Multidimensional Poverty Measurement with Economic Well-being, Capability, and Social Inclusion: A Case from Kathmandu, Nepal. *Journal of Human Development, November*, 301-328.

World Health Organization. (2016, sep 6). *Millennium Development Goals (MDGs)*. Retrieved from World Health Organization: http://www.who.int/topics/millennium_development_goals/about/en/

Yin, R. K. (1989). Case study research: Design and methods, revised edition.*Applied Social Research Methods Series5*.

Yin, R. (1994). Case study research: Design and methods. Beverly Hills

Yunus, M. (2007). *Banker To The Poor: Micro-Lending and the Battle Against World Poverty.* New Delhi: Penguin Books, India.

Zeller, M. (1995). The Demand for Financial Services by Rural Households:Conceptual Framework and Empirical Findings. *Quarterly Journal of International Agriculture, 34*, 149-170.

Zikmund, W. G. (2000). *Business Research Methods (6th ed.).* Orlando: Dryden Press.