



Impirical study of impact of microfinnce in improving standard of living of poor people in Latur district

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Abstract

Microfinance is provision of financial services to the poor and needy. Many Microfinance institutions in India and abroad are working with the objectives to reduce the poverty, empower women and rural upliftment etc. In the current paper, the researcher has tried to evaluate the impact of microfinance in poverty reduction of poor people in Latur district of Maharashtra State through survey method. It is found that Microfinance is efficient tool in poverty reduction. Structured Questionnaire method is used to know the opinion of 300 respondents. CGAP social performance indicators of financial institutions is used to evaluate impact of microfinance in poverty reduction.

Keywords: microfinance, poverty, povery reduction, social performance, women empowerment, standard of living, rural upliftment

Introduction

“To give away money is an easy matter and in any man’s power. But to decide to whom to give it, and how large, and when, and for what purpose and how, is neither in every man’s power nor an easy matter.”

-Aristotle

Microfinance is the provision of financial services, such as loans, savings, insurance, money transfers, and payments facilities to low income groups.

Objectives

1. To evaluate impact of microfinance in improving standard of living of poor people in Latur district.

Hypothesis

H0: MFIs have not been potential instruments in the reduction of poverty among the working poor in Latur District

H1: MFIs have been potential instruments in the reduction of poverty among the working poor in Latur District

Microfinance system- key players in India

- National Bank for Agricultural and Rural Development (NABARD):
- Reserve Bank of India
- Self Help Groups/ Joint Liability Groups:
- Micro Finance Institutions (MFIs)
- Non-Government Organizations (NGOs)

Table 1: Chronology of Microfinance development in India

Phase	Period	Characteristics
I	1900s- 1969	Cooperative Movement
II	1969 - 1991	State Driven through National Banks and emergence of NGOs
III	1992 – 2000	SHGs Bank Linkage program and Growth of NGO-MFIs
IV	2000 – today	Commercialization and Regulation of Microfinance

CGAP measures of social performance of Microfinance institutions

CGAP has given five measures of social performance of Micro Finance Institutions.

1. Depth of outreach

2. Reducing poverty and hunger
3. Schooling
4. Access to health care services
5. Women’s empowerment and social capital

Table 2: Sampling techniques and sample size calculation.

Sr. No	Particular	Specification
1	Sampling Area	Latur District
2	Sample Unit	SHG (125) MFI’s officials(5 MFI’s)
3	Sample Size Total (300)	250 SHG Members 50 MFI officials
4	Sampling method	Multistage Sampling. Random (Stratified & cluster)
5	Research approach	Survey Method (Direct Method)

6	Type of research	Qualitative & quantitative.
7	Period considered for data analysis	Five Years (2007-2012)
7	Contact Method	Structured Questionnaire method & Interview
8	Data analysis methods	Descriptive statistics (frequency distributions, means, and percentages and cross tabulations)
9	Hypothesis testing tool	Chi Square test, Test
10	statistical tool used	Statistical Package for the Social Sciences (SPSS), MS Excel.

The Online Sample size calculator was used to find required and valid sample size for the research. The screen shot of the same is pasted here.

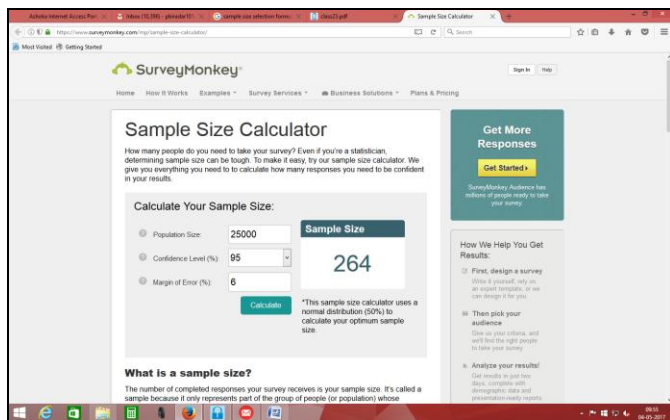


Fig 1

The Minimum sample size required at 95% level of significance for the given population of 25000 clients of the MFIs in Latur District is 264. But for getting accurate result and convenience in the calculation, the researcher has selected sample size of 300 Respondents. 300 Respondents are again divided into 2 categories. 250 SHG/JLG Members and 50 Microfinance Officials.

Method of Data Collection and Analysis

This section of the study provides the details of the various sources of data collection and the tools used in data analysis. This research relied on the use of primary data collected directly from respondents through the structured questionnaires and interviews. The questionnaire method was used in this research and administered by well-trained interviewers in the study area which is Latur District of Maharashtra state.

The data analysis for this research is done with the use of descriptive statistics such as frequency distributions, means, and percentages and cross tabulations between the variables identified. The Median and Mode of the opinions is also calculated. The Chi square test is used for testing the hypothesis. The outputs of the analysis are presented using table, graphs are pie charts. The statistical tool used was the Statistical Package for the Social Sciences (SPSS). Use of MS Excel is also done in data analysis.

Microfinance and Poverty alleviation.

Understanding how to alleviate poverty is a central concern of

policy makers as well as decision takers in developing economies. Poverty by definition is multifaceted. It can be described as a situation of lack of basic necessities of life including basic food, shelter, medical care and safety. It is acknowledged that poverty is an outcome with various dimensions including social, political and economic. According to Hazel and Haddad, poverty consists of two interacting deprivations: physiological and social. Physiological deprivation is a state of individual's inability to meet basic material and physiological needs resulting from lack of income. Social deprivation refers to an absence of elements that are empowering such as autonomy, time, information dignity and self-esteem. In a more general term that allows international comparison, poverty can be seen as a statistical measure that indicates the annual income for a family to survive. This is commonly known as "poverty line".

Theories of Poverty

Brandshaw opined that theories of poverty may originate from five sources including

1. Individual deficiencies,
2. Cultural belief systems that support subcultures in poverty,
3. Political-economic distortions
4. Geographical disparities or
5. Cumulative and circumstantial origins.

The Vicious Cycle of Poverty

The vicious cycle of poverty states that the poor man is poor because he is poor or a country is underdeveloped because it is underdeveloped. The vicious cycle of poverty is a kind of curse which is feared by individuals and countries because it is said that an individual/country is poor because it is poor. The theory states that there are circular relationships known as the "vicious cycle of poverty" that tend to perpetuate the low level of development in less developed countries (LDCs). The trajectory is that poverty is caused by low income. Low income engenders low savings and this in turn leads to low investment. The latter provokes low productivity and the cycle continues.

Microfinance poverty reduction approach theories

- Welfares' Approach
- Institutionists Approach
- Welfarists' Approach
- Subsidy and Poverty Reduction Approach Theories
- Income before taking the loan

Data Analysis

Table 3: Income of Respondents before taking the loan from MFIs

Response	Frequency	Percentage	Mean	Standard Deviation	Skewness	Kurtosis
Below 30000	15	6	67415	47178	0.64	-2.90
30000-50000	108	43				
50000-100000	92	37				
100000-300000	23	9				
Above 300000	12	5				
Total	250	100				

Source: Field Work

Table 4: Income after 2 years of taking Loan:

Response	Frequency	Percentage	Mean	Standard Deviation	Skewness	Kurtosis
Below 30000	8	3	78755	51977	0.83	-0.98
30000-50000	76	30				
50000-100000	113	45				
100000-300000	32	13				
Above 300000	21	8				
Total	250	100				

Source: Field Work

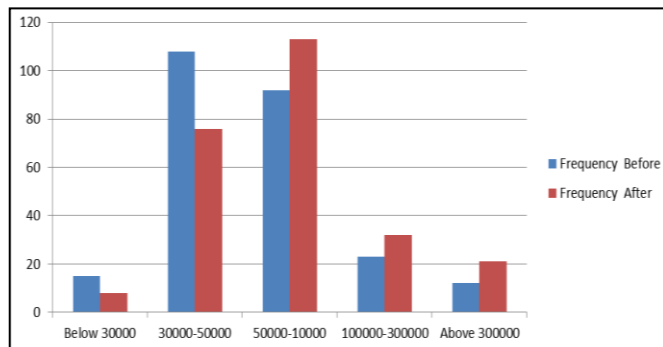


Fig 2

Table 5

Before taking the loan	
Mean	67415.96639
Standard deviation	47278.26705
Sample size	250
After taking The loan	
Mean	78755.45852
Standard deviation	81977.08202
Sample size	250

Source: Field Work

Results

Table 6

Difference	11339.492
Standard error	4594.781
95% CI	2310.3850 to 20368.5993
t-statistic	2.468
DF	465
Significance level	P = 0.0139
Conclusion	There is Significant difference in the mean Income.

Source: Field Work

Computational notes

This procedure calculates the difference between the observed means in two independent samples. A significance value (P-value) and 95% Confidence Interval (CI) of the difference is reported. The P-value is the probability of obtaining the observed difference between the samples if the null hypothesis were true. The null hypothesis is the hypothesis that the difference is 0. The program first calculates the pooled standard deviation s :

$$s = \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}}$$

Where s_1 and s_2 are the standard deviations of the two samples with sample sizes n_1 and n_2 .

The standard error se of the difference between the two means is calculated as:

$$se(\bar{x}_1 - \bar{x}_2) = s \times \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}$$

The significance level, or P-value, is calculated using the t -test, with the value t calculated as:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{se(\bar{x}_1 - \bar{x}_2)}$$

Calculation of Mean, Standard Deviation, Skewness and Kurtosis of Data:

For calculating Mean, Standard Deviation, Skewness and Kurtosis of Data, five point likert scale is used. The scale is quantified as 1-Strongly Disagree, 2-Disagree, 3-Undecided, 4-Agree and 5-Strongly Agree.

Table 7: Microfinance financed by MFIs increases the Monthly Family income of the Clients

Response	Frequency	Percentage	Cumulative Percentage	Mean	Standard Deviation	Skewness	Kurtosis
Strongly Disagree	12	4	4	4.04	1.05	0.55	-3.22
Disagree	19	6	10				
Undecided	30	10	20				
Agree	122	41	61				
Strongly Agree	117	39	100				
Total	300	100					

Source: Field Work

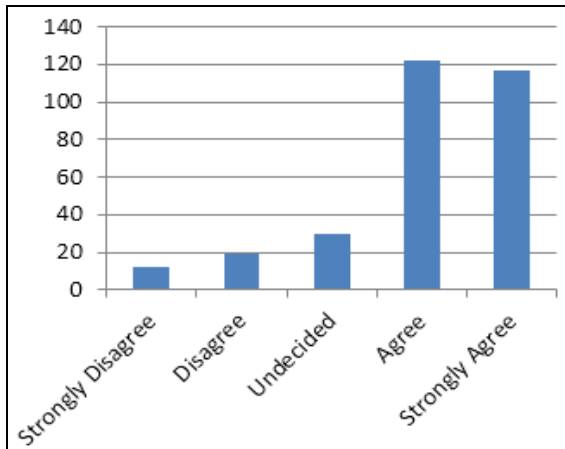


Fig 3

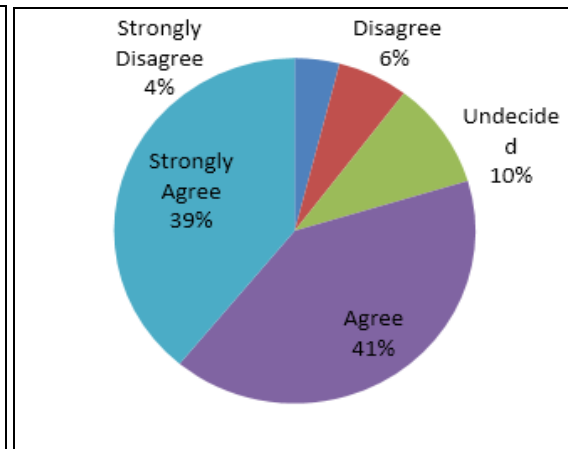


Fig 4

Interpretation of data

When asked if MFIs increases the Monthly Family income of the Clients, 39% strongly agreed, 41% agreed, 10% were undecided, 6% disagree and 4% strongly disagreed. Majority of the people agreed to the fact that MFIs increases the Monthly Family income of the Clients. Mean = 4.04 and Standard Deviation = 1.05 Since SD is less than mean, so

mean is meaningful value. Skewness = 0.55 since it is positive, the curve is right skewed and data is piled on left side of the axis. Kurtosis= -3.22 Since Kurtosis is negative, the curve is flat curve. The Kurtosis and Skewness values further affirm the meaningfulness of mean. Hence it is concluded that the Microfinance financed by MFIs increases the Monthly Family income of the Clients.

Table 8: Microfinance helps in reducing the poverty

Response	Frequency	Percentage	Cumulative Percentage	Mean	Standard Deviation	Skewness	Kurtosis
Strongly Disagree	11	4	4	4.05	0.96	0.86	-1.61
Disagree	13	4	8				
Undecided	27	9	17				
Agree	147	49	66				
Strongly Agree	102	34	100				
Total	300	100					

Source: Field Work

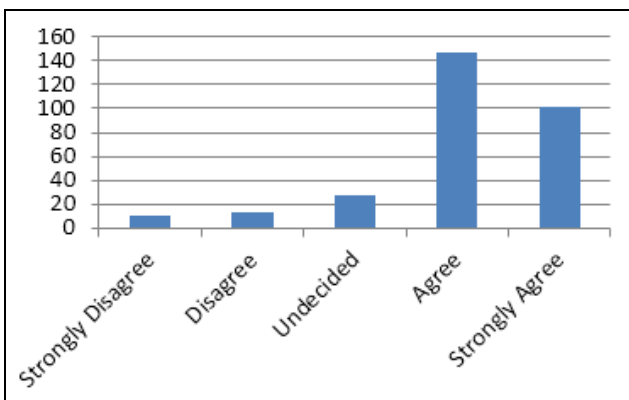


Fig 5

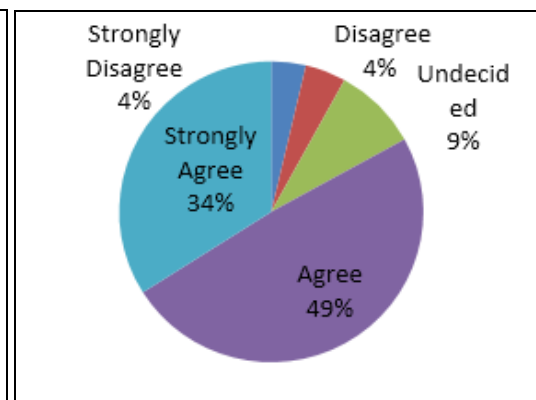


Fig 6

Interpretation of data

When asked if Microfinance helps in reducing the poverty of the Clients, 34% strongly agreed, 49% agreed, 9% were undecided, 4% disagree and 4% strongly Disagreed. Majority of the people agreed to the fact that Microfinance helps in reducing the poverty of the Clients.

Mean = 4.05 and Standard Deviation =0.96

Since SD is less than mean, so mean is meaningful value. Skewness =0.86

Since it is positive, the curve is right skewed and data is piled on left side of the axis.

Kurtosis= -1.61

Since Kurtosis is negative, the curve is flat curve. The Kurtosis and Skewness values further re affirm the meaningfulness of mean.

Hence it is concluded that the Microfinance helps in reducing the poverty

Table 9: Compared to the situation before taking the loan your current income is

Response	Frequency	Percentage	Cumulative Percentage	Mean	Standard Deviation	Skewness	Kurtosis
Increased significantly	67	27	27	2.04	0.84	0.87	0.39
Somewhat increased	123	49	76				
Remained unchanged	43	17	93				
Decreased	17	7	100				
Decreased significantly	0	0	100				
Total	250	100					

Source: Field Work

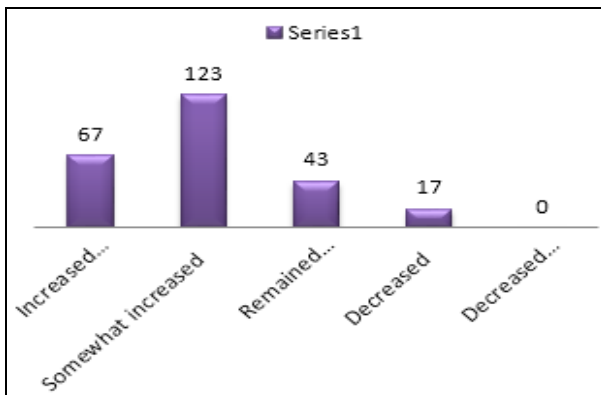


Fig 7

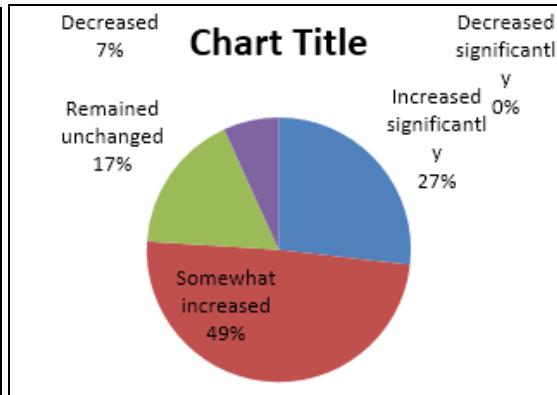


Fig 8

Interpretation of data

When asked the impact of loan on current income, 49 % said somewhat increased, 27 % said increased significantly, 17% Said remains unchanged, 7% said decreased. Majority of the people agreed to the fact that loan taken from MFI have helped them to increase their income.

Mean = 2.04 and Standard Deviation = 0.84 Since SD is less than mean, so mean is meaningful value. Skewness = 0.39, since it is positive, the curve is right skewed and data is piled on left side of the axis Kurtosis= 1.08, since Kurtosis is positive, the curve is tall curve. The Kurtosis and Skewness

values further re affirm the meaningfulness of mean.

Hence it is concluded that MFI have helped them to increase their income.

Hypothesis Testing

Poverty Reduction

H0: MFIs have not been potential instruments in the reduction of poverty among the working poor in Latur District

H1: MFIs have been potential instruments in the reduction of poverty among the working poor in Latur District

Table 10: Chi Square test for Testing the Hypothesis.

Responses	Observed Frequency(O)	Expected Frequency(E)	(O-E)	(O-E) ²	(O-E) ² /E
Strongly Disagree	11	60	-49	2401	40.01666667
Disagree	13	60	-47	2209	36.81666667
Undecided	27	60	-33	1089	18.15
Agree	147	60	87	7569	126.15
Strongly Agree	102	60	42	1764	29.4
Chi Square Calculated Value					250.5333333

Source: Field Work

Interpretation of data

When asked if Microfinance helps in reducing the poverty of the Clients, 34% strongly agreed, 49% agreed, 9% were undecided, 4% disagree and 4% strongly Disagreed. Majority of the people agreed to the fact that Microfinance helps in reducing the poverty of the Clients.

Hypothesis Testing :(Chi Square Test)

The Chi Square value for 5% level of significance and 4 degree of freedom i.e P (0.05, 4) is 9.49 and the calculated Chi Square value for the above set of data is 250.53. Hence there is no evidence to reject the null hypothesis and accept the alternate hypothesis. Hence we Accept H1 and Reject Ho. So, the alternate hypothesis MFIs have been potential instruments in the reduction of poverty among the working poor in Latur District is Accepted.

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