



Measuring the Economic Impact of Microfinance on Self-Help Group (SHG) Members in Ahmednagar District of Maharashtra, India

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Abstract: Microfinance, through Self Help Groups (SHG), has been a generally successful developmental intervention in India. However, quantifying or measuring the impact of microfinance has proved to be a difficult task. Despite several studies no concrete conclusion is seen to be emerging, leaving scope for more studies with newer methods and approaches. In this paper, we try to estimate the economic impact of microfinance on rural women using a different approach. In this, we have estimated low, medium and high economic impact depending on the number and kind of economic needs that were met due to participation in the SHG microfinance programme. Further we have used regression to understand how factors such as age, agricultural land owned, time spent in the SHG programme, Below Poverty Line (BPL) status and loan amount could be affecting the economic impact of microfinance. The data used is from a primary survey of 159 women SHG members conducted in Akole village of Ahmednagar district of Maharashtra. The results for our sample show that 58 percent of the sample participants reported a high level of positive economic impact of microfinance. Among BPL and Non-BPL participants, BPL participants experienced higher economic impact of microfinance. Further we found that the time spent in SHG programme is negatively linked to the impact of microfinance; greater the time spent in the programme, lesser is the positive economic impact. Other variables like age of the member, loan amount and agricultural land owned did not have a significant impact.

Keywords: 1. Microfinance 2. Self-Help Groups (SHGs) 3. Economic Impact 4. Impact Assessment

JEL Codes: B400; O100; O160

Introduction: The Challenge of Impact Assessment

Microfinance has been a generally successful developmental intervention in India. It has touched the lives of many poor people, specifically women, in both rural and urban India. Due to the Self Help Group (SHG) mechanism it is seen to be successful in providing micro loans at affordable transaction cost. Microfinance has also been successful in keeping default rates of loans at acceptable levels. A lot of literature has documented women empowerment through microfinance. Most studies report that microfinance participants experience an increase in asset holding and in social empowerment. However, it is seen that quantifying the economic impact of microfinance has proved to be a difficult task.

Thus one of the main areas where attention needs to be focused on is how to measure the success or the economic impact. Given this background, in this study we have attempted to assess the economic impact of microfinance on the rural women. The paper is divided into four sections. Section I presents the review of literature and Section II describes the objectives of the study, the methodology used and the sample description. Section III puts forth the results and analysis and Section IV concludes the paper.

I. Review of Literature

Literature is rife with articles and studies measuring the impact of microfinance. Talking about the positive impact, Wagner and Winkler (2012:327) state that the developmental impact of microfinance is extraordinarily high and it is a more stable form of finance than traditional finance. On the other hand, Rooyen *et al's* study (2012: 2259-60) shows that microfinance has a negative impact especially when members take repeated loans. Their study shows that longer the people are in the program the greater is the negative impact on their businesses.

Several studies have tried to assess the impact of microfinance on the members' income. For instance, Vijayalakshmi and Valarmathi (2008) find a three-fold increase in the income of the SHG members and also an increase in the average food expenditure. Pitt and Khandekar's (1996) study based on data from Bangladesh shows that for every 100 taka lent to a woman in Bangladesh, an additional eighteen taka is added to the expenditure of her household. Guha's (2007: 5-6) study shows that hardly any loans are being used for business purposes and hence the programme cannot create long term positive impact on income. If at all it can address the function of smoothening income fluctuations.

Whatever be the results, the methodology used in such studies has been criticized by several scholars (Armendariz and Mordoch, 2005; Duvendack *et al* 2011; Hudon and Sandberg, 2013: 564). As Armendariz and Mordoch (2005) note, it is difficult to separate the causal role of microfinance as it is difficult to answer how borrowers would have done without microfinance. They posit that the major challenge in the evaluating the impact of microfinance is the differences in the characteristics of borrowers. Some may be good entrepreneurs, some may have better networks etc. And so, they say that the estimated impact will be biased if these factors are not controlled (Armendariz de Aghion and Morduch, 2005). Duvendack *et al* (2011:75), based on their analysis of a large number of studies from various countries, contend that these studies lack proper randomization or double blinding. Hence they conclude that it is still unclear under what circumstances and for whom microfinance has been and could be of real rather than imagined benefit to the poor.

To overcome these issues, newer tools like randomized control trials have begun to be used to analyse the impact of microfinance. Two such detailed and methodologically sound studies, according to Hudon and Sandberg (2013) are those by Karlan and Zinman (2010) and Banerjee *et al* (2010). Karlan and Zinman (2010) find that in Manila the profits of male micro borrowers increase but their businesses shrink. Banerjee *et al* (2010) find that expenditure on durable goods increased in “treated” areas and the number of businesses by one third. However they found no impact of microcredit on average monthly per capita expenditure. (Banerjee *et al*, 2010). Thus, studies based on randomized control methods too point to a positive impact of asset creation but no impact on monthly expenditure.

Studies trying to assess impact of microfinance give differing results and according to Duvendack *et al* (2011) more research in this area is needed. (Duvendack *et al*, 2011: 75)

II. Objectives of the Study, Methodology and Sample Description

2.1. Objectives of the Study

Given that more study is required in this area, we proposed a study using a new and different approach for the same with the following objectives:

1. To estimate the economic impact of the SHG microfinance programme on the participating rural women.

2. To try and ascertain the factors which influence the economic impact of the SHG microfinance programme.

2.2. Methodology

To assess the economic impact of the SHG programme, we are proposing a different approach to assess the economic impact. We hope that this may give some answers about the economic impact although it may not be able to measure the increase or impact on income precisely.

2.2.1. The Design of the Study

For measuring the economic impact of the programme in our approach we are not looking at the levels of expenditure; instead we postulate that positive economic impact can be ascertained by directly asking the participants about their experiences in this regard. This positive economic impact we imagine could be manifested as or would be reflected as: 1. Easy access to money, 2. Fulfillment of personal monetary need, 3. Fulfillment of family monetary needs, 4. Any other monetary need. The respondents had to choose which ones of these or any other option not mentioned that they perceived as an economic advantage of joining the SHG programmes. Using their responses we have tried to quantify the level of monetary impact of the microfinance intervention on the participants in terms of low, medium and high depending on the responses given by them. Further, we have used regression to assess the different factors like age of member, number of months of association with the microfinance programme, BPL status, land owned and loan amount affecting the level of the economic impact.

The data used for the study has been collected through a survey of women SHG members in rural Maharashtra in Akole and Sangamner taluka of Ahmednagar district of Maharashtra state in India in December 2019. The survey was done using convenience sampling.

2.3. The Sample Description

The sample comprised of 159 women members of Self-Help Groups residing in 10 villages of Akole Taluka and 2 villages of Sangamner taluka of Ahmednagar district of Maharashtra. The sample is described below through various descriptive statistics.

2.3.1. Age and Occupational Profile of the Sample Members

The age of the respondents ranged from 21 to 63 years. Thirty six percent women were in the 20 to 40 age group and 64 were in the 41-65 age group. Thus we note that a larger number of the women are in the 40 plus age group. The occupational profile of the members, shown in Table 1, indicates that the majority of the members are associated with basic occupations like agriculture and labour.

2.3.2. BPL Status and Income Range

We have tried to categorize the sample by income status using the indicator of BPL status. The BPL, Non-BPL status of the sample members is summarized in Table 2 which shows that a larger number of members are Non-BPL.

Although we have the BPL, Non -BPL bifurcation of the sample units, we tried to collect data on income. This was done by our field investigator trying to place the member into high, medium and low income group. Since she belongs to that area we left it to her discretion and interpretation to categorize the member as low, medium or high income. She has defined the household income range as low if it is Rs. 50,000 and below per annum; medium if it is between Rs.50,000 and Rs.1,00,000 per annum and high if it is Rs. 1,00,000 and above per annum. We did not strive for an exact income figure as we felt that that would not be reliable and also that members would be reluctant to share that information. The data from Table 3 shows that a large percent, about 76 percent belong to the low income group.

2.3.3. Ownership of Assets

We asked the respondents about assets owned like house and farm land. The findings are shown in Tables 4 and 5. From these tables we note that a whopping 94 percent of members stay in their own house but only 76 percent own agricultural land, which is a livelihood resource in the rural areas. From Table 6 we see that majority of the members who do own agricultural land have small holdings which are below 2 acres.

2.3.4. Association with the SHG Microfinance Programme

The length of the association of the participant in the SHG programme was noted and is shown in Table 7. From here we see that about 59 percent members have an association with the SHG programme which is 2 years or less.

2.3.5. Loans Taken

We sought information on the microfinance loans taken by the sample SHG members. The findings with respect to this are shown from Table 8. From here we note that about half the sample members have taken loans. From Table 9 we see that, from among the 85 participants who have taken a loan, a large percentage (64 %) are Non-BPL members.

Regarding the purpose of loan, from Table 10, we see that personal need dominates with about 54 percent members taking personal loans. However the percent of members taking business loans too are not very small at 39 percent.

Table 11 summarizes the responses to the question about why the members took loan; whether because they needed it or because it was available. We felt the need to ask this question because in our earlier studies we have come across this attitude of the microfinance participants that they take the loans because these loans are available and not because they have a genuine need for it. Most of the times they have no plan of how to use the funds. And in fact it is probably this tendency which leads to defaults, multiple loans, coercion for repayment and an eventual debt burden. The problem of oversupply of micro loans has been noted in literature too (Pattanaik, 2017). This excess supply of micro loans is because many times Micro finance Institutions (MFIs) are interested in giving the loan but the participants are not really interested in taking it but they take it because it is available. This leads to inefficient use of funds and also to increasing defaults or to over indebtedness.

We find that in this sample, a majority, i.e. over 70 percent have taken the loan because they needed it rather than because it was available.

Having seen the broad characteristics of our sample, we now proceed, in the next Section, to analyse the data to answer our main question regarding the economic impact of the microfinance programme on the participants.

III. Results and Analysis

3.1. Assessing the Economic Impact

To measure the economic impact of the microfinance programme on the participants we tried to explore the different ways in which the scheme had affected the participants. The question relating to economic impact had the following options from which the respondents could choose. Economic impact was visualized as satisfying the following economic needs of participants:

1. Easy access to money (includes low interest rate; ease of obtaining credit)
2. Fulfillment of personal monetary need (Could be an economic activity)
3. Fulfillment of family monetary need (Buying Household assets)
4. All of the above

Selection of option 1 would mean that they find the SHG interest rate lower and the loan easier to access than other sources; If only 2, 3 then it means that the SHG loan can fulfill needs but not necessarily at a low interest rate.

According to Brett (2006), “most research examining the impact of microfinance utilizes structured questionnaires designed by investigators to answer specific questions....while this specificity is necessary, these kinds of designs cannot easily accommodate participants voices” (Brett, 2006:9). Coincidentally we had the same underlying instinct i.e. to allow participants to voice their own experiences. Keeping this in mind, we gave open ended questions to the women. The respondents could choose one or more of the options from those given and if they wanted to narrate something else they could do so too. The question was open ended as well as with prompts. The responses to this question were converted into a calibrated measure of economic impact. The levels were assigned as follows:

1. Low Monetary Impact: If only one option selected
2. Medium Monetary Impact: If two options selected
3. High Monetary Impact: If three options selected or ‘All of the above’ selected.

Thus we have tried to calibrate the monetary impact. The calibration is not in cardinal terms, but in ranks of High, Medium and Low. The results of this exercise are shown in Table Nos. 12, 13 and 14. Here, it is to be noted that out of a total of 159 sample units, 15 members did not answer this query. Out of the remaining 144, 4 said they got no benefit. For the remaining i.e. 140, the following results are shown in Table 12, 13, 14.

From Table 12 we note that the majority of the members (59 %) opted for the choice “all of the above”. From Table 13 we note that 59 percent members reported a high impact, 9 percent reported medium and 33 percent reported low economic impact.

Examining the results for BPL and Non-BPL categories, we find the following: Referring to Table 14, if we examine the total number of respondents reporting a high level of economic impact (82) we find that from this 31 are BPL i.e. about 38

percent are BPL and 62 percent are non-BPL. Hence we find that more non-BPL participants are reporting a high level of economic impact. If we consider the total number of BPL respondents who responded to this query, i.e 53 then we note that 31 out of 53 or about 58 percent reported a high level of economic impact. Thus we note that though the BPL coverage may be low; a high percentage of BPL members are reporting a high economic impact.

3.2. Factors Affecting the Level of Economic Impact

Having measured the level of economic impact of microfinance on the sample members, we further tried to see if the level of economic impact was dependent on any factors such as level of income, BPL status, agricultural land etc. For this, we have treated the level of economic impact as the dependent variable. And for the independent variables, we shortlisted the following variables, namely,

1. Length of Time Member was in SHG
2. Loan Amount
3. BPL Status of Member
4. Amount of Agricultural Land Owned by Member
5. Age of Member

The reason we have selected these variables as independent variables are two-fold. One is that that these independent variables are really likely to affect the level of monetary impact experienced by the member and the other is that the variable and the way it has been measured in this survey is amenable to testing.

Further, we could not use all of the 159 observations for studying this aspect as a lot of them had some or the other field missing. We could use only 60 sample units which were complete in all the above variables. Of these 60, 15 were BPL members and their agricultural land holding ranged from 0.25 acres to 4 acres. The amount of loan taken ranges from Rs. 250 to Rs. 2,10,000. The age of the respondents in this smaller sample ranged from 23 to 62 years. Thirty one were in the 20 to 40 age group and twenty nine were in the 41-65 age group. Thus we note the sample is evenly distributed across the two age groups.

The Variables are defined as follows:

The dependent variable is: LEVELEIMP

(The Level of Economic Impact; High, Medium, Low was converted to 3, 2, 1 for testing purposes)

The Independent Variables

1. **Mnths in SHG** (Months in SHG in number of months)
2. **BPL Status** (Qualitative variable Yes or No)
3. **Amt of Agri Land** (expressed in acres)
4. **Loan Amount** (Expressed in Rupees)
5. **Age of Member** (Expressed in Years)

To test these and run the regression we used the software R.

We first ran a single variable regression equation with each explanatory variable and then a multiple regression using all the explanatory variables simultaneously. The interpretations especially of the 't' values are as per Gujarati, *et al* (2009; p.128).

The regression results are shown in Table 15. From this, for the single variable equation, we note that all the explanatory variables have the expected sign, but the magnitude of the coefficient and the significance are varied. For example, the variable "number of months in SHG" has a negative sign but the magnitude of the β coefficient is small and not significant at all. The variable "Loan Amount" has a positive sign and signifies that higher the loan amount higher the level of monetary impact. But the β coefficient is too small to count and is also insignificant.

In case of the variable "Amount of Agriculture Land", the sign of β coefficient is negative as expected, signifying that higher the agricultural land owned, less is the economic impact of microfinance. The magnitude of the coefficient is relatively small. "Age of Member" has a positive sign and signifies that higher the age of the member greater is the economic impact. This means that older members are better able to make use of the SHG loans. It is interesting to note that age of member has a positive impact on the level of economic benefit whereas months spent in SHGs does not. This corroborates Rooyen *et al's* (2012; p 2259-60) findings that longer the people are in the programme, greater is the negative impact. ***So, it is not the time spent in the programme, which can increase the benefit realized, but the age of the member can.*** However, despite the positive sign, the magnitude of the age coefficient is quite low.

The coefficient of the variable "BPL status" has a positive sign and a relatively high magnitude of 0.6. The positive sign is as per expectation. It is also significant.

With respect to significance as shown by both 't' and 'p' values, only the equation with BPL status as the explanatory variable is significant.

The multiple regression was tried using the same explanatory variables that were used in the single variable regressions. Instead of BPL status, which is a qualitative variable, we have used “income bracket” (shown in Table 3) which we have converted to a numeric variable by assigning values 1,2,3 to low, medium and high incomes. The resultant equation shows that all the variables have the same sign in the multiple regression equation as they have in the single variable regression. ***Hence the consistency of the variable’s influence is maintained.***

In the multiple regression model, the variable ‘months in SHG’ becomes significant if we consider the t value. Further, in the multiple regression, although the R^2 improves, it does not increase a great deal. This could be because of other important variables which could not be included in the study. One variable which could have a great influence on the level of the monetary impact may be fluctuations in income. The greater the fluctuations in the income of the participant, greater could be the benefit derived from the microfinance programme. It is highly likely that the microfinance programme may be serving more to smoothen the income fluctuations rather than increase the incomes of the participants. That could be explored in future researches.

Also the economic impact of microfinance maybe small as these are very small or micro loans and therefore they may be aiding the women more in smoothening of consumption rather than increases in income.

From all the above analysis, we therefore note that the BPL status is the only variable that is seen to be influencing the level of economic impact significantly and substantially. Both the p and t values are significant. Hence we can say that BPL members register a higher economic impact compared to the Non-BPL members. Thus although Hermes and Lensink (2007, p.463-465) say that microfinance does not benefit the very poor, from our study we can say that even if the ***number*** of poor people that benefit are relatively less, the ***intensity*** with which they are impacted economically is greater and hence the programme is very relevant for them.

In conclusion we can say that for the given sample, the microfinance programme does have a significant positive economic impact on the lives of the participants and much more so on the lives of the BPL participants. We have been able to calibrate the monetary impact into high, medium and low to show that a majority of the sample report high economic impact.

Table 1: Occupational Profile of The Sample

<i>Sr. No.</i>	<i>Occupation</i>	<i>No. of Respondents</i>
1	Farming on Own Farm	83
2	Labourer	21
3	Housewife	15
4	Nursery worker	6
5	Tailoring Work	6
6	Farm Labourer in Others' Farm	5
7	General Stores	5
8	Beauty Parlour	4
9	Student	2
10	Worker in Gram Panchayat/Panchayat Samiti	2
11	Anganwadi/Asha Worker/Helper	2
12	Bank Employee	1
13	Doctor	1
14	Fruit Shop	1
15	Kirtan Member (singer)s	1
16	Teacher in ZP school	1
17	Vegetable Vendor	1
18	Agent in Vegetable market	1
19	Watchman in School	1
	Total	159

Table 2: BPL Status of Sample

<i>Status</i>	<i>Number of Respondents</i>	<i>Percent</i>
BPL	64	40.25
Non BPL	95	59.74
Total	159	100

Table 3: Income Range of Respondents

<i>Income Range</i>	<i>No. of Respondents</i>	<i>Percent</i>
Low (Below Rs. 50,000 per annum)	120	76.43
Medium (Between Rs.50, 000 and 1,00,00 per annum)	30	19.10
High (Above Rs.1,00,000 per annum)	7	4.45
	157	100

Note: *Data Not Available for 2 Sample Units.

Table 4: Asset Ownership: House

<i>Housing</i>	<i>No. of Respondents</i>	<i>Percent</i>
Own	149	93.71
Rented	8	5.03
Others	2	0.012
Total	159	100

Note: Of Others 1 lives with her brother and the other on a small house on owner's land

Table 5: Asset Ownership: Agricultural Land

<i>Agricultural Land</i>	<i>No of Respondents</i>	<i>Percent</i>
Own	121	76.10
Don't Own	38	23.89
Total	159	100

Table 6: Distribution of Agricultural Land Holding in Acres

<i>Range of Agricultural Land in Acres</i>	<i>No of Respondents</i>	<i>Percent</i>
0 - 0.5	40	33.05
0.5 - 2	60	49.58
2 - 4	20	16.52
Above 4	1	0.82
Total	121	100

Note: This data is for 121 out of 159 who own the land.

Table 7: Number of Months as Member in SHG

<i>No. of Months as a Member of SHG</i>	<i>No of Respondents</i>	<i>Percent</i>
0-6	49	30.81
7-24	46	28.93
25-60	53	33.33
Above 60	11	6.91
Total	159	100

Table 8: Number of Members Availing Loans

	<i>No. of No of Respondents s</i>	<i>Percent</i>
Number of members taking Loan/s	85	53.45
Number of members not taken loan/s	73	45.91
Total	158	100

Note: One member has not answered this question.

Table 9: Members from BPL/Non-BPL Who Have Taken Loan/s

<i>Status</i>	<i>No. of Members</i>	<i>No. of No of Respondents who have taken Loans</i>	<i>Percent</i>
BPL	64	31	36.47
Non-BPL	95	54	63.52
Total	159	85	100

Table 10: Purpose of Taking Loan

<i>Purpose of Loan</i>	<i>No. of No of Respondents</i>	<i>Percent</i>
A - Personal/Family need	45	54.21
B - For Business	33	39.75
A and B	1	1.20
C - To Repay Earlier Loan	1	1.20
D - All of the Above	3	3.61
E - Cannot Say	-	
Total	83	100

Table 11: Motivation for Taking Loan/s

<i>Reason for taking Loan</i>	<i>No of Respondents</i>	<i>Percent</i>
A-Because you needed it	61	71.76
B-Because it was available	17	20
Both A and B	7	8.23
Total	85	100

Table 12: Monetary Impact of Being SHG Member

<i>Positive Impact</i>	<i>No of Respondents</i>	<i>Percent</i>
Only A-Easy Access to Money/Credit	28	20
Only B-Can fulfil personal need	10	7.14
Only C-Can fulfil family need	8	5.71
Only D- all of the above	82	58.57
A and B	2	1.42
A and C	7	5
B and C	3	2.14
Total	140	100

Table 13: Level of Positive Monetary Impact of SHG Programme

<i>Level of Positive Economic Impact</i>	<i>No of Respondents</i>	<i>Percent</i>
1-Low	46	32.85
2-Medium	12	8.57
3- High	82	58.57
Total	140	100

Table 14: Level of Positive Monetary Impact by BPL Status

<i>Level of positive impact</i>	<i>No of Respondents</i>	<i>BPL Respondents</i>	<i>Non-BPL Respondents</i>
1-Low	46	16	30
2-Medium	12	6	6
3- High	82	31	51
Total	140	53	87

Table 15. Results of the Regressions

<i>Sr. No.</i>	<i>Regression</i>	<i>Equation Generated</i>	<i>R2</i>	<i>P Value</i>	<i>T Value</i>	<i>95% Confidence Interval</i>	
1.	LEVELMIMP = α + β (Mnths in SHG)	2.646467-0.003980 (Mnths in SHG)	0.01996	0.282	-1.087	0.01131	0.00335
2.	LEVELMIMP = α + β (Loan Amount)	2.338 +0.000003696 (Loan Amt)	0.02061	0.2739	1.105	-0.0000030	0.00001039
3.	LEVELMIMP = α + β (BPL StatusYes)	2.3333+0.6 (BPL StatusYes)	0.09882	0.01444	2.522	0.12376	1.076236
4.	LEVELMIMP = α + β (Amt of Agri Land)	2.6752-0.1277 (Amt of Agri Land)	0.02709	0.2089	-1.271	-0.32896	0.073477
5.	LEVELMIMP = α + β (Age of Member)	1.76721+0.01745 (Age of Member)	0.0328	0.1661	1.403	-0.007455	0.042360
6.	LEVELMIMP = α + $\beta_1 X_1$ + $\beta_2 X_2$ + $\beta_3 X_3$ + $\beta_4 X_4$ + $\beta_5 X_5$ X_1 = Mnths in SHG X_2 = Loan Amount X_3 = Income Bracket X_4 = Amt of Agri Land X_5 =Age of Member	1.957 -0.009023 X_1 + 0.000007161 X_2 +0.2357 X_3 - 0.1638 X_4 +0.0132 X_5	0.1669	0.0718	X_1 = -1.983 X_2 = 1.690 X_3 = 1.164 X_4 = -1.480 X_5 = 1.008	-0.0181476 -0.000001334 -0.17025 -0.385717 -0.0130517	0.00010149 0.00001565 0.6416654 0.058150 0.039446

Source: Author's Computation

IV. Summary and Concluding Remarks

This study was an attempt to try and assess the economic impact of microfinance programme on the participants. We particularly focused on the trying to measure the amount or the level of economic impact of the microfinance programs on the participants, particularly rural participants. For this, we scanned the literature and also undertook a primary survey in the rural area of Akole and Sangamner taluka of Ahmednagar district of Maharashtra State in India.

The review of literature showed that the developmental impact of microfinance is quite high. Our survey too confirmed this. We found that a large number of participants, particularly BPL participants benefitted from the program.

Our assessment about the level of monetary impact on the participants showed that a majority (59 percent) of the participants reported a high level of positive monetary impact. Further, the BPL and Non-BPL categorization showed that an equal proportion of BPL and Non-BPL (58 percent) participants recorded a high level of positive economic impact.

Our regression results showed that BPL participants registered a higher positive economic impact of the intervention as compared to the non-BPL. On the aspect of the length of association of the member in the SHG program and the level of economic impact, we found that it was a negative, negligible and non-significant impact. It was significant in the multiple regression equation. This partly corroborates the finding in literature by Rooyen *et al's* study (Rooyen *et al*, 2012). Further, we found that the age of the participant had a positive influence on the level of economic impact experienced by the participants implying that higher the age of the member, greater was the economic benefit derived; though the equation is not significant.

Regarding loan amount, we found that the amount of loan has a negligible impact on the level of economic impact. In case of agricultural land, we found that amount of agricultural land has a negative impact on the level of monetary impact. This is on expected lines, but the magnitude of the impact (as reflected in the coefficient) is negligible and not significant. When it comes to BPL status, this has a significant effect on the level of monetary impact and the magnitude of the effect too is substantial.

When we tried doing a multiple regression, by regressing the level of economic impact variable on all the above variables (Months in SHG, Loan Amount, Income Bracket, Amount of Agricultural Land and Age of Member), we found that most of variables are exhibiting the same sign (the sign obtained in the single variable

regression) but except of 'months in SHGs' none of the variables were significant. This shows that of all the variables we considered, the BPL status of the member alone shows a significant impact on the level of positive economic impact derived by the participants. This underlines the fact that although the coverage of BPL or poor people in the microfinance programme maybe low, the intensity of the benefit they derive from the program is high. Hence even if our survey reveals that the number of BPL member taking loans through microfinance is lower than the Non-BPL members, the level of positive economic impact that they (BPL participants) experienced is much greater than that experienced by the Non-BPL participants.

In this study we have made an attempt to quantify, albeit ordinally, the economic effects of the microfinance program on the rural participants. We have been able to get the impacts in three magnitudes of High, Medium and Low. Further work in other places, with other samples needs to be done to corroborate this method. Further refinement of the method is called for, where more detailed question on the family size, dependent people, income fluctuations etc. can be included. Better and larger samples can also add to the rigour of the study.

In conclusion we can say that the microfinance programme has shown a great deal of positive economic impact. But the main point to note is that with our method of quantifying the economic impact, we find that the impact of microfinance is substantial and it is much more substantial for the BPL members. Hence, even if the microfinance programme does not cover a large number of the poor or the very poor, the number it does cover benefit substantially and so this intervention is highly useful for them.

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