

Impact of microfinance on SHG members: a socio-economic analysis in Burdwan district of West Bengal, India

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ABSTRACT

An investigation was carried out to study the Impact of micro-finance on SHG members in Burdwan district in West Bengal during 2011-12. A sample of 60 SHGs members were chosen from two villages viz. Gopal Nagar (village-1) nearer to block head quarter and the Rosui Khondo (village-2) farthest from the block head through SRSWOR method. The microfinance through SHGs helped the members in capital formation activities in livestock and poultry rearing, agriculture, irrigation structure, educating their children's, etc. The on farm employment generating has been escalated while, women participation in income generation activities are greatest impact. On an average, the SHGs members' households earned Rs. 39327 and Rs. 26683 respectively in village-1 and village-2. The t statistics of average total income showed that members in village-1 could generate significantly higher income than village-2 as they could access the district head quarter very frequently. The Kendall's W test showed that members from both the villages unanimously accepted that the benefits from micro-credit (SHG model) and were highly satisfied.

Keywords: Kendall's W test, microfinance, SHG, women empowerment

Credit has long been considered as an important tool to fight against poverty in many developing countries including India as poor people lack access to productive assets from which they can generate income to maintain livelihood in a sustainable manner. This idea has led Government of India to nationalise banking sector, setting up of Regional Rural Banks specially for lending credit to small and marginal farmers, to launch various poverty alleviation programmes such as Integrated Rural Development Programme (IRDP) covering vast areas of the country. Although these initiatives led to widening of geographical spread and functional outreach of banking services, loan amount remain concentrated in hands of few influential persons having large landed property in the rural areas. The main reason identified was the lack of collateral on the basis of which banks extend credit *i.e.* access to institutional credit was denied on grounds of having no mortgage able assets or in such specific form which were not acceptable to public sector banks (Das, S. 2003). Another major impairments in flow of credit to the poor is the poor recovery in respect of current loans due to lack of proper monitoring of end use of loans and rigorous law of enforcement leading to mounting of nonperforming assets (NPA). Further it may be also argued that, the poor who falls in the trap of vicious cycle of poverty are most prone to be a defaulter rather than a wilful defaulter. In order to break the vicious cycle of low income - low

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saving - low investment - low income credit may be injected in cycle leading to more investment - more income - more saving - more investment - more income. So it had become essential to develop a new mechanism which would take care of all the problems associated with the difficulties in getting access to institutional credit by poor.

The search for an innovative approach ultimately led to the development of a new mechanism of lending designated as micro-credit or micro-finance. Micro-credit, defied by many but reframed by Prof Yunus of Gramen Bank as small amount of loans extended to the poor for undertaking self-employment projects that would generate income and enable them to provide livelihood for themselves and their families. Considering the overwhelming success of this new innovative approach of delivering financial services to poor as envisaged in micro-credit concept, Government of many developing countries including India introduced microcredit in various forms. In India, one such innovative approach is reckoned as the development of Self-Help-Groups (SHGs) and linking it with Formal Financial Institutes (FFI) with the sole objective of reaching rural poor in a cost effective and sustainable manner. Pradhan and Talukdar, 2014 also reported that credit through SHG is a successful mechanism of entrepreneurship development.

The SHG-FFI linkage scheme is based on the theory of asymmetric information and peer monitoring. This helps FFIs to overcome problems of high transaction costs while providing credit to the poor by transferring banking responsibilities (such as loan appraisal, follow-up, recovery *etc*) to the poor themselves, that allows the FFIs to come forward in providing large number of small loans to by utilising the social capital like peer pressure. This linkage programme has become an effective vehicle to reach the poorest of the poor and has become a regular component of institutional system. In this view it is high time to review the real perspective and to analyse its impact on rural livelihood.

Status of SHG in India

Agricultural developed states like Andhra Pradesh, Maharashtra, Kerala, and West Bengal are vehemently opposing microfinance in rural areas through MFIs like SKS, BASIX Spandana *etc.* as there these financial agencies were using cohesive method of recovery leading too committing suicide by the poor farmers (Rao, 2002). There are several evidences wherein, the poor had formed groups with the sole objectives of receiving government grants or bank loans. Survival and sustenance of such groups are obviously bleak. It is imperative that Self-Help-Groups promoting Institutions (SHPIs) carefully identified the targeted groups to be addressed. Since SHGS are considered as one of the best means to counter social and financial exclusion, it would be pertinent to study whether the visibly poor are included as members of SHGs. The present study, therefore, proposes to investigate whether the formation of SHGs - a new stock of social capital – has increased employment, incomes and assets of the rural poor through increase access to institutional credit facilities delivered by FFIs with reduced cost of

transaction. Besides, the study will examine some important characteristics of SHGs like age and size of SHGs, homogeneity of members within the groups in terms of social and economic indication.

Further the participation of poor and particularly poor women in income generating activity is reported to have significant impact on their empowerment both in social and economic aspects. Active involvement in group activities will improve their confidence which will be manifested in their ability to communicate, protest against social evils, control family violence and will positively influence their behaviour toward mutual and ultimately, this type of social impact would definitely go a long way in improving the quality of life of the members (Puhazhendi *et.al.*, 2002 and Krishnaiah, 2003). Active participation of women members in activities undertaken by SHG in general and particularly economic activities in particular will uplift their status in family and society (Lalitha and Nagarajan, 2004). Under this background, the present study was undertaken with the specific objectives as

- To study and quantify the assets/capital formation of SHG members
- To study the role of microfinance on gender, education and its impact on livelihood status of SHG members.

MATERIALS AND METHODS

To study the impact of micro-finance on SHG members in Raina block of Burdwan District in West Bengal, two villages *viz.* Gopal Nagar, near to the block head quarter and Rosui Khondo farthest from the block head quarter are selected purposively for the present study (Table 1).

Table1: Details of villages and farmers selected

Name of the village	Post office	No. of SHGs selected	No. of SHGs' members selected
Gopal Nagar	Teiandur	7	30
Rosui Khondo	Sohojpur Hattala	4	30

Selection of Farmers

To study the present status of microfinance in Raina block, Burdwan district, necessary secondary data was collected from reliable sources. Field level primary data was collected from two villages of Raina block i.e. Gopal Nagar and Rosui Khondo. To study the impact of micro-finance, a total of 11 SHGs were selected, out of

these 7 SHGs were operating in Gopal Nagar and 4 in Rosui Khondo.

For evaluation of economic activity taken up by members of SHG, 60 SHGS' members (30 from the village near to block headquarters & rest 30 away) were selected by following Simple Random Sampling without Replacement Technique (SRSWOT), (Table 2).

Table 2: Details of villages, SHGs and farmers selected for survey.

Village	Name of the SHG	No. of members
Village-1[Gopal nagar]	Saradmoni	8
	Ram Krisna	2
	Durga Mata	2
	Matangini	2
	Vivekananda	6
	Bidhyasagar	7
	Mother Teresa	3
Village-2[Rosui Khondo]	Data Baba	9
	Ma Durga	12
	Manik Pir	8
	Sidhu Kanhu	1

In order to document the pattern of development and procurement practices of micro-finance in two villages of Raina block of Burdwan district of West Bengal 60 SHGs were interviewed (Do not repeat the name, use either village-1 or block-1 like). Primary data on impact of microfinance on reduction of poverty of SHG members were collected with the help of pretested structured questioner from the SHG members during 2010-11 agricultural year. Secondary data relevant to the study were collected from published articles and journals, different government published reports and registers available with sources like Directorate of Economics and Statistics, NGOs (Sister Nibedita) etc.

Based on the objectives of the study, following hypothesises were formulated as below.

- There is no significant impact of microfinance on SHG members with regards to asset formation.
- Microfinance does not significantly empower women financially or socially.

The collected data were analysed using tabular analysis to compare the impact of micro-finance on the SHG members on reduction of poverty. Simple percentages analysis and averages analysis, per cent differentials were also computed to interpret the results. Students' 't' Test was employed to study the mean differences between group of respondents on annual income and expenditure during 2010 and 2011 when sample size was less than 30.

In order to analyse preferences of SHGs members on source of availability of finance, utilization of loan and other preferences if any, Garrett's ranking technique was employed. Kendall's coefficient of concordance or rank order correlation coefficient (W) was also employed for perception survey of the respondents: The basis of Kendall's coefficient of concordance is to imagine how the given data would look if there were no agreement among several sets of rankings and then to imagine how it would look if there were perfect agreement among the

several sets. When perfect agreement exists between individuals, W equals to 1. When maximum disagreement exists W equals to 0. W does not take negative values because of the fact that with more than two individuals complete disagreement cannot take place.

Thus coefficient of concordance (W) is an index of divergence of actual agreement from perfect agreement.

H_0 = There is no agreement among the SHGs members in both the villages

H_1 = There is agreement among the SHGs members in both the villages

The procedure used for computing the Kendall's coefficient of concordance (W) is as follows:

All the objects, N, were ranked by all the k judges in the usual fashion and this information was put in the form of a k by N matrix;

For each object the sum of ranks (R_j) assigned by all the k judges was determined;

The value of \bar{R}_j was determined and the value of s was obtained by the formula:

$$s = \sum (R_j - \bar{R}_j)^2$$

The value of W was worked out using the following formula:

$$W = \frac{s}{\frac{1}{12}k^2(N^3 - N)}$$

$$\text{where, } s = \sum (R_j - \bar{R}_j)^2$$

k = no. of sets of rankings i.e. the number of judges

N = number of objects ranked;

$\frac{1}{12}k^2(N^3 - N)$ Maximum possible sum of the squared deviations i.e., the sum s which would occur with perfect agreement among k rankings

The significance of W can be analysed by observing the critical value of S in Kendall's coefficient of concordance table. If the calculated value of S is higher than the tabulated value than W is significant and insignificant otherwise.

If $N > 7$ then chi-square value is calculated by the following formula,

$$k(N-1)W^2$$

The value of chi-square is then analysed. If the calculated value of chi-square is higher than the tabulated value then null hypothesis is rejected. Multiple regression analysis of the following form was used to find out the factors affecting household income of the respondents.

$$Y = b_0 + b_1X + b_2D + b_3X_2 + b_4X_3 + b_5X_4 + e_i$$

Where, Y = Total household income in Rupees, X_1 = Age in years, D = 1; if the cast is general, = 0; otherwise, X_2 = Education (years of schooling), X_3 = no. of family members, X_4 = Credit from SHG.

RESULTS AND DISCUSSION

The socio economic profile of the respondents is presented in table 3. It was found that, all the SHGs' members were women. With regard to social classification of SHG members, the 56.67 per cent represents backward classes (SC and SC) followed by others in sample village-1 and the corresponding figures in village-2 were 36.67 per cent, and 63.33 per cent in others. On an average, majority of the respondents were

in the age group of 26-45 years in both the villages village-1village-2which showed young women were more energetic and could take additional responsibility in the house and spur them to become SHGs. members On the other hand, increased participation of members below 40 years was observed among newly formed groups. The level of illiteracy was 33.33 per cent in village-1 and 43.33 per cent in village-2. The percentage of SHG members having primary education, middle level education, Matriculate certificate and Higher Secondary certificate were 33.33, 26.67, 3.33, and 3.33 respectively in village-1 while in village-2 the corresponding figures were 36.67 per cent, 16.67 per cent, 3.33 per cent, and 0 per cent. In case of composition of family members in village-1 children comprises of 39.42 per cent and adults 60.59 per cent of total sample population whereas village-2 there were 34.65 per cent of children and 65.35 per cent adults.

The number of working members per family varied from one to five with an average of two members in both the villages. Business experience prior to formation of SHG was 33.33 per cent in case of village-1 and 13.33 per cent in village-2. All farmers were marginal i.e. less than one hectare land. Only 36.67 per cent of sample households of the village-1 were having farmers where as in village-2, 53.33 per cent of sample households owned land. Landless agricultural labourer accounted for 78.95 per cent in village-1 and 42.86 per cent in village-2 of total sample households and the rest were other than agricultural labourers (Table 3).

Table 3: Socio-economic profile of the sample villages.

Characters		Village-1	Village-2	Total
Sex	Male/Female	0 (0)/30 (100)	0 (0)/30 (100)	0 (0)/60 (100)
Caste (HHs)	Schedule Caste(HHs)	17 (56.67)	11 (37)	28 (47)
	Schedule Tribe(HHs)	3 (10)	0 (0)	3 (5)
	Other Backward Caste(HHs)	9 (30)	0 (0)	9 (15)
	Others(HHs)	1 (3.33)	19 (63)	20 (33)
Age (year)	Up to 25	0 (0)	0 (0)	0 (0)
	26-45	30 (100)	21 (70)	51 (85)
	>45	0 (0)	9 (30)	9 (15)
Education	Illiterate	10 (33.33)	13 (43)	23 (38)
	Up to primary level	10 (33.33)	11 (37)	21 (35)
	Middle level	8 (26.67)	5 (17)	13 (22)
	Matriculate	1 (3.33)	1 (3)	2 (3)
	Higher secondary & above	1 (3.33)	0 (0)	1 (2)
No. of family members	Children	54 (39.42)	34 (35)	88 (147)
	Adult	83 (60.59)	84 (65)	167 (278)
	Total	137 (100)	117 (100)	254 (423)
No. of working members	One	1 (3.33)	4 (13)	5 (8)
	Two	27 (90)	17 (57)	44 (73)
	Three	0 (0)	8 (27)	8 (13)
	>= Four	2 (6.67)	1 (3)	3 (5)
Business experience	Known	10 (33.33)	4 (13)	14 (23)
	Unknown	20 (66.67)	26 (87)	46 (77)
Category of farmer	Landholding farmers (marginal*)	11 (36.67)	16 (53)	27 (45)
	Landless farmers	19 (63.33)	14 (47)	33 (55)
Land less family	Agricultural labourer	15 (78.95)	6 (43)	21 (35)
	Other than agricultural labourers	4 (21.05)	8 (57)	12 (20)

Note1. "*" marginal means land holding size less than 1 ha.; Figure in parentheses are percentage to total

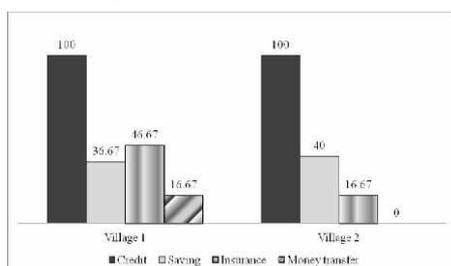
Table 4: Garrett ranking on source of availability of finance

Source	Village-1			Village-2		
	Total Score	Avg Score	Rank	Total Score	Avg Score	Rank
Personal savings	1734	111.87	II	1770	114.19	III
Friends & relatives	1689	108.97	III	2070	133.55	II
Money lender	1689	108.97	III	1770	114.19	III
Cooperatives	1584	102.20	IV	1410	90.97	IV
Bank	1481	95.55	V	1410	90.97	IV
Chit fund	1082	69.81	VI	750	48.39	VI
SHG	2129	137.35	I	2430	156.77	I
MFI	1082	69.81	VI	1140	73.55	V
Others	570	36.77	VII	750	48.39	VI

In order to analyse preferences of SHGs members on source of availability of finance, the sample members were asked to give rank on importance basis in scale nine. Table 4 revealed that, in both the villages SHG was the most preferred source of obtaining credit followed by friends and relatives. Personal saving was 2nd preferred source of farm or micro-enterprise finance in village1 where as in village-2 it received 3th rank. Till date village money leaders were preferred source of farm finance next to friends and relatives in both the villages. The inference could be drawn that Government supported financial institutions like banks and co-operatives failed to meet the financial need of the rural population. In a capital starved sector like rural India, SHG would come to the rescue of the vast majority of poor population

Awareness about products of MFIs

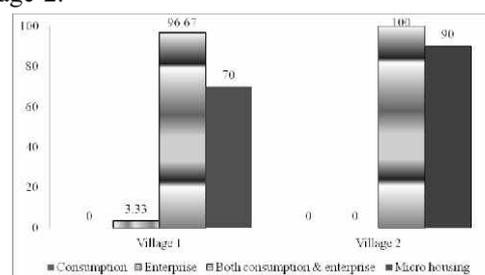
Figure1 reveals the awareness level of SHG members in both the villages. With regard to various products of microfinance cent per cent of SHG members were aware of microcredit facility. Sixteen percentages of SHG members knew about money transfer facility provided by microfinance institutions in village-1 while all the members in village-2 were fully ignorant. A sizable portion of SHG members did not know about microfinance products like savings and insurance offered by micro financing institutions. The figures were 63.33 per cent & 53.33 per cent in village-1 and 60 per cent & 83.33 per cent in village-2.

**Fig.1: Awareness about products of MFIs (in percentage).**

The sources of finance for the SHG were collected from the office bearers of SHG only. Both of the villages availed loan from nationalised bank and the loan period was three years for the first village and one year for the second.

Purpose of loan needed

Figure 2 reveals the data on purpose of loan needed by SHG members in the sample villages. It was found that none of the SHG members were interested to take loan only for consumption purpose. Only 3 per cent of SHG members of village-1 were interested to avail loan only for enterprise. Majority of the respondents showed their willingness to avail loan both for consumption and enterprise purpose (In village-1, 96 per cent and village-2, cent percent). A sizable portion of SHG members were not interested for micro housing loan. The figure was 30 percent in village-1 and only 10 per cent in village-2.

**Fig. 2: Purpose of loan needed (in percentage).**

Amount of loan received

In order to analyse the amount of loan received by the SHG members, the sample SHG members were asked about the sources and amounts of finance. It is revealed from table 5 that maximum amount of finance came from SHG (95 per cent) for village-1 and the corresponding figure in village-2 was 37 per cent. Money lenders were preferred till date for farm finance which contributed not less than 10 per cent for village-2 and 1 per cent for village-1. Banks and co-operatives

were also used for financial back up. In village-1, banks and co-operatives contributed only 1 per cent each and village-2 the corresponding figures were 8 per cent and

zero per cent. The contribution of chit fund and MFI were nil for farm activities in the study area.

Table 5: Amount of loan received

Source	Village-1 (Amount)	Village-2 (Amount)	Total
Friends & relatives	11060 (1.21)	147000 (43.34)	158060 (12.59)
Money lender	10000 (1.09)	34000 (10.02)	44000 (3.51)
Cooperatives	10000 (1.09)	-	10000 (0.8)
Bank	11000 (1.2)	30000 (8.84)	41000 (3.27)
SHG	868000 (94.75)	126200 (37.21)	994200 (79.2)
Any other	6000 (0.65)	2000 (0.59)	8000 (0.64)
Total	916060 (100)	339200 (100)	1255260 (100)

Utilization of loan

In order to analyse the utilization of loan, SHG members were asked about the various purposes of utilizing the loan amount received and are documented in table 6. It was found that the SHG members of village-1 mostly utilized the loan for livestock purpose whereas village-2 they utilised the loan amount for crop husbandry. The sample households of village-1 gave importance to agriculture just after the livestock where as in village-2; they gave importance to business after agriculture. Irrigation was the third one in which the loan amount was spent in both of the villages. The loan amount spent for fishery sector by the sample households of village-2 and got rank fourth whereas

village-1 of it was 9th position. The SHG members of village-1 were not too much interested about business although they ranked it fifth. The SHG members of both villages put rank 10th to homestead vocation. Purchase of household goods received rank 6th and 7th in village-1 and village-2 respectively. The rank put against performing social functions were 8th and 9th respectively by the SHG members of the sample villages. Education of children and healthcare was ranked as 4th and 6th by the SHG members of village1 and in village-2 it was ranked as 6th and 5th respectively. Re-lending and repayment of other loans were got the last ranks as those were the least important aspect to the sample households of both the villages.

Table 6: Garrett ranking on utilization of loan by SHGs members

Sl. no.	Purpose/Utilization	Village-1			Village-2		
		Total score	Avg score	Ranking	Total score	Avg score	Ranking
1	Agriculture	1982	127.87	II	2435	157.09	I
2	Irrigation	1946	125.55	III	1891	122	III
3	Livestock & poultry	1988	128.26	I	1519	98	VI
4	Fishery	1456	93.96	IX	1622	104.65	IV
5	Business	1624	104.77	V	2108	136	II
6	Homestead vocation	1421	91.68	X	1340	86.45	X
7	Purchase of household goods	1613	104.06	VI	1487	95.94	VII
8	Performing social functions	1482	95.61	VIII	1418	91.48	IX
9	Education of children	1769	114.13	IV	1428	92.13	VIII
10	Healthcare	1497	96.58	VII	1616	104.26	V
11	Relending	1135	73.23	XI	1032	66.58	XI
12	Repayment of other loan	881	56.84	XII	737	47.55	XIII
13	Others	584	37.68	XIII	894	57.68	XII

Note: avg. score= average score

Delivery mechanism of loan

Regarding delivery mechanism of loan of SHG members, it was found that 90 per cent of the SHG members availed the loan quickly i.e. within a month, only 10 per cent of total sample SHG members waited more than a month to get the loan, and zero per cent of SHG members belonged in cumbersome process. The corresponding figures in village-2 were 3%, 50% and 47%. Enrichment should be done in delivery of the loan.

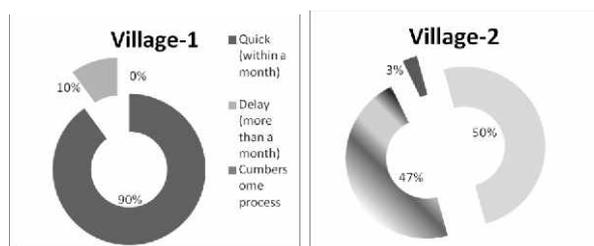


Fig. 3: Delivery mechanism of loan

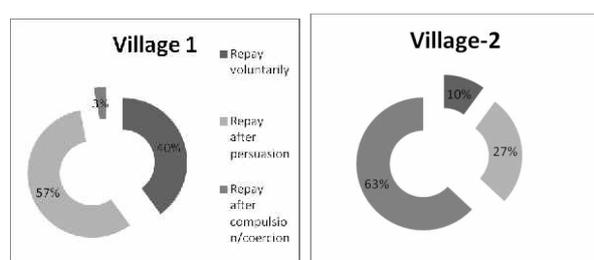


Fig. 4: Recovery mechanism of the loan

Recovery mechanism of the loan

The recovery mechanism of loan of SHG members depicted that, there were 40% of SHG members who repayment the loan voluntarily, 57% of total sample SHG members **returned** after persuasion, and the rest repaid the loan after compulsion/coercion in village-1. The corresponding figures in village-2 were 10%, 27% and 63% respectively. The NGO's should motivate the people through training to pay back their loans voluntarily else the sustainability of SHG would be at stake.

Impact of SHG on annual income

Table 7 reveals that there was no significant difference between the households of the SHG members earning from agriculture in both the sample villages as the calculated "t" value was non-significant. But in case of livestock, daily wages and total annual income, as the "t" value were significant; there were significant difference between the two sample villages. Other income sources were not statistically significant. In

village-1, the average total income and income from dairy were much higher because the microcredit was used for income enhancing enterprise. Therefore, it can be inferred that, SHG members in village-1 could generate significantly higher income than village-2 as they could access the district head quarter very frequently.

Table 7: Source wise average annual income of sample villages (Rs).

Source	Village-1	Village-2	t-value
Agriculture	9766.67	8233.33	0.49 ^{NS}
Livestock & poultry	17793.33	7683.33	7.79***
Fishery	0	5966.67	-5.21 ^{NS}
Business	8275.86	3066.67	0.85 ^{NS}
Daily wages	8866.67	1166.67	4.29***
Service	333.33	566.67	-0.35 ^{NS}
Any other	0	0	0 ^{NS}
Total	39326.67	26683.33	4.33***

Note: ***significant, NS: Non significant.

Table 8 indicated that the regression coefficients of number of family members, caste and loan amount were positive and statistically significant. Age of the respondent and education level did not seem to affect the income level of the households as their corresponding coefficient turned to be statistically non-significant. It was concluded that household income was positively affected by loan amount taken from SHG which was used for investing in profitable farm activities. Though nationalized banks were operating in village-2, the farmers were reluctant to avail loan because of their lengthy and cumbersome procedure of lending farm credit. As reported by the respondents, very often loan was sanction during mid-season of crop growth. Thus the farmers were not able to adopt new income enhancing farm technology.

Impact of SHG on asset formation: Asset formation

Table 9 reveals the data on asset formation. In village-1 there were 10% SHG members made *pucca* house where as 13% households made *kutchha* house. 13% households of SHG members purchased land. Only one SHG member purchased bullock cart. Two SHG members made *pucca* toilet and one SHG member made *kutchha* toilet. The percentage of SHG members who created water source for irrigation was 10. Out of total SHG members 10 per cent brought machinery. Thirteen

per cent of households created electric facility in their house. Thirty per cent households brought durable goods. All the SHG members purchased cow as income generating source.

In village-2 there was no SHG member who constructed *pacca* house but 3 per cent households made *kutch*a house. Three per cent of them purchased land as well as bullock for cultivation. Ten per cent households made *kutch*a toilet whereas 6 per cent brought machinery. 46 per cent of them created electric connection and 56 per cent purchased durable goods. 93 per cent SHG members purchased cow, 23 per cent hen and 13 per cent goat. All these assets were brought in the past year by the SHG members of that sample villages. The above data shows that asset formation in village-1 was much higher than village-2, which was possible either availing direct credit from SHG or through their recent past savings *i.e.* after functioning of SHG. Investment in electricity and durable goods by the households of village-2 was more as compared to village-1 because village-2 is closer to block headquarters coupled with demonstration effect. But in village-1, the households put more money on dwelling house, toilets and income generating assets.

Impact of SHG on asset formation: Educational status

Table 10 reveals the data on educational status of the households of the sample SHG members. The percentages of children attending School & College were 87 & 37 respectively sample village-1 and the corresponding figures of sample village-2 were 50 and 17 respectively. As the standard of living in village-1

was better school and college going children were higher. Note: Figures in parentheses are percentage to total

Impact of SHG on employment

Table 113 reveals the data on employment and duration of employment. Only a sizable portion of SHG members, both the villages had employment outside of the house. The percentage of SHG members, who worked outside of the house, was nil in village-1 and 16 in village-2. Micro-credit directly helped to create more employment in village which discourage migration. All the SHG members got employment more than hundred days in a year in both the villages.

Impact of SHG on communication facilities and insurance awareness

Table 12 reveals the data on communication facilities and insurance. Most of the households of the SHG members were using mobile phones for communication in both the villages though it was slightly higher in village-1. The SHG members who did insurance right to life insurance, crop insurance and other insurance were 46 per cent, 16 per cent and 3 per cent respectively in village-1 and the corresponding figures in village-2 were 40 per cent, 3 per cent and 3 per cent respectively. One can say because of smooth operation of SHG, the household members were educated on risk aversion measures and availed the facility rendered by the government. Still there is 33 per cent of the population in national programmes who can benefit from crop, livestock, insurance *etc.*

Table 8: Factors affecting households income of the respondents.

Particulars	Coefficients	Standard Error	t Stat	P-value	R ²	\bar{R}^2	F
Intercept	7570.46	7131.81	1.06	0.29	0.47	0.42	9.66***
Age	89.99	140.87	0.64	0.53			
Caste	4631.7	2596.44	1.78	0.08			
Education	-153.3	369.7	-0.41	0.68			
Family member (No.)	2948.67	884.7	3.33	0.001			
Loan amount	0.49	0.0971	5	0.000			

***significant, NS: Non significant.

Table 9: Asset formation in SHGs members' household.

Assets	Village-1		Village-2		
	Frequency	Percentage	Frequency	Percentage	
Construction of house	<i>Pucca</i>	3	10	0	0
	<i>Kutch</i>	4	13.33	1	3.33
	Purchase of land	4	13.33	1	3.33
	Bullock	10	33.33	1	3.33
	Bullock Cart	1	3.33	0	0
Toilet	<i>Pucca</i>	2	6.67	0	0
	<i>Kutch</i>	1	3.33	3	10
	Water sources	3	10	0	0
	Machinery	3	10	2	6.67
	Electricity	4	13.33	14	46.67
	Durable goods	9	30	17	56.67
Others	Cow	30	100	28	93.33
	Hen	0	0	7	23.33
	Goat	0	0	4	13.33

Table 10: Educational status of households.

Education level	Village-1	Village-2	Total
Children attending School	26 (87)	15 (50)	41 (68)
Children attending Higher education	11 (37)	5 (17)	16 (27)

Table 11: Impact of SHG on employment

Items	Village-1	Village-2	Total	
Employment	Own House	30 (100)	25 (83)	55 (92)
	Outside the house		5 (17)	5 (8)
Employment duration	< 100 days	-	-	-
	> 100 days	30 (100)	30 (100)	60 (100)

Note: Figures in parentheses are percentage to total.

Table 12: Communication facilities and insurance awareness

	Village-1	Village-2	Total
Communication facility	Yes	19	63.3318
	No	11	36.6712
Insurance	Life insurance	14	46.6712
	Crop insurance	5	16.671
	Any other	1	3.331

Note: Figures in parentheses are percentage to total

Status of gender on decision making

Table 13 reveals the data on status of decision making of the SHG members. In the study area irrespective of villages generally both wife and husband took part in all

decision making process. Only in case of a widow, the SHG member took decision by her own. A small portion of SHG members depended upon the male member of the family for decision making.

Table 13: Status of gender on decision making.

Status of decision making		Village-1	Village-2	Total
Availing loan	Wife	1 (3.33)	9 (30)	10 (17)
	Husband		1 (3)	1 (2)
	Both	19 (63.33)	20 (67)	39 (65)
Utilization of loan amount	Wife	1 (3.33)	9 (30)	10 (17)
	Husband			
	Both	29 (96.67)	21 (70)	50 (83)
What to purchase	Wife	1 (3.33)	8 (27)	9 (15)
	Husband		1 (3)	1 (2)
	Both	29 (96.67)	21 (70)	50 (83)
Selling of product/produce	Wife	1 (3.33)	8 (27)	9 (15)
	Husband		2 (7)	2 (3)
	Both	29 (96.67)	20 (67)	49 (82)
Utilizing profit amount	Wife	1 (3.33)	9 (30)	10 (17)
	Husband		1 (3)	1 (2)
	Both	29 (96.67)	20 (67)	49 (82)

Note: Figures in parentheses are percentage to total.

Test on perception of SHG members on benefit of micro-credit

In order to examine the perception of SHG members regarding benefits derived from micro-credit, some key indicators as rate of affordable interest, hassle free procedure of availing loans, enhanced employment facility, increase in income and savings, easy access to education and health, status of decision making process, improvement in standard of living and financial health and reduction in migration were computed. Finally the Kendall's Co-efficient of concordance was employed. The result was presented in table 14.

Table 14: Test Statistics: Kendall's 'W' of benefits of SHGs.

Particulars	Values
N	60
Kendall's W(a)	0.051
Chi-Square (Calculated)	33.886
df	11
Chi-Square (Table value)	24.725
Asymp. Sig.	0.000

Note: a Kendall's Coefficient of Concordance.

Calculated Chi-square value is greater than table value the null hypothesis (H_0) rejected in favour of alternative hypothesis (H_1). Hence, the SHG members of both the villages unanimously accepted that the benefits from micro-credit (SHG model) were highly satisfactory

Micro-finance is an effective tool to fight against poverty, but not a panacea. microfinance through SHGs helped significantly to the members in realizing the incremental income that actually accrued through capital formation. Hence, further to propagate the benefits in other locality, microfinance will help the SHGs members to eradicate the poverty from the rural India. Microfinance through SHGs actually helped the village women to become self sufficient in nourishing herself and contributed to improve the livelihood status of household. Hence, there should be institutional mechanism to monitor the activities of the SHGs, train them to change group behaviour for sustainable development of SHGs with an aim to reach the unreachable by financial institutions.

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