

Full Length Research Paper

## Impact of microfinance on women empowerment: An economic analysis from Eastern India

Mula G.\* and Sarker S. C.

Department of Agricultural Economics, Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar, West Bengal – 736165, India.

Accepted 31 October, 2013

The study was attempted to assess the empowerment of women through microfinance. It was conducted in Cooch Behar District of Eastern India. A total of 144 members from 48 groups of twelve blocks (four SHGs from each block) formed the sample size. To assess the impact paired t-test and Impact Index analysis were done. The study revealed that majority of the members was middle aged and belonged to Scheduled Caste farming family. A number of income generating activities were undertaken by the SHGs. The results showed positive change in indicators of economic empowerment like income (65.39%), employment (78.94%), investment (66.25%), savings (120.02%), assets (32.44%) and consumption (5.12%) of the members after joining the SHG. The calculated t-values for the economic indicators were significant at 1% level. It was revealed from multiple regression analysis that investment, employment generation and assets were the factors which influenced the income of the members significantly. The contribution of these variables was 83%. The gain indexes of social and economic empowerment were found to be 29.30 and 36.37 respectively. Briefly, microfinance through SHG seems to be a unique action oriented rural development strategy to tap the gesture for the upliftment in social and economic point of view.

**Key words:** Credit, income, employment, savings, economic empowerment, social empowerment.

### INTRODUCTION

The World Bank (2011) has estimated that there were an estimated 1.345 million poor people in developing countries who live on \$1.25 a day or less. The 2007 World Bank report "Global Economic Prospects" predicts that in 2030 the number living on less than the equivalent of \$1 a day will fall by half, to about 550 million. According to FAO (2010) in round numbers there are 7 billion people in the world. Another report said that in India, 66% of the rural women are engaged in agriculture as a main occupation (Sihag et al., 2006) and 48.46% of the country's population is women (Census, 2011). Eighty-eight percent of the indebted categories are headed by small/marginal farmers with holding less than 2 ha (Thorat, 2005). Therefore to finance this category of the poor, there is an obligation to create opportunities

where credit can be used in a meaningful way and hence there is an urgent need to organize rural women in small groups to empower them socially and economically.

The concept, Women empowerment, was introduced at the international women's conference in 1985 at Nairobi. In India, empowering women, especially at the grassroots level was focused in the eighth five year plan (1992-1997) through Panchayati Raj Institutions and empowering women through translating the recently adopted National Policy for Empowerment of Women (2001) into action and ensuring survival, protection and development of women and children through rights based approach was taken care in tenth five year plan (2002-2007). Empowerment is a process that helps and assists women realize their identity, capacity, capability, strength and

\*Corresponding author. E-mail: [gobindamula@yahoo.co.in](mailto:gobindamula@yahoo.co.in), [gobindamula@gmail.com](mailto:gobindamula@gmail.com). Tel: 9153693921.

power and its application in day to day life in various spheres. It enables them to have access to resources, greater say in decision making, more ability to plan their time and family size, also free them from irrelevant customs, traditions, practices and prejudices. According to Kate young, the concept of empowerment refers to entrepreneurial self reliance or empowering individuals and also empowering people through participation in policy making and planning process which is significantly played by Self Help Groups, that is, microfinance approach. The SHGs are characterized in empowerment of women through focusing attention on women of below the poverty line to improve their status in the family as well as in the society and to creates better awareness in health, education and environment among rural people.

By learning from the example of Grameen Bank model of micro-credit in Bangladesh, initiated and launched by Mohammed Yunus, the founder of the concept of micro-credit in 1979, many NGOs in India, came forward to form Self Help Groups (SHGs) with rural poor and provide financial services to the rural poor and RNFS (Rural Non Farm Sector) enterprises to them. National Bank for Agricultural and Rural Development (NABARD) initiated the process of micro-finance in India through bank linkage programme of SHGs by providing technical, financial support to subsidiary banks in 1991. Government of India started to provide micro-credit through banking sector (Commercial banks, Regional Rural Banks and Co-operative Banks) to generate self employment through SHG approach by launching of Swarna Jayanti

Gram Swarojgar Yojana (SGSY) from 1<sup>st</sup> April, 1999 and the program has grown to enormous size. The task force on micro finance defined microfinance as "Provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi urban or urban areas for enabling them to raise their income levels and improve living standards". Micro financing or group lending is being looked upon as the instrument that can be considered as the golden stick for poverty alleviation vis-à-vis rural development. Hence, Self employment through SHG can increase the earning capacity and economic independence and gave an opportunity in decision making within the families (Mary, 2008). So micro-finance is an emerging as a powerful instrument for poverty alleviation and women empowerment but there is an acute need among the poor both for consumption and production credit which forms declining line between survival and succumbing to poverty. Credit for health, housing, education is also critical for survival (Zeller and Sharma, 2000). But after passing two decade, is the technique of group credit lending is promisingly able to increase the status of living standard of rural poor especially women by making them self-independent, self-sufficiency to the desired level, in all over the country? The really poor tend to be implicitly or deliberately excluded as they are unable to bear the pressure of

recovery (Simanowitz, 2002; Marr, 2004) and a lot of poor quality work remain hiding in SHG model (Basu and Srivastava, 2005). Though comprising commercial Banks, RRB and Co-operative Bank, with a large network of more than 1,53,000 retail credit outlets (one for every 4100 population) has been established as a multi-agency rural credit delivery structure across the country, yet reaching the poorest of the poor, whose credit requirements are very small, fragment and unpredictable, way found to be difficult (Abraham, 2008). The performance of credit agencies are very poorly in case of microfinance except southern region (Anand and Vijay, 2008). But according to Putnam (2000) SHGs when combine with savings and credit have enabled women to get benefit by mobilizing their saving and monetizing their contributions and the process empowered them to become change agent (Prakash et al., 2004). Experience has shown that promotion of enterprise creation and income generating activities among women would transform them from 'being alive' to 'living with dignity'. So, enterprise development based on locally available recourses has been considered a powerful tool for women empowerment (Sriraman, 2006). Keeping the above background the present study was conducted to address the major income generating activities of Self help groups with socioeconomic features of the beneficiaries to determine the impact of microfinance on socio-economic empowerment of women.

## MATERIALS AND METHODS

A critical review of studies on Micro-finance through Self-Help-Groups (SHGs) especially on women empowerment furnished a good theoretical as well as structural background. The study was undertaken on the basis of primary data collected members of SHGs under SGSY (Swarna Jayanti Gram Swarojgar Yojona), a subsidy based programme for Below Poverty Line (BPL) participants, covering the period September'2011 to March'12.

### Study area

The study was conducted in three backward districts viz. Cooch Behar, Jalpaiguri and Uttar Dinajpur of North Bengal, out of six major backwards districts of the state West Bengal of Eastern India, identified by the planning commission, Government of India (Figure 1). The total geographical areas of these three districts are 3.82, 3.86 and 3.84% respectively of the State and the agricultural constitutes 72.78, 65.48 and 65.48% of the total geographical area of each district respectively. Out of total population of the three districts on an average 87% living in rural areas comprise of 70.17% Hindu, 27.48% Muslim, 38.17% Schedule Caste and 8.18% Schedule Tribe (Census 2001, India). The overall literacy rate is 66.30% but female literacy rate is 59.01%. Almost 85 to 90% people depend on agriculture for maintaining their livelihood. The average percentages of BPL households and Agricultural labourer are 40.95 and 40.03 respectively (P and RD, 2002). The ethnic practice of the study area has been observed that the female members of the family are mainly bogged with household work and play a secondary role on economic aspects. They take part in

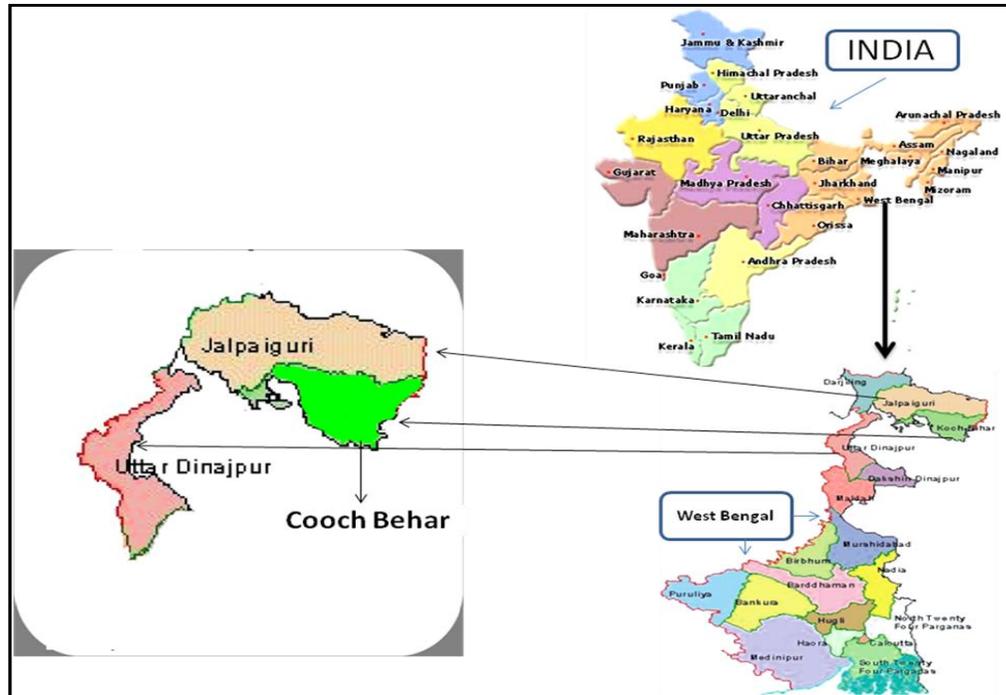


Figure 1. The Study Areas.

physical sharing of agricultural works, but usually not empowered to run own economic life.

#### **Data collection**

A multi-stage sampling was adopted for the selection of districts, blocks, villages, SHGs and beneficiaries. Cooch Behar, Jalpaiguri and Uttar Dinajpur districts were selected purposively because these three districts are categorised as major backward districts of North Bengal. Then four blocks from each district were selected randomly and from each block two villages were selected on the basis highest number of self help group (SHG) under SGSY. Then from each selected village, two SHGs who carried out income generating activities were selected randomly. Thus a total of 48 SHGs from eight villages were selected. Lastly, three members from each self-help group were selected randomly so as to constitute a sample size of 144 responded from the area under study. The required information was collected through personal interview method, using well-designed and pre-tested schedules. The data gathered covered a wide range of information on SHGs and their practices particularly relating economic and social aspects of microfinance.

#### **Variables of the study and their measurement**

To find out the economic impact of microfinance on SHG's members the main variable which were being undertaken are income, assets, employment, investment, consumption and savings of the members. Each variable were classified into three category viz. low, medium and high by grouping the respondents. The scales of three categories for annual income, assets position, investment pattern, consumption and saving of the beneficiaries are shown in Table 1.

#### **Annual income**

The annual income of the respondent was worked out by taking into account income from income generating activities of SHGs and other subsidiary occupations per year.

#### **Generation of employment**

It refers to the days of employment generated through the various sources like crop enterprises, dairy, goat farming, poultry, group activity and self-employment activities. The three categories are shown in Table 2.

#### **Investment**

It shows the purpose of the funds availed by the beneficiaries whether they are owned funds or borrowed funds. Borrowed funds included the ones borrowed form Banks as well as money lenders.

#### **Savings**

It includes savings of the members in SHGs, banks, post-office and friends, relatives have been considered.

#### **Assets position**

It includes the various assets of the respondents like the live stock assets and the durable assets.

#### **Consumption pattern**

The pattern of consumption of beneficiaries is recorded. This

**Table 1.** Classification of the respondents on the basis of scales.

Category	Year
Low	Less than (mean - 0.5 SD)
Medium	Between (mean ± 0.5 SD)
High	More than (mean +0.5 SD)

**Table 2.** Classification of the respondents on the basis of employment generation.

Category	Employment in mandays/ Year
Low	Less than (mean - 0.5 SD)
Medium	Between (mean ± 0.5 SD)
High	More than (mean +0.5 SD)

**Table 3.** Classification of the respondents on the basis of Empowerment level.

Empowerment level	Score
Nil	0
Small	1
Medium	2
High	3

includes the amount spent (₹/year) on food, clothing, religion ceremonies and marriages *etc.*

#### Analytical techniques

For the purpose of fulfilling the objectives of the study, data were analysed by tabular presentation method where frequencies and percentages were used, mean and standard deviations were used to categorize the sample.

#### Impact index

Empowerment is divided into social empowerment and economic empowerment. It refers to the extent of empowerment the beneficiaries have gained through the SHGs on the social as well as economic conditions. The level of empowerment in each case was measured by asking the respondents to put their status on three point continuum scale. It was quantified using the scoring pattern (Table 3).

The impact of the SHG on the members' empowerment was assessed using the above scoring pattern. The impact index was obtained by using the formula:

$$\text{Impact index (\%)} = \frac{\text{Obtained score}}{\text{Total obtainable score}} \times 100$$

#### Paired t-test

To find out the impact of SHGs on the beneficiaries before and after joining the SHG the paired t-Test was employed.

#### Stepwise multiple linear regression

This analysis was done to identify the factors which contributed to the income of the members. The regression model was specified as follows

$$Y = \beta_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + u_i$$

Where Y is the dependent variable;  $X_1$  = employment;  $X_2$  = investment;  $X_3$  = assets;  $\beta_0$  = intercept;  $\alpha_1, \dots, \alpha_3$  are the coefficient associated with each independent variables,  $X_1, \dots, X_3$ , respectively, and  $u_i$  = error term. SSPS statistics 17.0 software package was used to run the analysis for identifying the factors affecting income of members of SHGs.

## RESULTS AND DISCUSSION

### Socioeconomic characteristics of respondents:

The information on socio- economic characteristics of rural people of Self Help Groups like age, marital status, educational qualification, family type, family size are presented in Table 4.

#### Age

Data in Table 4 showed that majority of the respondents (44.44%) aged between 26 and 35 years, while those of 36 to 45 years was represented by 22.92%. The age group of less than 25 years was found to be 28.19%. So the age group upto 45 years corresponded to the active/working population 72.63 and 4.86% of the members belonged to the old age group. Age is an important variable with which affinity to social status is associated and the women of middle age are more enthusiastic than their older counter parts. They desire to earn a little more from alternative occupation to help their family. The results are in line with the findings of Prasad (1998).

#### Marital status

It was evident from the Table 4 that 81.95% of the SHG members were married belonged to the age group of middle aged (26- 45 years), 14.58% of the members were unmarried and 3.47% of the members were widows. Predominance of married women in SHGs may establish their urge and need for employment. Even after meeting household responsibilities, BPL women are keen for social and economic identity in their life. The result is in line with Kumaran (1997). About 3.47% of members were

**Table 4.** Socio-economic characteristics of the respondents (n = 144).

Variable	Frequency	Percentage
<b>Age</b>		
Upto 25	41	28.19
26 – 35	64	44.44
36-45	33	22.92
45-55	7	4.86
<b>Marital status</b>		
Married	118	81.95
Unmarried	21	14.58
Widow	5	3.47
<b>Education</b>		
Non-educated	51	35.42
Primary (I – V)	35	24.31
Secondary (VI-X)	45	31.25
Higher secondary (XI –XII)	9	6.25
Post higher secondary (>XII)	3	2.08
<b>Occupation</b>		
House wife	36	22.22
Labour	42	28.47
Farming	48	33.33
Petty business	9	6.25
Marketing	14	8.33
Service and others	2	1.39
<b>Caste</b>		
SC	115	79.68
ST	4	2.63
OBC	2	1.32
GEN	24	16.37

widows and the SHG movement could thereby help them to become self reliant and self-sufficient.

### Education qualification

Educational level is an important yardstick to assess the poverty status. Distribution of respondents by level of education and occupation also revealed that 35.42% of them had no education, 24.31% of the members had primary school education (class I to class V), 31.25% of the members had middle school education (class VI to class X) followed by 6.25% had high school education (class XI to class XII), and 2.08% had college education. Education is one most key element in development and empowerment of the weak. The findings are in line with Ganesamurthy et al. (2004) but contrary to Suriakanthi (2000). The analysis makes us to point out that in rural

BPL families, educational level of women are poor and it acts as a hindrance for acquiring socio-economic empowerment through well known educational path. Rather if to augment their status, the approach must be on group based as well as based on wage for manual work. The group based skill development training will obviously increase capacity of such women. SHG can provide the institutional support to such poor women of rural society.

### Occupation

Occupation-wise distribution of the members of SHGs showed that majority of the members of SHGs belonged to farming (33.33%) followed by labour category (28.47%) and home maker, that is, house wife (22.22%). The finding is similar to the study of Pandain and

**Table 5.** Distribution of respondents by Enterprise (Income generating activities).

Enterprises	Frequency	Percentage
Concrete pillar	1	0.69
Goat farming	20	13.89
Tailoring	7	4.86
Piggery	17	11.81
Sheep rearing	8	5.56
Poultry	5	3.47
Grocery	6	4.17
Jute rope making	2	1.39
Dairy	66	45.83
Bamboo work	3	2.08
Nursery	4	2.78
Pisciculture	5	3.47

Eswaran (2002). One of the possible reasons is that the main occupation of the rural people of the study areas is agriculture and animal husbandry. To them SHG may act as an institutional platform to strengthen their capacity in zeal.

### Caste

The members under SC, ST are the economically oppressed class. The Table 4 showed that majority of the members belonged to the Scheduled Caste (SC) categories (79.68%) followed by 16.37% to general category while other backward category and scheduled tribe (ST) category revealed only 1.32 and 2.63% respectively. The reason behind it might be that Cooch Behar is one of the major SC dominated district (as per Census 2001 the percentage of SC community is 50.11% in this district) and ethnic society of the said area could hardly thrive over economic challenges of the developed world.

### The distribution of the respondents by the type of enterprise

The income generating activities/enterprises undertaken by the SHGs has been presented in the Table 5 where almost twelve activities were identified. It was observed that the activities were chosen on the availability of resources, compatibility with skills and demand of the products basically in local market. The major activities were Dairy, Goatery and Piggery. The results presented in Table 5 showed that for majority of the members (45.83%) major income generating activity was Dairy as the major income of area was from agricultural activities. Goatery, Piggery and sheep rearing were undertaken by 13.89, 11.81 and 5.56% of the members respectively, as

these members were involved in animal rearing and agricultural activities which are one of the main trend occupation of the scheduled caste people. Another reason may be cited here that these are the activities which can be done by women efficiently. 4.86 and 4.17% of the members had undergone on tailoring and grocery activity respectively and earned from their neighbourhood. These activities can also be done efficiently by women by using the leisure time effectively. Poultry and Pisciculture were undertaken by 3.3% each of the members. Nursery, bamboo work, jute rope making and concrete pillar making were undertaken by 2.78, 2.08, 1.39 and 0.69% respectively. The diversification in activities is noticed as the members belonged to different villages and available resources and opportunities varied. The study of Dadhich (2001) also reported that a large number of women members had taken up subsidiary occupation like diary, grocery and diversification of agricultural activities.

### Impact of microfinance on economic indicators of the members of SHGs

The impact study was carried out on economic situation of the members of SHGs before and after the introduction of microfinance. Impact of microfinance on SHG's members on income, employment, investment, consumption, savings and assets of the members after they joined the SHGs were found using percent change and paired t-test with categorizing the members into low, medium and high. The average retention periods of members to SHGs are 4 years 3 months and the change has been considered to annual basis.

### Income

The Table 6 revealed that before joining SHG 74.31% of the members belonged to low-income group which was reduced to 22.92% after joining SHG. There was an increase to 40.97 from 18.06 percent in members belonging to medium income group after joining SHG. In case of high income group there was an increase in the members to the tune of 28.47 percent after joining the SHG. The total percentage change in income of members after joining SHG was 65.39 percent to the tune of `8647.78 per annum. Therefore a positive shift in the income level of the members after joining the SHG was observed. The members after joining SHG could avail to expand their income generating activities by increasing their investments through the loans obtained at lower rate of interest. There was up-gradation of skills of the members through training which motivated them in proper utilization of money. All these led to increase in the income of the members. Some members before joining SHG were not involved in any income generating

**Table 6.** Impact of SHG on Income of the members (n = 144).

Categories	Before			After		
	Av. Income	F	%	Av. Income	F	%
Low income (<`15000 /annum)	10587.29	107	74.31	12408.73	33	22.92
Medium income (`15000 to `25000/annum)	18232.85	26	18.06	21143.97	59	40.97
High income (>`25000 /annum)	27054.54	11	7.64	28707.54	52	36.11
Overall mean	13225.65			21873.43		
Mean difference				8647.78		
S.D.				4363.27		
t-value (Significant at 1% level)				23.783		

\*Av. Income. = average income; F = frequency.

**Table 7.** Impact of SHG on employment of the members (n = 144).

Categories	Before			After		
	Av. Emp.	F	%	Av. Emp.	F	%
Low (<75 mandays/ year)	45.74	87	60.42	55.44	16	11.11
Medium (between 75 and 133 mandays/year)	91.52	46	31.94	112.09	66	45.83
High (>133 mandays/year)	134.00	11	7.64	145.24	62	43.06
Overall Mean	67.10			120.07		
Mean difference				52.97		
S.D.				23.13		
t-value (Significant at 1% level)				27.48		

\*Av. Emp. = average employment; F = frequency; % = percentage.

activities but after joining, by encouragement of NGO and other successful SHGs, financial support, ease to get and repay loan collectively and training, they have participated to income generating activities. These might be the reasons for the increase in the income of the members after joining the SHGs. The t-value calculated was 23.783 significant at 1% level. The results are similar to the study of Puhazhendhi and Satyasai (2000), Kumar et al. (2008).

### Employment

In case of employment, the Table 7 revealed that members belonged to the high employment category (>133 mandays/year) after joining the SHGs had increased to tune of 35.42%. Members under the medium employment category (75 to 133 mandays / year) were increased from 31.94 to 45.83% while member under lower employment category decreased from 60.42 to 11.11% only. Majority of the members (88.89%) fell under the high and medium employment category after joining the SHG. So, 49.31% of women who were under the low employment category before joining the SHGs had been shifted to higher employment category after joining the SHGs. The total percentage change in the employment was 78.94 and the t-value was significant at 1% level which showed that there was significant difference in

employment before and after joining the SHGs. The reason might be the easy access to credit provided the opportunities for undertaking income generating activities by the respondents. This could have resulted in the increase in the employment opportunities at the household level. Therefore, SHGs have assisted the members to generate more employment through self-employment activities and by availing of micro-finance in post-SHG situation. The findings are in confirmation with Rao (2005) who reported in his study that micro enterprises provided 117 mandays/ respondents.

### Investment

It was observed from the Table 8 that 9.03 and 32.64% of the members who were in high and medium category before joining SHG had increased to 11.11 and 45.14% respectively after joining the SHG. And there was a slight decrease from 58.33% of members in low category before joining the SHG to 43.75% after joining SHG. The study Asokan (2005) also reported 60% of members have investment less than `5000. The total average change was `2576.38 (66.25%) and the t-value calculated was 10.797 significant at 1% level. The positive change in the investment was observed. The reason is because after joining SHG the members had started income generating activities as they got opportunity through SHG

**Table 8.** Impact of SHG on Productive Investment of the members (n = 144).

Categories	Before			After		
	Av. Ivst.	F	%	Av. Ivst.	F	%
Low (<`5000 /year)	1604.00	84	58.33	2376.43	63	43.75
Medium (between `5000 and `10000 /year)	5845.40	47	32.64	7132.40	65	45.14
High (>`10000/year)	11575.38	13	9.03	19851.75	16	11.11
Overall mean		3888.54			6464.92	
Mean difference			2576.38			
S.D.			2863.48			
t-value (Significant at 1% level)			10.797			

\*Av. Ivst. = Average investment, F = frequency.

**Table 9.** Impact of SHG on consumption pattern of the members (n = 144).

Categories	Before			After		
	Av. consumption	F	%	Av. consumption	F	%
Low (<`7500/ year)	4586.37	52	36.11	3969.15	41	28.47
Medium (between `7500 and `15000 /year)	10784.16	64	44.44	10806.54	72	50.00
High (>`15000/year)	16528.43	28	19.44	16835.48	31	21.53
Overall Mean		9663.01			10157.67	
Mean difference			494.67			
S.D.			1202.26			
t-value (Significant at 1% level)			4.937			

\*Av. = average, F = frequency.

to avail loan and to invest in income generating activities. The increased investment triggered the recycling of fund in productive form.

### Consumption

The Table 9 exhibits those 7.46% members who were under low consumption category before joining SHG shifted to higher category after joining SHG. And the members in medium and high consumption category also increased from 44.44 and 19.44% to 50.00 and 21.53% respectively after joining SHG. The total percentage change in consumption of the member was 5.12. The t-value calculated was 4.937 and it was significant at 1% level. The participation of households in SHG activities had significantly contributed to the increase in their income and there by raised their level of living and one of the important indicators of the level of living has been the consumption expenditure. The results were in line with Gangaiah et al. (2006).

### Savings

Savings is one of the important indicators to asses the impact of SHG on members. The Table 10 showed that

members in the high savings category had increased from 5.56% before joining SHG to 21.53% after joining SHG. The members under medium category of savings were also increased to the tune of 34.73% after the joining in SHG. There was significant decrease (50.69%) in members in the low savings category after joining SHG. The average positive change in amount of saving of the members was found to be `421.70 (120.02%) after joining in SHG and the t-value calculated was 14.012 significant at 1% level, which denoted that there was significant difference in the savings. The results are in line with Puhazhendi and Jayaraman (1999). The concept of micro finance rests on the premise that members will develop the habit of thrift/saving mostly through organized sectors when compared to the situation before they became the members of the SHG. Through the savings the poor can avail credit from the SHGs for consumption or for emergency purpose, which many times cannot be catered by formal credit system. The poor are caught in poverty trap due to inadequate savings leading to low capital formation resulting in stagnant real income levels. To break out of their cycle, the SHGs make available investable capital to the poor as credit without seeking collateral security. Therefore SHGs around thrift and credit services emerged as one of the effective methods for empowerment of women.

**Table 10.** Impact of SHG on savings of the members (n = 144).

Categories	Before			After		
	Av. savings	F	%	Av. savings	F	%
Low (<`500/ year)	222.64	108	75.00	281.29	35	24.31
Medium(between `500 and `1000/year)	605.36	28	19.44	747.76	78	54.17
High (>`1000/year)	1200.00	8	5.56	1391.94	31	21.53
Overall mean		351.35			773.06	
Mean difference						421.70
S.D.						361.16
t-value (Significant at 1% level)						14.012

\*Av. savings = Average savings; F = frequency.

**Table 11.** Impact of SHG on assets position of the members (n = 144).

Categories	Before			After		
	Av.	F	%	Av.	F	%
Low (<`2000)	1077.95	73	50.69	1080.17	29	20.14
Medium (between `2000 and `5000)	3249.40	42	29.17	3016.36	77	53.47
High (>`5000)	6722.14	29	20.14	6748.55	38	26.39
Overall mean		2847.97			3771.74	
Mean difference						923.77
S.D.						1586.04
t-value (Significant at 1% level)						6.989

\*Av. = average; F = frequency.

### Assets position

The composition of assets would be a measure of the economic strength of the SHG members. In this study assets means assets other than land and buildings, they were excluded from the analysis, as the changes in them cannot be expected from microfinance interventions over a short span of time. The Table 11 showed that 50.69% of the members who were in the low asset category before joining SHG had reduced to 20.14% after joining the SHG. The members in the medium and high assets category had increased to 53.47 and 26.39% respectively after joining the SHG. The total percentage change of assets position was 32.44% to the tune of `923.77 per member and the t-value calculated was 6.989 significant at 1%, which indicated that there was a significant difference in the asset position of the SHG members before and after joining SHG. Before joining SHG the members did not have opportunities to save money or either earn an additional income which kept their asset position low. But after joining SHG they had opportunity to save, get additional income and through the savings and profit obtained they could afford to purchase some consumer durables, livestock and some household assets.

### Factors influencing the income of the SHG members

The step-wise regression was done to study the factors influencing the income level of the SHG members.

The income of members depends on several casual factors such as investment, savings, asset position, consumption, employment days, age of members, education level and caste. In the step-wise regression the insignificant variables were eliminated in each step until all the variables have become significant. The results are presented in Table 12 and are discussed subsequently. The dependent variable is the SHG member's annual income. The independent variables investment (`/year), employment (mandays) and asset position (in `) of the members positively contributed to the income of the members were significant at 1, 1 and 5% level. The result showed that the income of the SHG member was increased by Rs 0.42 for every one Rs increase in the investment. The estimate of employment indicated that an increase in the employment of the members by one day increased the income by `111.15. The estimate of assets showed that one Rs increase in the value of assets of the member's results in an increase in member's income by Rs 0.367. The R<sup>2</sup> value was 0.83 which indicated that the explanatory variables included in the regression function explained 83% of variations in income generation of the members. The results were in harmony with Samar and Raman (2001) with slight variations.

### Impact of SHGs on empowerment of the members

Social empowerment was operationally defined as the

**Table 12.** Factors influencing the income level of the SHGs members (step-wise-regression) (n = 144).

Variable	Notation	R	Standard error	Coefficient	t-value	R <sup>2</sup> value
Constant	Intercept	-	991.876	4417.59	4.454**	
Employment (Mandays)	X <sub>1</sub>	0.581 <sup>a</sup>	10.277	111.152	10.816**	0.83
Investment (₦)	X <sub>2</sub>	0.909 <sup>b</sup>	0.071	0.422	5.928**	
Assets (₦)	X <sub>3</sub>	0.912 <sup>c</sup>	0.172	0.367	2.134*	

\*\*Significant at 0.1% level; \*significant at 5% level; Model =  $Y = 4417.59 + 111.152 X_1 + 0.422 X_2 + 0.367 X_3$ ; Y = dependent variable: Income; a = predictors: (Constant), employment; b = predictors: (Constant), employment, investment; c = predictors: (Constant), employment, investment, assets.

**Table 13.** Impact of SHG on social empowerment of women (n = 144).

S/N	Variables	Before		After		Gain index
		Scores	Index	Scores	Index	
1	Literacy	253	58.56	346	80.09	21.54
2	Leadership qualities	135	31.25	248	57.41	26.16
3	Communication ability	270	62.50	361	83.56	21.06
4	Leisure time profitably used	227	52.55	389	90.05	37.50
5	Awareness to government policies	158	36.57	310	71.76	35.19
6	Extension participation	133	30.79	236	54.63	23.84
7	Involvement in social issues	123	28.47	333	77.08	48.61
8	Self image	192	44.44	277	64.12	19.68
9	Decision making	189	43.75	345	79.86	36.11
10	Treatments of family	265	61.34	413	95.60	34.26
11	Participation in organization	141	32.64	264	61.11	28.47
12	Entrepreneurship management ability	187	43.29	270	62.50	19.21
	<b>Overall Index</b>		<b>43.85</b>		<b>73.15</b>	<b>29.30</b>

extent to which the members of the SHGs have gained power to improve their status both in the family and society while Economic empowerment was operationally defined as the extent to which the members of the SHGs have gained power to have access to economic resources and control over economic activities such as management of income, expenditure and satisfaction of material needs (Kavitha and Jiji, 2008).

### **Social empowerment**

A perusal of the Table 13 gives a picture of the impact of SHG on the social empowerment of the SHG members. The impact was measured through scores and their index developed for contributing social factors before and after joining the SHG. Among them communication ability followed by treatment of family members, literacy, leisure time profitably used, self image, decision making and entrepreneurship management ability ranging from 180 to 270 before joining SHG which had been increased to scores ranging from 270 to 413 after joining SHG. Their respective indexes also showed an increase with highest in case of treatment of family followed by leisure time profitably used, communication ability, literacy and

decision making. Awareness to government policies, extension participation, participation in organizations, and leadership quality also showed remarkable increase in their scores and indexes after joining the SHG. The overall index calculated (given equal weight to all attributes) was 43.85 before joining SHG which increased to 73.15 after joining the SHG. The gain in index was highest in involvement in social issues followed by leisure time profitably used. The members had opined that leisure time was profitably used after joining SHG, as members were involved in income generating activities and participated in social issues. The literacy level also increased as the women learnt to sign and manage their accounts in the group. The overall gain in index was 29.30. The reason might be due the increase of the participation in income generating activities, contact with banks and higher officials, attending training programmes, involvement in government schemes and social issues through the SHGs.

### **Economic empowerment**

Economic empowerment is a necessary condition for enabling women to seek justice and equality. Without

**Table 14.** Impact of SHG on economic empowerment of women (n = 144).

S/N	Variables	Before		After		Gain index
		Scores	Index	Scores	Index	
1	Savings/ month	104	24.07	359	83.10	59.03
2	Food consumption pattern	216	50.00	296	68.52	18.52
3	Access to credit	149	34.49	345	79.86	45.37
4	Material obsession (aspects at home)	203	46.99	263	60.88	13.89
5	Acquisition of skill	268	62.04	391	90.51	28.47
6	Women's own income	134	31.02	402	93.06	62.04
7	Purchase of gold	223	51.62	335	77.55	25.93
8	Purchase of immovable assets	169	39.12	377	87.27	48.15
9	Control over financial resource	188	43.52	331	76.62	33.10
10	Expenditure on cosmetics	129	29.86	255	59.03	29.17
	<b>Overall Index</b>		<b>41.27</b>		<b>77.64</b>	<b>36.37</b>

economic strength, women cannot be able to exercise their guaranteed rights.

Table 14 depicts the impact of SHG on the economic empowerment of women members. The index for the contributing factors such as women's own income increased from 31.02 before joining SHG to 93.06 after joining SHG, followed by acquisition of skill from 62.04 to 90.51, immovable assets from 39.12 to 87.27, saving/month from 24.07 to 83.10, access to credit from 34.49 to 79.86, purchase of gold from 51.62 to 77.55, access/control over financial resources/households increased from 43.52 to 76.62, food consumption pattern increased from 50.00 to 68.52, material possession increased from 46.99 to 60.88 and expenditure on cosmetics increased from 29.86 to 59.03. The overall index of economic empowerment of women increased from 41.27 before joining SHG to 77.64 after joining SHG. The gain index was highest in case women's own income. The overall gain in index was 36.37. The aggregate measure of the overall impact of microfinance encompasses social as well as economic aspect. Impact index indicates the increase in socio-economic empowerment of the women. So, the study revealed that SHGs in general had succeeded in gaining the socio-economic status of the members, by making microfinance. Thus it could be said that the women empowerment was enhanced through SHGs. But economic empowerment is higher than social empowerment which is contrast to the study of Puhazhendhi and Satyasai (2000) reported that the impact of SHGs was relatively more pronounced on the social than on the economic aspects. The contrast may have come from BPL portfolio of the women under study. They prefer to achieve economic stability than social obligation.

## Conclusion

The study revealed a significant positive change in the

economic variables in the areas of self-income, employment generation, asset building, productive investment, savings which led the socio-economic upliftment of rural women folk and empowered them particularly in the sphere of child education, leadership and entrepreneurship ability, technology adoption, decision making etc. The study revealed that majority of the members was involved in Dairy followed by Goatery and Piggery. The total percent change of income of the members from before joining SHGs to after joining SHGs was 65.39% and was significant at 1% level. There was significant percentage change in employment days of the members after joining SHGs. The percentage change was 78.94.

The asset position of the members also showed significant change which was 32.44%. The total percentage change in the consumption was 5.12% and it was significant. There was significant change in the investment of the members which was calculated as 66.25%. The percentage change in the savings was 120.02% and the change in savings was significant. From the analysis of multiple regression, the study revealed that investment, employment generation and assets were the factors which influenced the income of the members significantly. The contribution of these variables in enhancing income level of the members was 83 percent.

Empowerment level of the participants in different socioeconomic factors was being accelerated after joining in SHG. It was observed that the index of social empowerment increased from 43.85 to 73.15% after joining the SHGs. The economic empowerment index increased from 41.27 to 77.64% after joining the SHGs. Women have improved their self-value as better 'good wives and mothers' beyond being perceived as visitors, dependant on men. They have gained a wider access to diversified livelihood strategies outside the traditional work boundaries. Their labour has also shifted away from the confines of the kitchen and village farms into the local and far-off mobile markets through entrepreneurship

activity. They have also gained community dominance through extension participation, marketing of their micro-enterprise product and entry into social issues. So, through microfinance support, women's agency has sparked their struggle to stimulate their livelihood practices through entrepreneurship development. Hence, encouragement and support by the government to establish and promotion SHGs up to the entrepreneurship level simultaneously with proper training facilities to develop their knowledge and skill certainly helps in reducing the problem of rural unemployment through socio-economic empowerment.

## REFERENCES

- Abraham P (2008). Microfinance Scenario of Kerala. *J. Southern Economist* 47(1):14-16.
- Anand VV, Vijay (2008). For Rural Development. *Yojana* 52:63-64.
- Asokan R (2005). Micro-enterprises: An alternative strategy for poverty alleviation. *Kisan World* 32(3):49-50.
- Basu P, Srivastava P(2005). Scaling up Microfinance for India's Rural poor, World Bank Policy research working paper 3646 (<http://econ.worldbank.org>).
- Dadhich CL (2001). Microfinance – A panacea of poverty alleviation: A case study of Oriental Grameen Project in India. *Indian J. Agric. Econ.* 56(3):419-424.
- Ganesamurthy VS, Radhakrishnan MK, Bhavaneswari S, Ganesan A (2004). A study of thrift and credit utilization pattern of SHG in Lakshmi Vilas Bank Suriyam palayam branch Erode. *Indian J. Mark.* 34(1):12-16.
- Gangaiah C, Nagaraja B and Vassudevulu NC (2006). Impact of self help groups on income and employment: A case study. *Kurukshetra.* 54(5):18-23.
- Mary JG (2008). Women Empowerment through Self-Help-Groups. *J. Southern Economist* 46(21):28-30.
- Kavitha V, Jiji RS (2008). Perception of empowerment by the members of women Self-Help Groups in goat farming. *J. Dairying Foods.* H. S. 27(3/4):181-185.
- Kumar V, Sharma RK, Sharma HR (2008). Impact of Microfinancing on Employment, Income and Empowerment – Micro Evidence from Himachal Pradesh. *Finan. Agric. Natl. J. Agric. Rural Develop.* 40(1):3-8.
- Kumaran KP (1997). Self help groups: An alternative to institutional credit to the poor: A case study of Andhra Pradesh. *J. Rural Develop.* 16(3):515-530.
- Marr A (2004). A Challenge to the Orthodoxy Concerning Microfinance and Poverty Reduction. *J. Microfinance.* 5(2):1-35.
- Prakash N, Pal PP, Sharma M (2004). Self Help Groups for Mobilizing Tribal Youth for Entrepreneurship: The Experiences of Meghalaya. *MANAGE Exten. Res. Rev.* 2:19-30.
- Prasad CH (1998). Implementation processes of women development programme (IFAD) -An experimental model. *J. Rural Develop.* 17(4):779-791.
- Puhazhendhi V, Satyasai KJS (2000). Economic and social empowerment of rural poor through self help groups. *Indian J. Agric. Econ.* 56(3):450-451.
- Puhazhendhi V, Jayaraman B (1999). Increasing women's participation and employment generation among rural poor: An approach through informal groups. *Natl. Bank News Rev.* 15:55-62.
- Pandain P. and Eswaran R. (2002). Empowerment of Women through Micro-Credit. *Yojana.* 46:47-49.
- Putnam R (2000). *Bowling Alone: The Collapse and Revival of American community* (New York, Simon & Schuster).
- Rao VM (2005). Building cooperative entrepreneurship through dairy cooperative in Ajmer. *The Cooperator.* 43(5):231-234
- Samar KD, Raman M (2001). Can heterogeneity and social cohesion co-exist in self-help groups? An evidence from group lending Andhra Pradesh in India. *Indian J. Agric. Econ.* 56(3):389-400.
- Simanowitz S (2002). 'Microfinance for the Poorest: A Review of Issues and Ideas for Improving the Impact of Microfinance on Poverty'. <http://www.microfinancegateway.org>.
- Sihag S, Singh AR, Dhawan D (2006). knowledge of Farmwomen Regarding Post-Harvest Technology of Cereals in Hanumangarh (Rajasthan, India). Paper Presented in International Conference on Social Science Perspectives in Agricultural Research and Development. Indian Agricultural Research Institute, New Delhi. 15-18 February. P. 37.
- Suriakanthi A (2000). Literacy-essential for SHGs. *Social Welfare.* 47(6):32-34.
- Sriraman VP (2006). Micro Finance, Self Help Groups and Women Empowerment – current issues and concerns available at [http://www.bim.edu/pdf/lead\\_article/Prof-sriraman.pdf](http://www.bim.edu/pdf/lead_article/Prof-sriraman.pdf)
- Thorat YSP (2005). Microfinance in India: Sectoral issues and challenges. *National Bank News Rev.* 21(1):10-18.
- Zeller M, Sharma M (2000). Many borrow, more save, and all insure: Implications for food and microfinance policy. *Food Policy* 25(1):143-167.