

Research Paper



AN ANALYSIS OF INCOME GENERATION AND EXPENDITURE PATTERN OF SELF HELP GROUP WOMEN MEMBERS

M.J.Cecilia Shobana¹

¹Research Scholar, Corporate Secretaryship, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India

Dr.V.K.Somasundaram²

²Head, PG & Research Dept. of Corporate Secretaryship, Bharathidasan Govt. College for Women, Puducherry-3, India

ABSTRACT

All over the world, through out the history, People, who are oppressed and have something in common with them, have joined together to overcome the barriers they face. Self Help Group (SHG) in India, as part of micro financing system, is one such formation by the people who are poor and in the clutches of poverty to support each other. Because of present formal financial system which failed to cater to the financial need of the rural poor, particularly poor women in rural households, at micro level, the concept of SHG is arisen to lend credit to those deserving people to invest in income generating activities as well as to promote saving among them. Hence, SHGs have gained wide recognition in India as in most developing countries in Asia. In this present context, a focus is made in this paper to explore the micro finance in general, microfinance in India, concept, characteristics and functions of Self Help Groups and the SHGs in India as well as the SHGs in Union Territory of Puducherry.

KEYWORDS: Self help group, Microfinance, Savings, income generation, expenditure pattern

1.INTRODUCTION

All over the world, throughout the history, People, who are oppressed and have something in common with them, have joined together to overcome the barriers they face. Self Help Group (SHG) in India, as part of micro financing system, is one such formation by the people who are poor and in the clutches of poverty to support each other. Because of present formal financial system which failed to cater to the financial need of the rural poor, particularly poor women in rural households, at micro level, the concept of SHG is arisen to lend credit to those deserving people to invest in income generating activities as well as to promote saving among them. Hence, SHGs have gained wide recognition in India as in most developing countries in Asia. In this present context, a focus is made in this paper to explore the micro finance in general, microfinance in India, concept, characteristics and functions of Self Help Groups and the SHGs in India as well as the SHGs in Union Territory of Puducherry.

2.LITERATURE REVIEW

Microfinance is a term for the practicing financial services, such as credit, savings or insurance at micro level to poor people. Of the three categories of micro finance, namely, micro credit, micro savings and micro insurance, micro insurance is still in experimental

stage. According to, microfinance has evolved as an economic development approach intended to benefit low-income women and men. The term refers to the provision of financial services to low income clients, including the self-employed. Financial services generally include savings and credit; however, some microfinance organizations also provide insurance and payment services (Joanna Ledgerwood,1999). The aim of microfinance is not just about providing capital to the poor to combat poverty on an individual level, it also has a role at an institutional level. It seeks to create institutions that deliver financial services to the poor, who are continuously ignored by the formal banking sector (Otero, 1999).Micro Finance in India. In India, the process of micro finance is evolutionary and has grown gradually to provide great opportunity to the rural poor, particularly rural women, in India to achieve economic, social and cultural empowerment in order to lead better standard of living standard and quality of life. In the process of micro financing, government owned financial institutions (public sector banks) in the country have been playing a leading role for nearly two decades now. World Micro Credit Summit has converged the developed and developing countries at Washington to tackle the serious problem of poverty by using micro credit as a tool to empower the poorest sections. A global movement has been launched



to reach 100 million of the world's poorest families by the year 2005 (Subrahmanyam, P.V.V., 2006). Self help is one of the most intriguing facets of rural development. It is a dynamic process that transcends the narrow boundaries of any given facets of development. Self-Help is a fundamental tenant of recent expanded strategies of basic needs and self-reliance (Suguna .B, (2006), CASA (Church's Auxiliary for Social Action) views Self-Help as a tool for community organisation, an activity of socio-economic development and a strategy for women's empowerment (Bose, Joe AGR, (1997). The Self-Help Groups (SHGs) are voluntary associations of people, particularly women in poor rural households, formed to attain some common goals. SHGs are formed by those people who have similar social identity, heritage, caste or traditional occupations, come together for a common cause and also for managing the resources for the benefit of the group members (Satya Sundaram, I. (2001).

3. METHODOLOGY

The SHGs are used as forum for poor people where they can learn about mobilizing money collectively and managing the risks involved in their chosen area of income generating activity. the proposed research is undertaken to examine the activities of women members in generating income from sources available from SHG, expenditure pattern, investment pattern and savings patterns as well as to examine how the above activities help them to be empowered in their families. The present research work is relied primarily on primary data to fulfil the objectives and partially on secondary data regarding the topic of the study. The secondary data sources are publications in journals, books, dissertations and reports on various aspects, such as income generation, expenditure pattern, investment pattern, savings pattern and empowerment of SHG women members. An in-depth analysis of secondary data was useful in preparing the questionnaire. Next primary data are collected using a well designed questionnaire instrument. For collecting the primary data, the list of SHG groups in rural and semi-urban areas surrounding Puducherry region. For selection of sample two sampling methods, viz., convenient sampling method and simple random sampling method are adopted. For selection of SHG group, convenient sampling method is used. Using this method, the SHG groups who volunteer for the survey and who are easy to reach are selected. A total of 42 SHGs are thus selected. To select the women members for the survey from each SHG group, the simple random sample technique is used. First list of members are obtained from each selected SHG and each member in the list is assigned with unique identification number. The numbers are placed in a bowl and thoroughly mixed and 8 members from each SHG are drawn.

The total number of members thus selected for the survey amount to 336. Then the researcher visited each SHG and with the help of the leader of SHG each randomly selected member is contacted in person and questionnaire is distributed, opinion is obtained immediately. The filled in questionnaire are obtained from total of 304 women members as the remaining members out of 336 initially selected are not willing to participate. After securitization, the 4 questionnaire are still found with insufficient information, and hence rejected. So, the final sample is stood at 300. The internal consistency of scale items in the questionnaire instrument is assessed using Cronbach alpha coefficient before carrying out actual data collection. The table below shows the Cronbach alpha coefficient indicating internal consistency of scale items measuring various aspects of SHG. The data collected was analyzed using various statistical techniques from descriptive to multivariate.

4. FINDINGS AND DISCUSSION

4.1 Income Generation Pattern of SHG Members

The income generation activities and expenditure pattern of SHG members and comparing the same before and after joining SHG. Before going for analyzing the investment and savings patterns of the members before and after joining SHG, it is wise to evaluate these two aspects as saving and investing in various assets is highly likely only if they have sufficient income and left with some money in excess after fulfilling their needs. Regarding income and sources of income generation, the respondents are asked to give their opinion for pre and post period of joining SHG. The income per month is obtained in absolute value. With regard to income generation sources, the questionnaire is incorporated with 12 different sources viz., Cultivation of vegetables & greens, Trading food grains, Grocery shops, Selling food items (Ready to eat food items), Tailoring, Readymade garments, Basket knitting, General stores, Livestock / Cattle rearing, Gold covering jewelry sales and poultry farms. The scale values ranges from 'strongly disagree' to 'strongly agree' (disagree, neutral and agree in between) qualitatively and the opinion levels are quantified from 1 to 5 (strongly disagree to strongly agree). On the other hand, the expenditure pattern is obtained in actual value (in rupee terms) for pre and post period of joining SHG using 10 different family oriented needs such as food items, clothing, ceremonies, health drinks, medicines, children's education, transport, entertainment, cooking fuel and house maintenance. The data are analyzed by descriptive statistics, cross tabulation analysis, paired t-test, t-test for independent sample, Repeated measures ANOVA and canonical correlation. The results of the analysis are tabulated and discussed in detail hereunder. Table 1 shows the descriptive results of the income generated before and after joining SHG.

Table 1 Generation of Income Before and After Joining SHG

Joining SHG	Mean	SD	95% Confidence Interval	
			Lower	Upper
Before	2417.17	1535.81	2242.67	2591.66
After	5108.33	2742.41	4796.74	5419.92

As shown in the table 1 the income per month is Rs.2417.17 on the average before joining SHG whereas it is on the average Rs.5108.33 after joining SHG. The monthly income before joining SHG tend to vary between Rs.2241.67 and Rs.2591.66 while it is likely to range bound between

Rs.4796.74 and Rs.5419.92 after joining SHG 95 per cent of the time if any such survey is taken in the current population. The statistical significance of the difference in monthly income before and after joining SHG is tested by paired t-test and the results of the analysis are given in Table2.

Table 2: Paired t-test for Significance of the Difference in Income Generation Before and After Joining SHG

Joining SHG	Mean	SD	Mean Difference	SD Difference	t-Value
Before	2417.17	1535.81			
After	5108.33	2742.41	2691.17	1661.54	28.05**

**Significant at 1% level

As given in the table 2, the income after joining SHG is higher by Rs.2691.17 per month and this difference in income per month between two SHG periods is significant statistically (t value = 28.05, p < 0.01). Hence, it is well understood that SHG has significant positive impact on the family income of women in the study area.

The role of demographic factors of the respondents in determining their income levels before and after joining

SHG is tested by repeated measures ANOVA. Table 3 presents the results of one such ANOVA comparing monthly income between pre and post joining SHG across respondent categories by age levels. As presented in the table, F value of 769.62 is significant at one per cent level for difference in income level between two periods, whereas it is found to be insignificant for difference income levels between two periods across age groups (interaction of age with period, i.e., interaction effect) as F value is very low and hence insignificant.

Table 3 Results of Repeated Measures ANOVA Comparing Monthly Income Before and After Joining SHG by Age Levels

Age Levels (in Years)	Before		After		F Value for Within Subject Effect	
	Mean	SD	Mean	SD	SHG Period	SHG Period x Age Levels
Up to 35	2656.40	1960.13	5406.98	3448.37	769.62**	0.16
36 - 40	2324.18	1451.75	4950.82	2556.32	(1, 297)	(2, 297)
> 40	2316.85	1132.74	5038.04	2189.18		

Source: Primary data; SD – Standard Deviation; **Significant at 1% level.

The insignificant F value for interaction effect of age with period has revealed that the increase in income after joining SHG is independent of the age levels rather due to joining SHG. Table 4 is reported with the results repeated measures ANOVA comparing pre and post period income levels between Hindu and Non-Hindu religious groups. As

per the table, the income level after joining SHG is higher for Hindu group compared to that of Non-Hindu groups, but such difference in income levels between two religious groups during pre and post SHG period is not significant at required statistical level (F Value for SHG period x Religion is insignificant).

Table 4 Results of Repeated Measures ANOVA Comparing Monthly Income Before and After Joining SHG by Religion

Religion	Before		After		F Value for Within Subject Effect	
	Mean	SD	Mean	SD	SHG Period	SHG Period x Religion
Hindu	2448.66	1597.10	5200.89	2857.97	569.82**	1.20
Non-Hindu	2324.34	1344.48	4835.53	2365.57	(1, 297)	(1, 297)

Source: Primary data; SD – Standard Deviation; **Significant at 1% level.

Figures in brackets are degrees of freedom

At the same time, income levels differ significantly when compared before and after joining SHG (F value = 569.82, $p < 0.01$ for period). This envisages the effect of SHG in improving the income among women but such improvement is solely attributed to SHG and there is no any interaction of religion.

4.2 Expenditure Pattern of SHG Members:

The most of the members of the SHGs are in below poverty line and belong to the lower income group and hence the amount of spending by them is very little. But after becoming members of the SHGs, they are able to generate more income due to assistance from SHGs and hence spend

more for meeting their expenditures. Hence, here an attempt is made to evaluate the effect of SHGs on spending capacity of their members. The respondents' opinion about expenditure pattern of women SHG members on food items, clothing, ceremonies, health drinks, medicines, children's education, transport, entertainment, cooking fuel and house maintenance before and after joining SHG in order to evaluate whether the SHG have increased the women members spending capacity. The statistical significance of the difference in opinion levels about spending on various family needs and other purposes in pre and post SHG joining conditions is analyzed by paired t-test. Table 5 presents the paired t-test results comparing the opinion of the respondents about expenditure on food items before and after joining SHG.

Table 5 Paired t-test Results Comparing Expenditure on FOOD ITEMS Before and After Joining SHG

Joining SHG	Mean	SD	Mean Difference	SD Difference	t-Value
Before	2525.67	647.38			
After	3436.00	657.83	910.33	384.91	40.96**

Source: Primary data; SD – Standard Deviation; **Significant at 1% level.

As presented in the table 5, the expenditure on food items, on the average per month, is Rs.2525.67 before joining SHG whereas it has increased by Rs.910.33 and stood at Rs.3436.00 on the average after joining SHG. Further, the difference in expenditure on food items is significant at 1 per

cent level (t value = 40.96, $p < 0.01$). This has revealed the positive impact of women SHGs on their members towards spending on food items.

Table 6 reports the paired t-test results from comparing spending on clothing by women members before and after joining SHG.

Table 6 Paired t-test Results Comparing Expenditure on CLOTHING Before and After Joining SHG

Joining SHG	Mean	SD	Mean Difference	SD Difference	t-Value
Before	269.83	269.49			
After	529.33	382.40	259.50	214.25	20.98**

Source: Primary data; SD – Standard Deviation; **Significant at 1% level.

As reported in the table 6, the spending on clothing, Rs. 269.83 on the average before joining SHG has increased to Rs.529.33 on the average after joining SHG which is more by Rs.259.50. Further, this spending on clothing after joining SHG is significantly higher compared to the spending on this item before joining SHG (t value = 20.97, $p < 0.01$). Hence, it is evident that SHGs organization has positive effect on spending pattern of their members on clothing due to more earnings from various business activities supported financially by SHGs.

The multivariate relationship between increase in family expenses (expenditures on various family needs) and increase in income from various activities is analyzed by relating canonical variates of variables underlying 10 family needs and 12 income generation sources (activities) promoted

by SHGs using canonical correlation analysis. The canonical correlation functions and their statistical significance are displayed in Table 7. An examination of the table shows that there are 10 canonical correlation functions relating 10 pairs of canonical variates of family expenses (dependent) and income generation activities (independent). The canonical functions from 0 to 7 (eight functions) are statistically significant. Though there are eight functions with significant fit, only the seven functions (0 to 6) are found with sufficient correlation of more than 0.30 and shared variance above 10 per cent. This indicates that only these seven functions are important and exhibit meaningful relationships between dependent and independent canonical variates. Therefore further inferences based on the canonical loadings of the variables in the dependent and independent set with respective canonical variates of the seven functions are undertaken.

Table 7 Canonical Correlation Functions between Difference in Expenditure on Household Needs and Difference in Sources of Income Generation after Joining SHG

Canonical Function	Canonical R	Canonical R ² (Eigenvalue)	Chi-Square	df	p-Value	Wilks Lambda
0	0.7388	0.5458	902.71	120	0.0000	0.0433
1	0.6907	0.4771	675.82	99	0.0000	0.0953
2	0.6381	0.4071	489.42	80	0.0000	0.1823
3	0.5984	0.3581	339.13	63	0.0000	0.3074
4	0.5348	0.2860	211.69	48	0.0000	0.4789
5	0.3875	0.1501	114.84	35	0.0000	0.6707
6	0.3477	0.1209	68.07	24	0.0000	0.7892
7	0.2479	0.0615	31.01	15	0.0088	0.8977
8	0.2016	0.0407	12.77	8	0.1199	0.9565
9	0.0540	0.0029	0.84	3	0.8397	0.9971

Source: Primary Data

5. CONCLUSION

This paper has focussed on evaluating the income generation and expenditures pattern of SHG women members prior to analyzing their investment and savings pattern as investments and savings are generally determined by these two attributes because a person can make investments in assets and tend to save only if they have earnings in excess after fulfilling their needs. To measure the income generation, 12 different business activities supported by SHG are considered. The expenditure pattern is measured using 10 different household needs. The role of SHG in increasing the income and improving the lifestyle (based on spending on family needs) is ascertained by comparing the opinion of the respondents' about the above aspects before and after becoming members of SHGs.

From the inferences of the results, it is understood that SHGs have played significant role in assisting their women members to significantly increase their income levels. It is found that more earnings after joining SHGs are purely due to assistance from SHGs because the difference in earnings before and after becoming members of SHGs is independent of their age levels, religion, community, educational status, occupational levels, family type, number of earning members in family and land holding status. However, family size of the respondents is found to be an important factor in improving the income levels after joining SHGs.

ACKNOWLEDGEMENT

The authors wish to thank the various Self Help Groups in Puducherry for providing the data set for usage in this study. The authors also wish to thank Manonmaniam Sundaranar University, Tirunelveli and Bharathidasan Government College for Women, Puducherry for carrying out the investigations.

REFERENCES

1. Ledgerwood, J. (1999). *Microfinance Handbook: An Institutional and Financial Perspective*. Washington DC: World Bank.
2. Otero, M. (1999). "Bringing Development Back into Microfinance", *Journal of Microfinance*, Vol.1, No.1, pp.8-19.
3. Subrahmanyam, P.V.V. (2006), "Rural Women and Self Help Group Strategy", *Andhra University, Visakhapatnam*, pp. 69 – 70.
4. Suguna .B, (2006), *Empowerment of Rural Women through Self Help Groups*, Discovery Publishing House, New Delhi.
5. Bose, Joe AGR, (1997), "Organizing Self Help Groups: The CASA Experience", *Participation and Governance*, July, Vol.7, No.10, pp.18-22.
6. Satya Sundaram, I. (2001). "Self-Help Groups: Challenges and Opportunities", *Social Welfare*, Vol.48, No.4, p.18.
7. Mishra, M and Hossain. M. (2001). "Panchayatraj and rural development in Orissa." *Indian Journal of Social Development*, Vol.1, No.1, p.453.
8. Alakananda Mookerjee. (2002). "Rural Women Draw Shakti from Setting Up Dairy Cooperatives", *Vikasini*, January, Vol.17, No.1, p.37.
9. Burjorjee, Deena M., Rani Deshpande and Gean Weide Mann C. (2002). *Supporting Women's Livelihoods: Microfinance that Works for the Majority*, New York: United Nations Capital Development Fund- Special Unit for Microfinance.