

An Empirical Study to Examine the Impact of Self Help Groups on the Income of Rural Women

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ABSTRACT

Self-Help Group (SHG) is a small voluntary association of poor people, preferably from the same socio-economic background. They come together for the purpose of solving their common problems through self-help and mutual help. Self-Help Groups act as a platform of microfinance in rural India. This group was formed for the women's socio-economic empowerment. Many of the studies were already conducted on different aspects related to rural women income generation and Self-Help Groups and it was revealed by review in the present studies. The main objectives of this paper are to analyze the impact of the Self-help groups on the rural women income and savings before and after joining the groups and to find out the relation between income and savings of women group members. For this purpose, primary data was collected from household in Kalna block II, District Purbo Burdwan, West Bengal. The data was analysed with help of Gini-Co-efficient and Co-efficient of correlation. The major finding of the study; level of income of women has increased very much after joining the group and has positive relation between income and savings of women group members in the study area.

Keywords: Kalna, Microfinance, Self-help group, Gini-Coefficient, Income, Saving, Inequality, Rural women.

1. Introduction

In India women are important for national development because they constitute half of country's human resources. However, the results of National Sample Survey showed that women economic activities are on the decline. This trend was supported by the World Bank's World Development Indicators (2014), which showed that only 27 percent of women age group of 15 or elder than that participated in the labour force, declined from 34 percent in the year 2000. This decline was concentrated among the poor and rural women who are in need of job opportunities (Kabeer, 2016). Therefore, to improve the socio-economic conditions of rural women, it is necessary to empower the women. The Government of India has launched and implemented several programmes towards poverty alleviation and the women empowerment but it has been seen that women in rural areas remained poor. Thereafter a mother programme called Swarna-Jayanti Gram Swarozgar Yojana (SGSY) based on a group approach was introduced to make rural women empowered. Under this scheme the rural women are grouped as Self- Help Groups (SHGs) to undertake any feasible economic activities on their own and with the support from bank loans and government help. These voluntary associations of poor people, preferably from the same socio-economic background come together for the purpose of solving their common problems through self-help and mutual help.

A SHG characteristically comprises a group of micro entrepreneurs having uniform and common economic backgrounds, all willingly coming together to save regular small sums of money, mutually agreeing to contribute to a common fund and to meet their emergency needs on the basis of mutual help (Manisha, 2016). They pool their assets to become financially

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stable, taking loans from the money collected by that group and by making everybody in that group self-employed. The group members use collective wisdom and peer pressure to ensure proper end-use of credit and timely repayment. This system eliminates the need of security and is closely related to that of commonality lending, widely used by micro finance institutions.

The main objectives of this paper are to analyze the impact of the Self-help groups on the rural women income and savings before and after joining the groups and to find out the relation between income and savings of the women group members.

2. Literature Review

In the subsequent paragraphs an attempt has been made to review the literature relating to the impact of self help groups on the income level of rural women.

Modkey M.D. (1999) examined the impact of micro finance on the economic aspects of life of the rural women. He points out that SHGs themselves collectively ensured repayment of bank loan. His study also stated that the loan amount was suitably utilized and promptly repaid at low transaction cost. SHGs thus provided access to the credit for the poor.

Puhazhendhi (2000) reviewed the progress of the SHG-bank linkage program in Tamil Nadu and assessed the socio-economic impact of the program on the group members. The study was conducted by the NABARD in Tamil Nadu and covered 70 SHGs promoted by four major Nouveau Researcher's opinion. It talks about the impact of socio economic conditions after micro financing the SHG in Tamil Nadu. In a study by **J. Venkatesh and K. Kala (2000)** Identifies SHG as a potential pathway for poverty reduction among the group members. All over the India the enrolment of the poor women and men in SHGs has been increased amazingly. They are active in thrift; credit management as well as they are enhancing their performance, such as natural resource management, literacy, knowledge management, nutritional security etc. SHGs put the foundation for independence through building of even of institutions, which have the capacity to generate employment opportunities for the rurally poor and will lead to job led economic growth. **Ritu, Kushwaha and Srivastava (2003)** examined the functioning of self-help groups in Kanpur Dehat District in which twenty five women from self-help Groups are selected as sample for the study. Ten women members from each self-help groups and ten non-members from the same village are selected as respondents, to study the impact of the self-help groups on their socio-economic status. The results show that there is positive relationship between the self-help groups and the socio-economic status of women. **Malhotra (2004)** stated that the micro-finance programmes are aimed at increasing women's income levels and control over income leading to greater levels of economic liberty. They enable women access to networks and markets, access to information and possibilities for development of other social and political roles. They also improve income and family welfare, increasing women participation in household decisions about spending and other issues most important to greater expenditure on women's well being. Researcher like **Rimjhim Mousumi Das (2004)** felt that micro finance through Self-help Groups has become a modern economical weapon for the poor to fight against poverty. Many big and small institutions are vigorously taking part in this revolution of micro finance. Still it has a long way to become successful. The reasons behind this are poor follow up, lack of management and participation from the Government as well as people. In their paper **K.P. Bairagi and H.L. Ghorpade (2008)** stated that the microfinance is an important source of income for poor for their socio-economic development. SHG is one of the important agencies providing microfinance to the poorest in the society. The objectives of SHG are not only to provide finance to poor but also to promote the habit of saving to build mutual confidence among members and also to fulfil the financial needs of the poor, to improve communication among the people living at same places or village and organize work

to solve their problem. **Renu Verma (2008)** observed that microfinance usually plays a significant role in poverty alleviation and rural expansion or development. According to him microfinance has become one of the more promising ways to use core development funds to achieve the objectives of poverty alleviation. Further he stated that certain microfinance programs have gained prominence in the development field and beyond. **Tanmoyee Banerjee (Chatterjee) (2009)** made an effort to estimate the impact of Self-Help Groups created under SGSY programme of Government of India. The study based on primary survey undertaken in the district of North 24 Parganas of West Bengal during September 2005 to March 2006, data were collected from group members as well as from non-group members from the study area. The major finding of this paper - income of group members improved significantly but the inequality of distribution of income is high among the group members than that of the non-group members. **Chandralekha Ghosh and Tanmoyee Banerjee (2010)** investigated the factors influencing the employment status of selected group of self help group members. They collected the data from the study area once during the year 2005 and again during the year 2009. During the 2005 survey all the members were employed but in 2009 it was observed that about 55 % of the self help group members have turned into housewives. Authors try to examine the influence of socio economic, demographic and political factors on the employment status of the group members based on primary survey conducted in some villages of North 24 Parganas, West Bengal, India. Authors also tried to investigate the used loan pattern of this set of SHGs members. Along with the past occupation of the member the local politics at village level have been found to influence the employment status as well as loan use pattern of the members. **Bera Sudhin Kumar (2011)** stated that providing easy finance and micro credit has always been the primary objective of Micro Finance Linkages. Micro finance in the form of SHG Linkage model has been able to inspire hope on the lives of thousands of rural people, women in particular, and enable them to contribute to their families well being through savings and borrowings. Microfinance influences the quality of life and is considered a powerful tool for positive socio economic changes in modern society. **Tripathy and Jain (2011)** examine the appropriateness of the Self Help Group (SHG)-micro-enterprise framework towards effective income generation and poverty alleviation programme. They analysed that internal savings and group corpus have a positive and significant effect on the income growth of beneficiaries but bank credit does not have any such impact. Their study also highlighted that the socially and economically forward regions are more likely to benefit from this programme. **Indunil De Silva (2012)**, applied recent advances in propensity score matching methods to assess the impact of microfinance on household income and savings in his study. Results suggested that overall programme for participants' benefit incidence is indeed pro-poor. With respect to both household per capita income and savings, programme participation definitely has a positive impact for all low-income households. **M. Meganathan and M Arumugam(2012)** in their paper examined the Self Help Groups, able to reach the defenceless poor at reasonable cost and can help the poor become self-employed. Their study was based on primary data as well as secondary data. They collect data from 120 members of SHGs in Arianakupam block of Puducherry through structured questionnaire method and secondary data were collected from various sources of Puducherry Rural Development Agency, Magazines, NGOs report and internet. The collected primary data was analyzed with the use of suitable statistical tools. The descriptive analysis was undertaken using percentages to study the impact on members in both pre- and post-SHG situations. They observed that rural women after joining group enjoy all kinds of social amenities like medical facilities, water supply services, and schools for children, and there is a rise in their self-confidence level, communication skills, and decision making skill and transport facilities. **Sanjay Kanti Das (2012)** in his paper examined that Self Help Groups (SHGs) have emerged as popular method

of working with people in recent years. Since, SHG based micro finance programmes cover a large number of women, it is expected that such programmes will have an important bearing on women's empowerment. Self-Help Groups (SHGs) have emerged in order to help poor women to secure inputs like credit and other services. Micro finance and SHGs are effective in reducing poverty, empowering women, creating awareness and ensure sustainability of environment which finally results in sustainable development of the nation.

The above review of literature indicates that most of the studies dealt with the role of SHGs on rural women. SHGs have been playing an important role in promoting income among women of middle aged and low-educated in the rural India. SHGs are highly influencing on women economic empowerment as well as social empowerment. In this situation we want to examine the role of SHGs on rural women in case of promoting income as well as saving.

3. Research Objectives

The present study seeks to investigate the impact of joining SHG on the lives of women in Kalna (Burdwan). The main objectives of the study are given below:

- i. To study the Socio-economic profile of sample group members.
- ii. To compare change in income of women group members after and before joining the SHG group.
- iii. Find out the correlation between the income and savings of women group members.

Above mentioned objectives are transformed into the following research questions

1. What is impact the Self Help Groups on the economic conditions of women group members?
2. Does there is any relation between income and savings of women group members?

4. Sources of Data

The study is conducted at Kalna block II of Purbo Burdwan district in West Bengal. In this block there are eight gram panchayets (Anukhal, akalpoush, Badla, Bidyapur, Baradhamas, Kalyanpur, Pindira and Satgachi) and there are 120 villages consisting of 1,57,235 persons (Census, 2011). However, only 4,856 persons, mainly female, have participated in Self Help Groups. This block has been selected as the study area since it has maximum number of women led self help groups as compared to other blocks. Two villages from this block and five self help groups are selected randomly. Total 50 respondents have been selected from five SHGs. Necessary data are collected through Interviewing to the SHG members while secondary data were collected from the reports of NABARD, Block and panchayat office in Kalna block II. Purbo Burdwan District →Kalna Block II→Two Village →Five SHGs→Fifty Respondents

5. Analytical techniques

To evaluate the changes in the level of women's income after and before joining the group Gini Co-efficient and Lorenz curve methods have been used. At the same time correlation methods also have been used to analyze the collected data.

6. Result and discussion

6.1 Demographic profile of respondents

Table 1 provides the information about the demographic profile of the respondents of our study area.

In terms of age, 30 % of the respondents were in the age group of 30 to 40 years. Whereas 50% are less than 30 years of age and remaining 20 % are 40 years and above .In terms of category wise distribution 30% of the members belong to general category 50% belong to SC category and 20% belong to OBC category. We also classified the respondents in terms of

their education level. Level of education may affect the way in which they manage and live their daily lives and manage the household and business. From this survey, we realized that majority of our sample respondents had at least basic primary education, which represents 46% of our sample, on the other side there are 4% of the sample women who have no education background, and it is very significant. We know that Purbo Burdwan district is highly educated district and the survey reports also support this statement. Formal education plays a significant role in women empowerment as well as financial literacy.

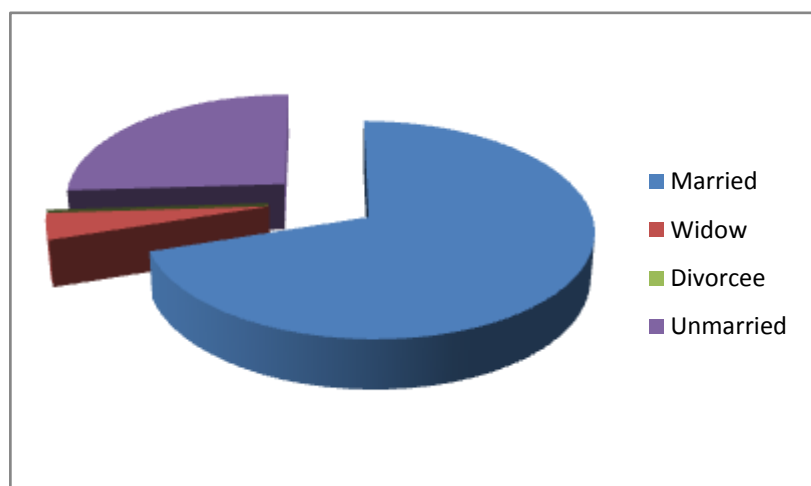
Table1
Demographic profile of respondents.

Variable	Measuring Groups	Frequency	Percentage
Age	Below 30	25	50
	30-40	15	30
	Above 40	10	20
	Total	50	100
Social Status	Scheduled caste	25	50
	Backward class	10	20
	General	15	30
	Total	50	100
Marital Status	Married	35	70
	Widow	02	04
	Divorcee	-	00
	Unmarried	13	26
	Total	50	100
Educational Qualification	Illiterate	02	04
	Primary	23	46
	Middle	15	30
	High	10	20
	Secondary and above	15	30
	Total	50	100

Source: Own calculation from field survey data

Figure1 shows the marital Status of the respondent in our study area. Among fifty women group members 70% are married whereas 26% women are unmarried. Majority of the group member have played dual role i.e.70% women are engaged not only in their home activities but also to some other activities. They are engaged in agricultural activity, and some other activities like making candle, doll, Rakhi, basket making and fruit vending etc. after finishing their household activities.

Figure1
Marital Status of SHGs members



6.2 Impact on Economic condition of women group members

The income of the women as well as household generally indicates the economic status of the household as well as women. In rural areas, women have engaged in diversified occupation for their livelihood especially after joining the SHGs. The SHG programme has improved the level of household income of the women. Table 2 provides that the average yearly income of the group members is Rs. 884 per annum in the post SHG as compared to Rs.383 per annum in pre-SHG situation. As a result of increase in income and savings of the group members has also improved nearly two times after joining SHG as in pre-SHG situation mean savings were 88 which further increased to 304 in post-SHG situation. In this regard, we can say that there is significant impact of joining SHG on economic situation of women household i.e. income, expenditure and savings. So SHG are creating positive impact on economic conditions of participant women household.

Table 2
Result of Economic Variable

Sr. No	Economic variable	Pre SHG	Post SHGs(2012-16)	Mean	
				Pre SHG	Post SHGs
1	Annual Income(Rs.)	96000/5=19,200	246000/5=49,200	384.00	884.00
2	Annual Savings(Rs.)	20000/5=4,000	76000/5=15,200	88.00	304.00

Source: Own calculation from field survey data.

6.3 Gini Co-efficient for pre and post SHGs engagement

The Gini Co-efficient is a measure of inequality of a distribution. It is defined as ratio with values between 0 and 1, the numerator is the area between the Lorenz curve of the distribution and the uniform distribution line; the denominator is the area under the uniform distribution line. It was developed by the Italian statistician Corrado Gini.

The Gini Co-efficient is often used to measure income inequality. Here, 0 corresponds to perfect income equality (i.e. everyone has the same income) and 1 corresponds to perfect income inequality (i.e. one person has all the income, while everyone else has zero income). Here, we use Gini Co-efficient as a measure of income inequality of the women before and after joining the group in our study area (Kalna block-II).

Table 3
Gini Co-efficient for pre SHGs involvement

Income(x) in Rs. Per month	Mid value of x	No. of members (f)	Cumulative frequency of income	Cumulative frequency of f	P(x)	Q(x)	$(Q_{i+} - Q_{j-1})$ Pre SHGs	$P_j(Q_{i+} - Q_{j-1})$ Pre SHGs
1000-2000	1500	10	1500	10	10/50	0.0625	0.625	0.125
2000-3000	2500	15	4000	25	25/50	0.166	0.791	0.237
3000-4000	3500	12	7500	37	37/50	0.312	0.478	0.114
4000-5000	4500	3	12000	40	40/50	0.5	0.812	0.048
5000-6000	5500	2	17500	42	42/50	0.729	1.229	0.049
6000-7000	6500	8	24000	50	1	1.00	1.719	0.275

Source: Own calculation from field survey data.

Therefore, for pre SHGs Gini Co-efficient (G) = $1 - A' = 1 - \sum P_j(Q_{i+} - Q_{j-1}) = 1 - 0.723 = 0.27$

Table 3.1
Gini Co-efficient for post SHGs involvement

Income(x) in Rs. Per month	Mid value of x	No. of members (f)	Cumulative frequency of income	Cumulative frequency of f	P(x)	Q(x)	$(Q_i + Q_{j-1})$ PostSHGs	$P_j(Q_i + Q_{j-1})$ Post SHGs
1000-2000	1500	1	1500	1	1/50	0.0625	0.625	0.125
2000-3000	2500	3	4000	4	4/50	0.166	0.791	0.047
3000-4000	3500	2	7500	6	6/50	0.312	0.478	0.019
4000-5000	4500	4	12000	10	10/50	0.5	0.812	0.064
5000-6000	5500	15	17500	25	25/50	0.729	1.229	0.368
6000-7000	6500	25	24000	50	1	1.00	1.719	0.859

Source: Own calculation from field survey data.

Therefore, for post SHGs Gini Co-efficient $(G) = 1 - A' = 1 - \sum P_j(Q_i + Q_{j-1}) = 1 - 1.372 = 0.37$

The above analysis states that value of the Gini Co-efficient for pre and post SHGs involvement are not same. Gini Co-efficient for pre SHGs involvement is higher than post SHGs involvement. So it can be said that pre SHGs involvement, the women members make significant improvements in their income and less inequalities in income compared to post SHGs involvement of women members. So we can conclude that SHGs have impact on income distribution of women group members in the study area.

6.4 Correlation between income and saving

We know that saving is a function of income and here are positive relation between income and saving. From table 2 we can see that annual mean savings of the post group members is higher than the pre-group members and it is occur due to increase in the level of income. Again, level of income increases due to engagement in Self help groups. In table 4 we plotted the income and saving of women after joining group in different years (from 2012-16). Table-4 shows that there is positive correlation relation between income and saving. Here saving and income are highly correlated ($r_{xy} = 0.96$).

Table 4
Correlation between income and saving

Income(x) in Rs.	Saving(y) in Rs.	$u = \frac{x-45000}{1000}$	u^2	$v = \frac{y-12000}{1000}$	v^2	u. v
35000	8000	-5	25	-4	16	20
36000	9000	-9	81	-3	9	27
45000	12000	0	0	0	0	00
60000	14000	15	225	2	4	30
70000	18000	25	625	6	36	150
Total			$\sum u^2 = 556$		$\sum v^2 = 65$	$\sum uv = 227$

Source: Own calculation from field survey data.

$$r_{uv} = \frac{\sum uv / n - (\sum u / n)(\sum v / n)}{SD of u \times SD of v} = \frac{45.4 - 1.04}{46.11} = 0.96$$

As $r_{xy} = r_{uv}$ then $r_{xy} = 0.96$ i.e. correlation between income and saving is 0.96. This value implies that income(x) and saving(y) are highly correlated for the women group members after joining the group. That is savings of the women group members is increased due to increase in income after joining in the groups.

7. Limitation of the study

Our paper is not free from limitations. Such as, in Kalna block II, there are 120 villages but we considered only two villages and only five SHGs from 333 SHGs which are selected randomly. In our study we applied only percentage method and Gini-Co-efficient for analysing the data.

8. Conclusion

In the study area little number of SHGs have developed without any planning and proper guidance, resulting in the abolition of these groups at an early stage. Another important problem is the unawareness of the members about group mechanism. Even though the authorities took the necessary measures for creating awareness among the group members, but there was a section of group members who were totally unaware of schemes of assistance offered to SHGs. Due to lack of solidity and harmony among group members many groups became delicate in terms of performance. Unexpected rural political invention during the creation of SHGs is another problem. Rural political interference creates the various problems in member's co-operation, production and management. As a result, many members lost their interest in it.

On the other hand, Self Help Group is an important tool which helps the rural women to acquire power for their self-supportive activities. SHG Programme clearly plays a central role in the lives of the poor. Microfinance / SHG are a way to raise the income level and improve the living standards and economic independence of the rural women. The impact on their lives is not only on economic standard but also enrich their self-confidence which forms the basis of social and economic improvements.

The study shows that pre SHGs activities make significant improvements in their income and less inequalities in income of women members compared to post SHGs activities. Therefore, we can conclude that SHGs have impact on income of women group members. In the above mention article it has been showed that income and savings are positively correlated to each other which indicate that rise in income lead to rise in savings. Since savings are considered as an important factor for standard of life, the increase in savings lead to positive impact on financial situation of the family which have direct impact on quality of life of its members.

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