Factors Contributing towards Income Generation of Rural Households through Self Help Groups (SHGs) in Jalandhar, Punjab

Dr. Munish Kapila
Assistant professor,
Guru Nanak Institute of Management and Technology, Ludhiana.

Abstract
Jalandhar is one of the most developed district of Punjab state, however there are very limited employment opportunities in rural areas due to lack of skilled and semi skilled enterprises. The Self Help Groups (SHGs) in villages which provide support to the members in terms of skill development through various training programmes is one alternative which can enhance the accessibility of income generating activities in the rural areas of Punjab. In the present study, an attempt has been made to assess contribution of SHGs in generating houseolds’ income in rural areas of Jalandhar and identify the factors that contribute towards rural household income. The primary data was sourced from 132 SHGs members. The results revealed that the income of rural households increased significantly after joining Self Help Groups. The household income of the participants has been increased by about 65 per cent. The results also show that the household income of the participants also improved significantly (35 percent) after joining SHGs in the study area. This incremental change in household’s income was due to contribution of family members engaged in SHGs. The discriminant analysis indicated that type of occupation was a significant contributor in improving household income of participants followed by number of earning members in the family and extent of employment. Hence, it is concluded that to generate the households income on sustainable basis, the government must be strengthened the SHGs in the rural area. Self Help Groups is an important instrument in alleviating poverty in the rural areas and thus a systematic mobilization of poor into SHGs should be encouraged, their capacity building and skill development should be taken up intensively.

Key words: Self Help Groups (SHGs), Income generation, participants, Occupation, Employment
Poverty alleviation in the developing countries is the major issue. In India, a major part of the BPL (Below poverty line) population has been living in the rural areas. According to the recent estimates, the percentage of persons below the Poverty Line in 2011-12 has been estimated as 25.7% in rural areas, 13.7% in urban areas and 21.9% for the country as a whole (Anonymous, 2013). Thus the rural population has high extent of unemployment and under employment and has limited option for other employment opportunities. With all those constraints not many families can cross the poverty line by augmenting their income without support from the government. It is pertinent to mention here, that while some families will come out of poverty through extra income, but there is a simultaneous process of pauperization by which a family with reasonable income loose livelihood and become poor or has to spend beyond their means to cope with problems like ill health or to meet some social obligation. Guarding against such eventualities and reducing vulnerability of the poor people (through insurance etc.) from landing up in such problems is also an important step in reducing poverty. However, the most visible anti-poverty programmes are those related to direct increase of income of the poor through wage employment to meet the short term need and through self employment for augmenting income on a sustainable basis (Roy, 2011).

Self-help group is a method of organizing the poor people and the marginalized to come together to solve their individual problem. The SHG method is used by the government, NGOs and others worldwide. The poor collect their savings and save it in banks. In return they receive easy access to loans with a small rate of interest to start their micro unit enterprise. Thousands of the poor and the marginalized population in India are building their lives, their families and their society through Self help groups. The 9th five year plan of the government of India had given due recognition on the importance and the relevance of the Self-help group method to implement developmental schemes at the grassroots level.

Since independence, the government of India has been initiated many poverty alleviation and employment generation programmes in India. Rural areas in general and poor families in particulars have been targeted under such programmes. The main objectives of such programmes are to improve the family income of rural poor by developing skills for self employment. The women in the rural areas have always been discriminated in terms of education, health etc than men in the rural areas. Such women are being trained through
Self Help Groups (SHGs) by imparting skills to start micro enterprise for supplement their family income. Therefore, SHG is an instrument which enhances economic and social empowerment among rural women. The present study is thus designed to investigate the impact of self help groups on income of the participants and their contribution to the total households’ income in the rural areas of Punjab.

**Review of Literature**

Ranaware (2011) concluded that the SHGs assisted poor families and helped them to rise above the poverty line. He found that majority of members became self-employment after joining SHGs and their income increased. It was also seen that not even a single BPL SHG was able to create self-employed opportunities for their members. Radhika & Anupriya (2011) examined the impact of Self-help Group based microfinance programme on the socio-economic characters like income, employment, literacy and migration of the rural households of Karur District, Tamilnadu. Findings revealed that SHGs had a positive impact on specific socio-economic variables such as children's schooling, household nutrition status, and women's empowerment. Baskar & Sundar (2012) studied the economic impact of SHG on its members during the pre and post membership period by considering the variables namely; Income, Expenditure, and Savings, Borrowings, and Assets creation. The findings revealed that women have become confident and have attained a considerable level of self-reliance and thereby improvement in the economic conditions after joining the self-help group. Chandrakumarmangalam & Vetrivel (2012) assessed the impact of group-based microfinance on income, assets position, savings, employment, literacy and migration of the households. Pre and post position of SHG members was compared in order to measure the impact of the programme. Ganga & Jain (2012) estimated the income and employment generation through SHGs concluded that there is a positive impact of dairy financing through Self-Help Groups on income and employment generation in the study area. Therefore, dairy financing through Self-Help Groups (SHGs) is an important option for income and employment generation for rural poor in a developing country like India. Sarmah & Das (2012) revealed an increase in income and employment level of members after joining SHGs. It was also found that women after joining SHGs started some income generating activities which helped in improving their incomes and assets 50 profiles of the households. The study concluded that SHGs have a positive impact on
income and living standard of the participants. Dutta (2012) revealed that SHGs opened up opportunities to participate in the various income earning activities for the women members and the monthly income of the members increased after formulating the group and they contributed more to the family expenditure. Further, members perceived the self-help groups as an important programme in the generation of income and occupations of the members. The study suggested better disbursement of the microcredit to the members for getting more active success in this area.

Sud (2013) in his article used Bourdieu and Giddens' perspective of the agency to investigate an anti-poverty programme of the Indian government that relies on self-help groups for the disbursal of microcredit. Multiple actors impact and refract away from the official agenda of the Swarnajayanti Gram Swarozgar Yojana (SGSY) scheme in Gujarat. Instead of working towards entrepreneurship through self-help, actors use the SGSY as a vehicle for populism, rent-seeking and as a saving scheme for children's weddings. Through the agency of these actors, practiced within a specific historical, structural and dispositional context, the structures of patriarchy and neo-liberalism are reproduced in everyday socio-economic and political life. However, hints of structural change, for example in women's control over earnings via access to banks, are also evident. Evidence from the SGSY scheme is used to highlight the ways in which microcredit can simultaneously empower and restrict the lives of female beneficiaries. Pawar (2016) compared the financial position of participants before and after joining SHGs and observed an increase in their income after joining the group. Brody et al., (2017) also established that group support, training, and microfinance provided by SHGs positively affect women’s mobility and control on family planning along with economic and political empowerment. Maity (2019) also reported that microfinance can decrease poverty, increase income and lead to financial inclusion.

In a nutshell, the literature cited above highlighted the positives and negatives of microfinance programmes on rural livelihood worldwide. Many studies conducted in India have proved that microfinance has a positive impact on income and employment of the beneficiaries. It was found that most of the rural women are socially and economically weak as compared to men in India. For overall development of the economy, there is a need to empower the women in terms of economic aspects. The literature also revealed that many countries and states of India have made remarkable achievement to enhance the empowerment of the rural women through SHGs.
However, a very limited study has been conducted in the Punjab state to evaluate the impact of microfinance programmes being implemented through SHGs which is a big research gap. Thus the present study has been designed to assess the impact of such programmes on rural women in the rural households with reference to Jalandhar district.

**Objectives of the study**

The main objectives of the study were:

1. To study the impact of joining SHGs on household income of the members.
2. To identify the factors contributing towards household income of SHG members.

**Methodology**

**Sampling Design**

The study used survey method, thus, primary data was collected. Due to limitation of time, budget, issues with connectivity and reluctance in sharing financial information convenience sampling method was used. The population for the study was SHGs in Jalandhar district. Total 150 questionnaires were distributed, 132 were used in final analysis as they were correctly filled. The data from the selected SHG members were collected through well designed pre-tested interview schedule. The data were analyzed by using the simple statistical tools like frequencies, averages, percentages etc. Student paired T-test was used to compare the extent of income of the participants before and after joining the SHGs.

**Discriminant Analysis**

A discriminant analysis technique i.e. *Mahalanobis Distance* ($D^2$) was used to measure relative contribution of various factors including income of the participants to increase the income of the households in the rural areas of Punjab. The sampled respondents were categorized into two groups as under:

- **Group A:** Household income of the participants before joining the SHGs
- **Group B:** Household income of the participants after joining the SHGs

Considering the various important factors which are responsible for affecting household’s income and how these factors are responsible for discriminating group A from group B. *Mahalanobis $D^2$* the distance
between the two groups A and B was calculated on the basis of four characteristics and its significance was tested as the first step of analysis to make sure whether these groups are significantly different from each as regards to the means of the characters under studied.

The linear forms of discriminant functions for these two groups were given below:

\[ Z = l_1X_1 + l_2X_2 + l_3X_3 + l_4X_4 \]

Where

- \( X_1 \): Income SHG members (Rs/annum)
- \( X_2 \): Occupation of member (Mean score)
- \( X_3 \): Employment in mandays/annum
- \( X_4 \): Earning members (No.)

and \( l_1 \) to \( l_4 \) is the coefficients in the linear discriminant function. The distance \( D^2 \) can then be expressed as:

\[ D^2 = l_1d_1 + l_2d_2 + l_3d_3 + l_4d_4 \]

Where \( d_1 \) to \( d_4 \) is the difference in the group means \( (A-B) \) for the factors \( X_1 \) to \( X_4 \)

In this break up of \( D^2 \) the product \( l_id_i \) gives the contribution of the \( i^{th} \) character of the total distance. The negative sign of the product does not mean that the character is playing towards decreasing the distance. The sign is only an indication of the direction of the differences. Each additional factor brings an addition to the distance. Therefore, the comparisons of the magnitudes of the products \( (l_id_i) \) bring out which characters are relatively more important in the discriminating group A from group B. Percentages shares to the total distances can also be worked out for comparison purposes.

1. Basic profile of the members

The general status of the individual in the society is greatly influenced by the basic profile such as age, education, family size and type of the individual. On an overall basis, the results given in Table 1.1 indicate that most of the respondents i.e. 37.88 per cent belonged to the age group of 41 to 50 years in the study area. While 33.33 per cent of the total respondents belonged to the age group of 31 - 40 years and only 17.42 per cent of the total respondents were more than the ages of 50 years. Nearly 11 per cent of the total respondents in the study
area were having age up to 30 years. Hence, it is indicated that majority of the respondents belonged to the most productive age group (31-50). Moreover, this age group has great exposure in the society which makes them more competitive.

Table 1.1: Distribution of the members according to socio-economic profile

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Jalandhar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td><strong>Age (Years)</strong></td>
<td></td>
</tr>
<tr>
<td>Up to 30</td>
<td>15</td>
</tr>
<tr>
<td>31-40</td>
<td>44</td>
</tr>
<tr>
<td>41-50</td>
<td>50</td>
</tr>
<tr>
<td>&gt; 50</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>24</td>
</tr>
<tr>
<td>Middle</td>
<td>32</td>
</tr>
<tr>
<td>Matric</td>
<td>42</td>
</tr>
<tr>
<td>Secondary</td>
<td>24</td>
</tr>
<tr>
<td>Graduate</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
</tr>
<tr>
<td><strong>Family Size</strong></td>
<td></td>
</tr>
<tr>
<td>Up to 6</td>
<td>44</td>
</tr>
<tr>
<td>6 and above</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
</tr>
<tr>
<td><strong>Type of the family</strong></td>
<td></td>
</tr>
<tr>
<td>Nuclear</td>
<td>50</td>
</tr>
<tr>
<td>Joint</td>
<td>82</td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
</tr>
</tbody>
</table>

The results revealed that majority of respondents i.e. 31.82 per cent were educated at matric level, 24.24 per cent were completed study at middle level, nearly 18 per cent were secondary pass out and only 7.58 per cent were graduate. About 18.18 per cent of the total respondents were remained illiterate. Thus, majority of the sampled respondents were attained education up to middle and matric level in the study area. The income and expenditure pattern of a family is associated with the size of the family. The perusal of Table 1.1 highlighted the family size of the respondents. The results showed that on an overall basis, more than half of the total respondents (66.67%) were having more than 6 members in a family, while 33.33 per cent were having family size of 6 members. The percentage of nuclear family is 3.78% and joint family is 62.12%.
members less than 6. The family structure is a most important parameter which may consider the favourable environment for the joining SHGs in the study area. The results pertaining to the type of family shows that 62.12 per cent of the respondents had been living in joint families, whereas about 37.88 per cent respondents were having nuclear families. The proportion of Joint families was more as compared to nuclear families in the study area. A healthy profile and supportive environment is thus developed highly courage especially for women members to join SHGs.

2. Impact of SHG on income of the members

In recent years, Self Help Groups have become significant institutions for rural development. The rural population does not have enough capital to take up any business enterprises as an individual. Hence, the poor population especially the poor women come together and combined their resources to take income generating activities. The various constructive activities undertaken through self help group enhanced the economic conditions of their members and boost their social status (Malshet, et al, 2005).

The extent of monthly income earned by members and household income before and after joining the self help group in the study is presented in Table 1.2. On an overall basis the income of the members was increased by Rs 1393 per month after joining the SHGs in Jalandhar district. Further, the household income increased by 37.15 per cent in the Jalandhar district through SHGs. This incremental change in households income was due to contribution of family members engaged in SHGs.

Table 2.1: Impact of SHG on monthly income and household income of the member, Jalandhar Punjab

<table>
<thead>
<tr>
<th>District</th>
<th>Before</th>
<th>After</th>
<th>Incremental income</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Income</td>
<td>2112</td>
<td>3505</td>
<td>1393 (65.95)</td>
<td>6.16**</td>
</tr>
<tr>
<td>Household Income</td>
<td>3803</td>
<td>5216</td>
<td>1413 (37.15)</td>
<td>8.56*</td>
</tr>
</tbody>
</table>

Source: Field Survey
Note: Figures in the parentheses indicate the per cent increase in extent of income
** and * Significant at one and five percent level of significance, respectively

The results of t-test indicate that this incremental change in income through SHGs is highly significant in the study area. Hence, the income of the members has been increased by about 65.95 per cent in the Jalandhar district. Similarly, the change in household income was also found significant in Jalandhar district. It is observed that the rate of change in income of the members is closely associated with the tenure of SHGs or duration of
establishment of SHG. The mature groups in the study area has relatively more established in terms of income generating activities. Thus, It clearly indicates that SHGs has significantly improved the income level of the members in the study area. The studies by Puhazhendhi and Satyasai (2000), Manimekalai (2001), and Mishra et al. (2001) also show the similar results of increase in income of the programme participants in the post-SHG situation as compared to their income in the pre-SHG situation.

4. Factors affecting Households’ Income through SHGs- An Application of Discriminant Analysis

4.1 Characteristics of the sample respondents

This section of the study deals with the brief description of the four characteristics included in the discriminant analysis. The inclusion of these characteristics is also justified by the higher sample mean s of group B than group A. The results are discussed in Table 4.1.

X1: Income of members of Self Help Groups

The contribution of members of SHGs towards the household income is an important factor which significantly affects the total household income in the study area. Table 4.1 reveals that the sample mean of group A and group B indicates that average income level in Punjab state was higher in group B (Rs 42060 per annum) than that of group B (Rs 25344 per annum). The t-statistics reveals that the income of these two groups is significantly differ from each other.

X2: Occupation of member

Occupation of the member is an important determinant of household income. A wide range of occupation is being taking up by the members of SHGs in the study area. The types of occupation were expected to differ in group A and group B in the study area. The occupation was categorized into following five categories:

Unemployed = 0

Labour = 1

Skilled worker = 2

Agriculture and allied = 3

Shop = 4
Others = 5

The perusal of data in Table 4.1 indicates that the mean score with respect to occupation of the members in the Punjab state was calculated to be 2.42 in group B and 0.94 in group A. The mean score with respect to type of occupation in group B was very high than that of group A and this difference was highly significant as indicated by the t-test. Hence, the symmetric mobilization of members into SHGs and their capacity building and skill development shifted the members from less income earning occupation to higher income earning occupation in the study area.

Table 4.1: Sample Mean of various factors that contributed towards household income, Punjab

<table>
<thead>
<tr>
<th>Factors</th>
<th>Group A</th>
<th>Group B</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1: Income SHG members (Rs/annum)</td>
<td>25344</td>
<td>42060</td>
<td>5.74**</td>
</tr>
<tr>
<td>X2: Occupation of member (Mean score)</td>
<td>0.94</td>
<td>2.42</td>
<td>11.80**</td>
</tr>
<tr>
<td>X3: Employment in man days/annum</td>
<td>155.00</td>
<td>228.00</td>
<td>7.21**</td>
</tr>
<tr>
<td>X4: Earning members (No.)</td>
<td>1.08</td>
<td>1.78</td>
<td>11.72**</td>
</tr>
</tbody>
</table>

Source: Field survey
** and * Significant at one and five per cent level of probability, respectively

X3: Extent of Employment

The level of income is greatly influenced by the extent of employment. The results presented in Table 4.1 shows that SHGs had significant impact on employment as the extent of employment in terms of man days per annum was significantly differ between group A and group B. The extent of employment came to be 155 man days per annum in group A and 228 man days per annum in group B. Statistically, the mean difference in terms of extent of employment in group A and group B significantly differ from each other.

X4: Magnitude of earning member

The household income is directly related to the magnitude of the earning member in the family. Table 4.1 shows that an average number of earning members was worked out to be 1.08 in group A and 1.78 in group B. Thus, the increase in the magnitude of earning members has positive and significant impact on family income.

4.2 Discriminant analysis

Since group A and group B representing the status of members before and after joining the SHGs, the discriminant analysis was carried out to measure the relative contribution of the above said factors which could
help in discriminating between these two groups i.e. group A and group B. The Mahalanobis distance $D^2$ between the two groups on the basis of four characteristics was calculated which came out to be 0.50 in the Jalandhar district. Statistically, the distance between these two groups differ significantly at one per cent level of significance. Further to find out the importance of individual characteristics and their relative share (li$di$) in the distance ($D^2$), the coefficients of best linear discriminant function (l$’$s) were estimated and presented in Table 4.2.

Table 4.2: Relative contribution of various factors to distance $D^2$ between two groups, Punjab

<table>
<thead>
<tr>
<th>Factors</th>
<th>difference in sample mean (di)</th>
<th>Discriminant function coefficients (li)</th>
<th>li$di$</th>
<th>Percentage share in the total distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1: Income SHG members (Rs/annum)</td>
<td>16716.00</td>
<td>0.000005**</td>
<td>0.08</td>
<td>16.00</td>
</tr>
<tr>
<td>X2: Occupation of member (Mean score)</td>
<td>1.48</td>
<td>0.183560**</td>
<td>0.27</td>
<td>54.00</td>
</tr>
<tr>
<td>X3: Employment in mandays/annum</td>
<td>73.00</td>
<td>0.000089**</td>
<td>0.01</td>
<td>2.00</td>
</tr>
<tr>
<td>X4: Earning members (No.)</td>
<td>0.70</td>
<td>0.201412**</td>
<td>0.14</td>
<td>28.00</td>
</tr>
<tr>
<td>Total Distance</td>
<td>-</td>
<td>-</td>
<td>0.50</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Field Survey

** and * Significant at one and five per cent level of probability, respectively

The comparison of the product (li$di$) establishes that lion’s share in distance ($D^2$) between these two groups was due to type of occupation adopted by the members in the study area. This factor alone contributed 54 per of the distance the two groups in the Punjab state. The next important factors are number of earning members in the family and income earned by the members engaged in SHG contributing to the tune of 28 per cent and 16 per cent, respectively.

Conclusions

The main findings of the study indicated that the income of rural households increased significantly through Self Help Groups. The results show that the household income of the participants was significantly improved after joining SHGs in the study area. This incremental change in household’s income was due to contribution of family members engaged in SHGs. The discriminant analysis indicated that income of the member of SHGs, type of occupation, number of earning members in the family and extent of employment has significantly contributed towards the enhancement of households’ income in the rural areas of Punjab. The comparison of the product (li$di$)
establishes the lion’s share in distance ($D^2$) was due to type of occupation adopted by the members in the study area. Next important factor is the extent of earning members in the family, income of the participants of the SHGs and extent of employment. The study concludes that to generate the income of vulnerable section of the rural society, the new entrants of the poor into SHGs should be promoted and they should be trained to develop micro enterprises to ensure the regular employment throughout the year.

References:


