# Assessing Income Generation From SHG Micro Enterprises: A Study Of A Backward Region Of Assam

\*Amith Roy
\*\* Dr. Sumanash Dutta

# INTRODUCTION

The Government of India has made several attempts to eradicate poverty, since the nationalization of 14 major Commercial Banks in 1969 (Singh, 2007). In the year 1975, Regional Rural Banks were set up with the objective of priority sector lending, which targeted rural poor and weaker sections of the society. Through these initiatives, the government was able to make credit accessible to 61 percent of rural poor in 1981, whereas, only five percent of them were served in 1951 (Karmakar, 1999). The National Bank for Agriculture and Rural Development (NABARD) piloted the SHG-bank Linkage Programme in the year 1992, with an objective to provide poor rural households access to banking services, and since then, the programme has grown in an exponential manner, particularly during the past five years or so. SHGs are now seen as an essential and integral part of financial and non-financial services delivery system within the larger objectives of the growth of income, livelihoods promotion, community development and women's empowerment. SHG is an economically homogeneous group of rural poor. They organize themselves into a group, and practice micro-savings to convert their savings into a common fund known as the Group Corpus Fund. Through common management, the group corpus fund is used to advance loans to the members. The group develops financial management norms covering the loan sanctioning procedure, repayment schedule and interest rates. The members in the group meetings take all the loaning decisions through a participatory decision-making process. These types of activities, including decision-making and maintenance of Minutes Book, Attendance Register, Loan Ledger, General Ledger, Cash Book, Bank Passbook and Individual Passbooks by members at the group level, gradually prepares SHG members to handle institutional finances. The 'learning by doing' process leads to empowerment of the poor, and improves their creditworthiness with respect to financial institutions.

The role of Non Government Organizations (NGOs) in SHGs formation and their development is very important. A majority of SHG projects are now being controlled by NGOs in the hope that with NGO's help, SHGs will be able to overcome the weaknesses in the banking system. Several studies have pointed out the importance of NGO connection for the success of SHGs. Overall credit policy and NGO cooperation can make the SHG programme effective and strong in India (Madhura Swaminathan, 2007). Micro financing programmes through SHGs, introduced and expanded by NGOs in several parts of India, have the potential to minimize the problem of inadequate access of banking services to the poor (Rajasekhar, 2000). One of the ultimate objectives of SHG formation is income generation through SHG activities among poorest of the poor in the society. Several studies have pointed out that there have been perceptible and wholesome changes in the living standard of SHG members in terms of ownership of assets, borrowing capacities, income-generating activities, income levels and savings (NABARD, 2002). Versluvysen (1999), in a cross country study on the impact of microfinance, concluded that poor households that have access to microfinance services show a significant increase in asset accumulation, which provide them with both the safety-net against misadventure and the resources for self-help investments. Increased household income improves nutrition, and improves the probability that children from poor families will go to school (Morduch and Haley, 2001). Hulme and Mosley (1996) in a comprehensive study on the use of microfinance to combat poverty, argue that well-designed programmes can improve the income of the poor and can move them out of poverty.

As per the SHG guidelines, 50 percent of the groups formed in each block should be exclusively for the women, the formation of SHGs contributes significantly towards women empowerment. Manimekalai and Rajeswari (2000) examined the empowerment of women through SHGs in rural micro enterprises in Tiruchirapalli district of Tamil

E-mail: amithroy2008@yahoo.in

E-mail: duttasu2003@yahoo.com

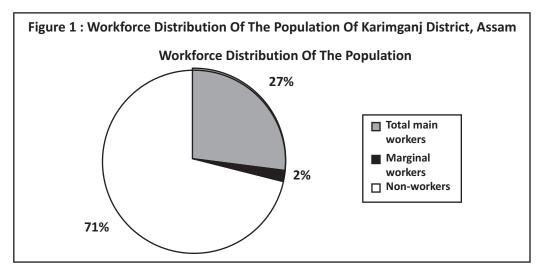
<sup>\*</sup>Ph.D Research Scholar, Department of Economics, Assam University, Silchar-788011, Assam.

<sup>\*\*</sup>Professor in Economics, Department of Economics, Assam University, Silchar-788011, Assam.

Nadu. They found that SHGs are successful in assets' formation, creating income and employment opportunities for women and better standing position of women in the family. Loveleen Kacker (2006) examined the real position of poor women and how effective the government policies are to empower the rural poor women. According to the author, SHGs help women to empower them both economically and socially, and they become capable to contribute to basic family maintenance, and it indirectly helps in poverty alleviation. However, one important and worrying side of the success story of SHGs is the evidence that the socio- economic benefits accruing from SHG formation is not uniform in all parts of the country. Rajasekhar and Madheswaran (2005) found that economic benefits of the programme are region specific. Thus, success of microfinance programme through SHGs seems context and region specific. Further, they found that microfinance benefits were not significant in case of members belonging to the landless and SC/ST categories. However, they concluded that given that the formal banks have not very well succeeded in the past in improving the access to credit for the rural households, the strategy of supporting the formation and nurturing of micro-finance groups is to be supported.

In the prevailing perspective of wide regional disparity in economic development in India, and the apprehension that economic benefits of programmes like the micro-financing of poor through SHG formation is region specific; what is needed for policy formulation is more and more empirical studies with heterogeneous data set representing different regions, populations, and contexts. The present study is, therefore, a modest attempt to examine the factors which contribute towards income generation from SHG activities in a remote and backward developing society of Assam, the state which is in the centre of North-Eastern region of India. As in 2007-08, there were more than 151966 SHGs in Assam, which were formed since 1.04.1999 (Statistical Hand Book, Assam, 2008; Directorate of Economics and Statistics, GOA), the whopping number being an indicator of the extent of poverty and at the same time, the popularity of the central government-aided SHG programme in working towards the development and boosting the rural economy of the state.

The study area, the Karimganj District is located in the Southern tip of Assam. Together, with two other neighbouring districts - Cachar and Hailakandi - it constitutes the Barak Valley zone in Southern Assam. Total area of the district is 1809 Sq. Kms., which comprises of varied geographical features like agricultural plains, shallow wetlands, hilly terrains and forests. The district is bounded on the North by Bangladesh and Cachar district; on the South by Mizoram and Tripura states, on the West by Bangladesh and Tripura and on the East by Hailakandi district. Located strategically, the district shares 92 Kms. of International Border with the neighbouring country of Bangladesh, 41 Kms of this is demarcated by the river Kushiara, while 51 Kms is the land border. On some stretches, there is no natural geographical demarcation for the border, which cuts across open agricultural or grazing fields. Population density of the Karimganj district is one of the highest in India. With a total population of 1007976 (in 2001) and a total land area of 1809 Sq.Km., the density stood at 557 persons per sq.km (as per 2001 data). The figure far outstrips the corresponding state figure of 286, and the national figure of 273. In fact, this is the second highest district level density in the whole of North-east. Out of the total population of 1007976 people of Karimganj District, only 27 percent constituted of the main workforce, 2 percent accounted for marginal workers, and the rest 71 percent of the population were non-workers and



hence, economically non-productive (Figure 1). Out of the main workers, 68 percent were engaged in agriculture and allied activities like farming, fishing, forestry, horticulture, etc. Industries (household as well as non-household), mining & quarrying, construction works etc. all combined, accounted for only 8 percent of the main workers. Trade, commerce, transportation, communication, etc. accounted for another 12 percent, and the rest 12 percent were engaged in the service sector.

The district represents one of the most socio- economically backward regions of the state of Assam. The per capita Gross District Domestic Product of Karimganj was only ₹ 12289.00, the highest of the state being ₹ 36924.00 of Kamrup District in the year 2000-2001 (Statistical Hand Book, Assam, 2008; Directorate of Economics and Statistics, GOA). As per 2001 census report, 22.54 percent households in rural areas, and 72.93 percent households in urban areas of the district had drinking water facility within their premises; the percentage of households enjoying availability of electricity was 16.09 percent in rural areas, and 81 percent in urban areas of the district. Only 26.63 and 75.12 percent households of rural and urban areas of the district had at least one of the specified assets, i.e.; radio, transistor; television; telephone; bicycle; scooter, motorcycle, moped; car, jeep, van. This alone is a strong indicator of chronic poverty in the rural areas of the district of Karimganj. During the period from 1999 to 2008, the total number of SHGs formed in the district were 4469, and out of these, 1337 SHGs had taken up economic activities.

# SAMPLE, DATA AND MODEL OF THE STUDY

The sample of the study was drawn by applying multistage purposive random sampling technique. Karimganj District has seven Development Blocks. Out of these, four blocks were selected purposively, one each from east, west, north and south parts of the districts, to make the sample a representative one. From each block, the SHGs which had received Revolving Fund four years back were identified and divided into two strata- SHGs with NGO connection, and SHGs without NGO connection. From the first strata, 15 SHGs and from the second strata, 22 SHGs were selected at random. Finally, 77 SHG members of 15 SHGs having NGO connection and 80 SHG members of 22 SHGs who have no NGO connection were selected at random for collection of data through personal interview method with the help of a pre-tested structured schedule. The sample of the study, therefore, comprises of 157 SHG members selected from 37 matured SHGs of the district.

The objectives of the paper are to:

- (i) Study the net income of the SHG members who have taken up economic activities by starting micro-enterprises 4 years back from the date of the survey;
- (ii) To identify proximate determinants of income generation from micro-enterprises and;
- (iii) To examine the impact of SHG's NGO connection in the income generation activities from micro-enterprises.

The data collected by field survey covers a wide range of information pertaining to the current yearly net income generated from micro-enterprises undertaken by the SHG members, the education level attained by the SHG members, household asset level of the SHG members, savings, etc. Simple statistical tables, descriptive statistics and regression model were used for the data analysis purpose. In the regression model, the current net yearly income generated from the micro-enterprise undertaken by a SHG member (YI), as a group activity, was taken as the dependent variable. The YI is measured in rupees. The link between micro-credit and poverty reduction has not been proven. Micro-credit is assumed to deliver higher incomes and increased assets to the poor through the micro-enterprise. However, there have been instances when a proportion of micro-credit clients have become worse off after accessing micro-loans (Hulme and Mosley, 1996). There is no guarantee that micro-credit borrowers will utilize the loan for productive purposes. Rather, it may be used for consumption- smoothing as most funds are fungible within a household. Poverty at the poor household level will reduce if, and only if, the borrowers of micro-credit utilize the loan or a substantial part of it for productive purposes and the return, thereof, is encouraging. The net income generated from micro-enterprises (YI) was, therefore, considered as the dependent variable of the regression model.

The income generated from micro-enterprises was considered as a function of a set of explanatory variables which will explain the variation in income generation from micro-enterprises taken up by SHG members. Since the existing literature suggests that NGOs have a crucial role to play both in SHG formation and in economic activities pursued by SHGs, the variable *'SHG members with and without NGO connection (DUMNGO)'* was included in the regression model as an explanatory variable. The variable was included in dummy form, assigning value 1 signifying NGO connection and 0, if otherwise. The variable was hypothesized to have a positive impact on income generation, the

dependent variable. SHG members having NGO connection implies that the SHG member was working under the NGO control and guidance. Education has both intrinsic and instrumental returns. In development literature, education is considered as a capability enhancing factor at the individual level. The level of education is a good indicator of a person's ability to develop employable skills, managerial ability and his/her general awareness. The variable 'Education of the SHG member (EDN)' is, therefore, considered as an explanatory variable here and is quantified as the number of years of schooling completed by the SHG members. It was expected that SHG members having higher level of education, are more likely to generate higher income from their micro-enterprises.

The success of SHGs micro-enterprises largely depends on the economic condition of the households of the SHG members. The SHG programme was launched for mainly BPL category of people, the severity of the incidence of poverty at the household level increases the probability of diversion of productive micro-loans for other purposes, mainly for satisfying consumption needs and for repayment of accumulated debts. To understand the severity of the incidence of poverty at household level, the variable 'Assets in the Household of SHG members (ASSETS)' was taken as an explanatory variable. The variable was measured in terms of the current money value of the durable assets found under possession of the SHG member in his/her household at the time of the survey. It is hypothesized that SHG members having higher assets, implying higher economic condition among the poor, will be able to generate more income from micro-enterprises.

Micro-enterprises can be made profitable by introducing new modern techniques of production and going through trainings. A large number of hired labour engaged by the SHG members is also an indicator of their diversification and productivity and production enhancement needs. Considering these points, three variables were included in the regression model as explanatory variables. The first one was, 'Production Technique Adopted in Micro-enterprise (DUMPT)'. It was introduced as a dummy variable assigning value 1, if production technique adopted by the SHG members in their micro-enterprises is modern; 0 if it is traditional in nature. The technique adopted is considered as modern if the SHG members are found to be using modern machinery, tools and new technology in the production process. On the other hand, traditional method implies using of old-age methods and tools of production. As new methods are productivity enhancing, DUMPT is likely to have a positive impact on income generation from micro-enterprises. The second variable in this category was 'Hired Labour (DUMHL)'. This was also a dummy variable with value assigned 1, if labour is hired by SHG member for production in his/her micro-enterprise and 0 otherwise, meaning that family labour is used for the purpose. For reasons mentioned above, the variable DUMHL is hypothesized to have a positive impact on the dependent variable. The third variable was 'SHG member received training (DUMTR)'. This dummy variable assumes value 1 if the SHG member received training and 0, otherwise. The variable is hypothesized to have a positive impact on income generation from micro-enterprises.

The involvement of SHG members with group activities is reflected in his /her willingness to attend SHG meetings. The active participation in group activities helps the members to learn financial matters, increases their overall awareness and also exposes them to new values and ideas. Considering these aspects, the variable 'Monthly Meetings Attended by SHG member (DUMMA)' was included in the model as a dummy variable. The variable takes value 1 if the SHG member attends the meetings regularly and 0, otherwise. The variable is likely to have a positive impact on income generation.

Another variable considered here to indicate the economic status of the SHG members was 'House Ownership Status of SHG Member (DUMHS)'. The variable was dummy and assumes value 1 if the house where the SHG member lives, is owned by him/her; and 0 otherwise. This was included, as during the survey, it was observed that there is a perceptible feeling among the local residents that many outsiders, and even immigrants from Bangladesh are getting benefits of anti-poverty schemes like micro-financing through SHGs. However, as local people are likely to have more control over local resources, the variable is likely to have a positive impact on income generation.

The variable 'SHG-Bank Linkages (BL)' was quantified by the number of visits the SHG member generally makes to the bank for banking purposes during a month at current times. As Bank linkage of the SHG member is a good indicator of his/her economic activities, this variable was also included in the regression model as an explanatory variable. A good number of visits to the Bank indicates higher economic activities and growth of income and ,therefore, the variable is assumed to have a positive impact on income generation.

The sex, caste and religion of the SHG members were represented in the model by variables DUMSEX, DUMCASTE and DUMRLG respectively. All these variables were in the dummy form. In case of DUMSEX, the variable assumed value 1 if the SHG member was Male, and 0 if the member was female. The variable DUMCASTE was assigned the

value 1 if the SHG member belonged to the General category, and 0 otherwise. The variable DUMRLG was assigned value 1 if the SHG member was a Hindu, and 0 otherwise. The variables were included in the model to see the impact of sex, caste and religion on income generation.

Since the prerogatives of higher position held by the SHG members in the SHG is likely to have a positive impact on income generation, the variable 'Position held by SHG member in the SHG (DUMPH)' was also taken here as an explanatory variable. The variable was a dummy one, assuming value 1 if the SHG member holds the position of Secretary/President in the SHG, 0 otherwise. The variable, as quantified, is likely to have a positive impact on income generation. The type of economic activity undertaken by the SHG members also has relevance with the issue of income generation. As such, the variable 'Activity area of SHG members (DUMAA)' was considered as an explanatory variable with micro-enterprise in Farming (Pig, Goat, etc. rearing farm) as the reference group.

Lastly, the impact of SHG member's savings in the group on his/her income from micro-enterprise was attempted to be captured by introducing the variable 'SHG member's savings in the Group (SAV)'. The variable represents average yearly savings of the member in rupees over the last four years. Higher savings reflect higher economic affordability of the member for future investment, since savings are made by poor SHG members by sacrificing present consumption needs. The variable is hypothesized to have positive impact on income generation from micro-enterprises. The regression model constructed with the above variables is presented in equation (1).

 $Y_1 = \beta_0 + \beta_1 DUMNGO + \beta_2 EDN + \beta_3 ASSETS + \beta_4 DUMPT + \beta_5 DUMHL + \beta_6 DUMTR + \beta_7 DUMMA + \beta_8 DUMHS + \beta_9 BL + \beta_{10} DUMSEX + \beta_{11} DUMPH + \beta_{12} DUMCASTE + \beta_{13} DUMRLG + \beta_{14} DUMAA + \beta_{15} SAV + \mu ---- (1)$ 

### SAMPLE CHARACTERISTICS

The important sample characteristics are presented in tabular form and discussed in this section. The Table 1 is self-explanatory and ,therefore, needs no further elaboration. Table 2 represents the caste-wise distribution of the SHG members. The number of sample SHG members belonging to the general, SC and OBC category were 92, 20 and 45 respectively; there was no ST SHG member in the sample. The noteworthy point is that, in the general category, 65.22 percent of the SHG members had NGO connections, whereas, the corresponding percentage for SC and OBC members was zero percent and only 37.78 percent respectively.

The descriptive statistics of the current net income of SHG members from SHG activities, asset positions of the SHG members' Household and the educational level of the SHG members is presented in the Table 3. The figures show that

Table 1: Block-Wise Distribution of The Sample SHGs						
Block	NGO Connected SHGs (covered)	NGO Connected SHG Members interviewed	SHGs Without NGO Connection (covered)	SHG Members Without NGO Connection Interviewed		
BDB	3	19	8	26		
LDB	4	22	4	14		
RDB	2	6	7	28		
SKDB	6	30	3	12		
Overall	15	77	22	80		
Source: F	Source: Field Survey					

Table 2 : Caste-wise Distribution of Sample SHG Members				
Category	GEN	sc	OBC	
SHG Members (with NGO connection) 60 0 17				
SHG Members (without NGO connection)	32	20	28	
SHG Members (Overall) 92 20 45				
Source: Field Survey				

the SHG members without NGO connections had higher average annual net income, higher average assets (in money terms) and higher-education level than the SHG members with NGO connection. However, the disparity in all these three individual areas was also higher among SHG members without NGO connections, as reflected in the corresponding SD values of the variables in Table 3.

Table 4 represents the area of SHG members' economic activity in both the categories. The figures show that 47 SHG members had taken up farming (rearing of Pig, Goat etc. ) as the SHG activity, the second highest number was in Handicrafts (33). The other popular activities were Fishing and Dairying.

Table 3: Category Wise Mean & Standard Deviation Values							
Category Average Net Income S.D of Average Asset S.D. of Asset Average S.D. of Cyearly, in Rs.) Income Valuation (in Rs.) Valuation Education							
SHG Members (with NGO connection)	9380.3	4334.5	12838	12880	6.5325	3.5003	
SHG Members (without NGO connection)	10250	5827.8	15038	16073	6.55	3.4491	
SHG Members (Overall)	9823.4	5152	13920	14615	6.5414	3.4632	
Source: Field Survey							

In any type of economic activity, training plays an instrumental role in achieving success. The SHG members who received training in their respective areas of SHG activities together comprised of near about 62 percent of the sample under study (Table 5). The remaining members (37.6 percent) had not received any training after the formation of SHGs. Out of the members who received training after SHG formation, 46.94 percent members had NGO connection. From the Table 3, it is observed that the Standard Deviation of the current yearly net income of the SHG members from SHG activities is remarkably high for both categories of SHG members having and not having NGO connections. The SD figures indicate that there is a wide range of variation in the yearly net income of the SHG members. This necessitates further investigation to identify factors, which contribute to the higher income for SHG members. The regression model is constructed with an objective to identify factors, which have bearing on the income of the SHG members.

Table 4: Areas Undertaken For Starting Micro-Enterprises By Sample SHG Members							
No of SHG Members							
Category	Farming(Piggery, Goatery etc.	Dairying	Handicrafts	Weaving	Trade & Business	Fishing	Agriculture
SHG Members (with NGO connection)	27 (35)	5 (6.5)	20 (26)	4 (5.2)	5 (6.5)	10 (13)	6 (7.8)
SHG Members (without NGO connection)	20 (25)	19 (23.8)	13 (16.3)	8 (10)	3 (3.8)	17 (21.3)	0 (0)
SHG Members (Overall)	47 (30)	24 (15.3)	33 (21)	12 (7.6)	8 (5)	27 (17.2)	6 (3.8)
Source: Field Survey (Figures in parenthesis are in percentage).							

The Mean and Standard Deviation of the selected variables are shown in the Table 6. The figures contain valuable information about SHG members. The annual average net income of the SHG members (YI), average asset valuation

Table 5 : Training Received By Sample SHG Members						
SHG Members (No.)						
Category Received Training after formation of SHG Received No Training after formation of SH						
SHG Members (with NGO connection)	46 (59.7)	31 (40.3)				
SHG Members (without NGO connection)	52 (65)	28 (35)				
SHG Members (Overall) 98 (62.4) 59 (37.6)						
Source: Field Survey (Figures in parenthesis are in percentage)						

(ASSETS) and average education of SHG members (EDN) are already shown in the Table 3. The rest of the figures in Table 6 reveal the following information. Only 17 percent of the SHG members had adopted modern techniques of production for running their SHG projects (DUMPT), although 47 percent of the SHG members had been engaging hired labour(s) for the purpose (DUMHL). Near about 62 percent of the SHG members had received training (DUMTR) in their chosen area of activity, and 79 percent attended monthly SHG meetings regularly (DUMMA). The SHG members' household asset level was found to be very low (ASSET); nevertheless, near about 90 percent of the SHG members had their own homes (DUMHS). The SHG-Bank linkage was satisfactory, as is evident from the fact that a SHG member visited the bank 1.92 times in a month (BL). Forty-seven percent (47 percent) of the SHG members were male (DUMSEX) and 29 percent of the SHG members held high position (Secretary/ President) in the SHGs (DUMPH); 59 percent of the members belonged to the general category (DUMCASTE), and 49 percent of them were Hindu by religion (DUMRLG). The percentage of SHG members who had undertaken farming (pig, goat, duck, etc. rearing) as their SHG activity, was 30 percent (DUMAA) and on an average, a SHG member saved ₹ 833.89 yearly in a SHG (SAV).

### THE MODEL RESULT

The regression equation (1) was estimated by applying simple OLS method. The correlation coefficient between pairs of variables was found to be low, indicating an absence of the problem of severe multicollinearity in the data set. As such, all the independent variables discussed above, were retained for the regression equation and the estimation of the same. The estimated regression results are presented in the Table 7.

The value of the adjusted R<sup>2</sup> in regression result indicates that near about 57 percent variation in the value of SHG member's annual net income from SHG projects undertaken is explained by the set of explanatory variables taken into consideration. F value was found to be significant at 1 percent level. The variable 'SHG member with/without NGO connection (DUMNGO') was found to be exerting a statistically significant strong negative impact on the dependent variable, implying that SHG member's NGO connection has a negative impact on the yearly income of the SHG member from his/her SHG project. The result is unexpected in the sense that the role of NGOs has always been envisaged in the literature as income generating for the beneficiaries. The result casts aspersion on NGO's role in SHG activities in this remotest part of the country. One possible explanation of the observed phenomenon is that the NGOs

Table 6: Descriptive Statistics of Selected Variables					
Variable	Mean	Standard Deviation	N		
<b>Y</b> <sub>1</sub>	9823.44	5151.98	157		
DUMNGO	0.49	0.50	157		
EDN	6.54	3.46	157		
ASSETS	13920.38	14614.77	157		
DUMPT	0.17	0.38	157		
DUMHL	0.47	0.50	157		
DUMTR	0.62	0.49	157		
DUMMA	0.79	0.41	157		
DUMHS	0.90	0.29	157		
BL	1.92	0.55	157		
DUMSEX	0.47	0.50	157		
DUMPH	0.29	0.46	157		
DUMCASTE	0.59	0.49	157		
DUMRLG	0.49	0.50	157		
DUMAA	0.30	0.46	157		
SAV	833.89	248.61	157		
N= Size of the Sample					

of this region have little expertise in modern techniques of production, and they are organizationally weak. As a result, the intermediary role played by NGOs has proved to be detrimental and obstructive for the SHGs in this region. This is probably one reason for which near about 50 percent of the SHG members have preferred to function independently, rather than taking the NGOs' help.

The variable 'Education of the SHG member (EDN)' exerts a positive significant impact on income, the dependent variable. Although the average education of the SHG members was found to be low in the present study (only 6.54 years of completed schooling; Table 6), the regression result was as per the expectations, indicating that even low level of education or literacy enhances human capabilities, which are essential for making the best use of economic opportunities. Therefore, even 1 unit increase in the educational attainment of the SHG member increases his/her income by ₹ 188.00 from SHG micro enterprises. The result vindicates the point that basic education is necessary for eradication of poverty, and for income growth. The third statistically significant variable was DUMRLG (the religion of the SHG member). The variable was considered in the model as a dummy one, assigning value 1 if the SHG member was Hindu, 0 otherwise. The variable was found to be exerting a strong negative impact on the income of the SHG members, implying that as far as income of the SHG member from SHG micro enterprises was concerned, the Hindus were the disadvantaged community in the region. It may be pointed out here that the Karimganj District, the area selected for the present study, is a Muslim majority one. Poverty is equally rampant among the Muslims and Hindus of the area, but the emerging Muslim leadership is more concerned and driven by community interests. As a result, close monitoring, motivational and organizational help is always forthcoming from the Muslim leadership for the successful implementation of poverty eradication programmes like micro financing programmes etc. for the Muslims. The last variable found to be statistically significant in the result was SAV (SHG members' annual savings in the group). This variable exerts, as expected, a strong positive impact on the net income of the SHG member from his/her microenterprise. Higher savings results in higher income through higher investment in the project. This point towards the fact that by making larger investable fund available to the capital starved poorer communities, SHG programmes can be made more effective for reducing poverty in the region.

Table 7: Regression Result						
Dependent Variable=Y <sub>1</sub>						
Variable	Un-standardized Coefficient	Std. Error	t-Value	Standardized Coefficient		
Constant	-1248.627	1762.987	708			
DUMNGO	-1416.606**	632.747	-2.239	138		
EDN	187.764***	108.438	1.732	.126		
ASSETS	3.066E-02	.019	1.600	.087		
DUMPT	360.596	825.819	.437	.026		
DUMHL	575.853	684.864	.841	.056		
DUMTR	534.954	654.775	.817	.050		
DUMMA	-271.604	692.898	392	022		
DUMHS	232.770	975.886	.239	.013		
BL	327.930	533.101	.615	.035		
DUMSEX	1283.983	823.232	1.560	.125		
DUMPH	543.219	616.148	.882	.048		
DUMCASTE	-884.697	658.125	-1.344	085		
DUMRLG	-1381.621**	672.875	-2.053	134		
DUMAA	-983.281	741.288	-1.326	088		
SAV	11.457*	1.608	7.127	.553		
R <sup>2</sup> =0.613 * Significant at 1% level; Adjusted R <sup>2</sup> =0.572 ** Significant at 5% level						

R<sup>2</sup>=0.613 \* Significant at 1% level; Adjusted R<sup>2</sup>=0.572 \*\* Significant at 5% leve

F value = 14.914 \*\*\* Significant at 10% level

Two more variables had turned up to be statistically significant at 12 percent level of significance. These were the ASSET (Asset valuation found under possession of SHG members at the time of the survey) and DUMSEX (Sex of the SHG member, Dummy, 1 if male; 0 otherwise). Both the variables were having a positive causal connection with the dependent variable. The variable ASSET was included in the model as a proxy for the economic status of the household of the SHG member. The result was as per the expectations, indicating that the SHG member enjoying higher household economic status derives more benefits (although the impact is very weak) in terms of income from his/her SHG enterprise. The income of the male SHG members was found to be higher than that of the female members. The high coefficient value of the variable is an indicator of the gender difference in the income of the SHG members; and the men were found to be the advantageous group. A gender-based study on the performance of SHGs would probably shed meaningful light on this dimension of the problem. The values of the standardized coefficients in Table 7 show that the savings of the SHG members was the strongest determinant of income followed by NGO connectivity.

### CONCLUSION

The study throws important light on the net income of SHG members from their micro-enterprises and its determinants. It was observed that the yearly average savings of a SHG member was only ₹834.00. The current yearly average net income accrued from SHG enterprises was also low at ₹ 9823.00 only, with a moderately high standard deviation value of 5152. It is obvious, therefore, that although average income accrued was low, there is a moderately high degree of inequality in income across SHG members. In this situation, the result indicates that higher savings results in higher income for the SHG members. What is required at this stage is more capital for the poverty-stricken people, enabling them to invest more in their projects to make these profitable and sustainable. The present low scale of operation of SHG projects will not help in eradication of perpetual poverty in the region. Higher education was found to be an income promoting factor in the study. As the members have a minimum level of education, appropriate policies may be formulated for imparting 'on the job training' to the members. In this regard, the role of the NGOs needs to be reviewed. The NGOs may play an important role in identifying profitable economic micro projects for the SHGs and for strengthening SHG project- market linkage. The result of the present study reveals that Farming, which was considered in the regression analysis as a reference group, as an enterprise of SHG activity has a negative, albeit statistically insignificant impact on income generation. This is perplexing since rearing of duck, hen, goat, pig, etc. (rearing of which is considered together as Farming) has strong local demand. The urban areas offer good markets for these products. It appears that the SHG members engaged in rearing pigs, goats for business purposes (as a SHG activity) have failed to find good markets for their products. The NGOs can help the SHG members in marketing their products, which is of utmost importance in generating higher and sustainable income for the micro enterprises.

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