Impact of Grameen Bank micro credit on change in livelihood status of women beneficiaries

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Abstract

Grameen Bank (GB) is one of the largest NGO working with the socio-economic upliftment of the poor section, specially women of the society. The main focus on the present study is to determine change in livelihood status of women beneficiaries of GB in twenty selected centers of Jaforgonj north of Debidwar branch under Comilla district; and to identify the existing problems faced by GB participants. Data were collected from 100 randomly selected sample (15% of population), out of population size 663 of GB beneficiaries. Data indicated that change in livelihood status scores of the respondents varied from 4 to 24. The average change in livelihood status score was 13.94. The largest proportion (62 percent) of women belonged to medium, compared to 25 percent and 13 percent belong to low and high change in livelihood status categories respectively. Results of t-test on change of livelihood status in three dimensions namely 'change of farm and house hold materials', 'change of housing, health and sanitation' and 'change of annual family income' in terms of 'before' and 'after' involvement were found highly significant. Out of 11 selected characteristics, education, annual income, credit availability, communication with GB employee and staff and attitude towards micro-credit program of GB were positively significant and only age and non-localite behaviour were negatively significant with dependent variable of change in livelihood status. Family size, farm size, organizational participation and attitude towards community did not show any significant relationship with change in livelihood status. Problems faced by beneficiaries in respect of 'lack of sufficient amount of credit' was the most serious problems, credit disbursement delayed was the second problem and the third problem was 'belief on dogmatism and fatalism' with problem index 199 among the six existing problems.

Keywords: Grameen Bank, Micro credit, Livelihood status, and Women beneficiaries

Introduction

The GB launched its operation from Jobra (a village adjacent to Chittagong University, Chittagong, Bangladesh) and some of the neighboring villages during 1976-1979. With the sponsorship of the central bank of the country and support of the nationalized commercial banks, the project was extended to Tangail district (a district north of Dhaka, the capital city of Bangladesh) in 1979. With the success in Tangail, the project was extended to several other districts in the country (Anon., 2004). GB brought credit to the poor, women, the illiterate, the people who pleaded that they did not know how to invest money and earn an income. Grameen created a methodology and an institution around the financial needs of the poor, and created access to credit on reasonable term enabling the poor to build on their existing skill to earn a better income in each cycle of loans.(Yunus, 1994). Microenterprise development proved its potential in bringing about considerable improvement in incomes of upper poor and non-poor borrowers who are close to the poverty lines (Hulme and Mosley, 1996).

The first Microcredit Summit (MCS) held in Washington, DC in 1997 was an important event for mainstreaming microcredit and its more inclusive sister, microfinance, as the leading development initiative with the potential to address not only poverty alleviation, but also gender equity issues. The ambitious action plan, drafted by the various players in the field (e.g., donors, political leaders, policymakers, NGOs, commercial lenders and multinational corporations), sought to provide "credit to 100 million of the world's poorest families" and particularly to women by 2005 (Microcredit Summit 1997). (Anon., 2001) Faith in microfinance's ability to successfully address these two fronts of international development is evidenced by the UN proclamation of the year 2005 as the International Year of Microfinance (UN 1998). To meet the Summit goal and highlight the UN proclamation, most bilateral and multilateral agencies pledged financial support to microfinance initiatives (Rahman 2004: 30). Indeed, the November 2005 issue of THE ECONOMIST outlines the growing number of formal sector financial institutions now investing in such programs (e.g., Citibank, Ecuador's Bank Pichincha, India's ICICI) (Easton 2005: 5, 7). To coordinate and maintain consistency among the varied agencies currently engaged in these projects, the Consultative Group to Assist the Poorest (CGAP) has developed general guidelines that are now widely adopted. (Anon., 2002).

The word "Livelihood" is used in many ways. A livelihood comprises the capabilities, assets, and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from the stresses and shocks and maintain or enhance its capabilities and assets both now and in the future without undermining the natural resource base (Chambers and Conway, 1988). "Livelihoods" are the ways people combine their capabilities, skills and knowledge with the resources at their disposal to create activities that will enable them to make a living. A sustainable livelihood is one that can be carried on bow and trim the future without depleting the resources it depends on and without depriving other people of a livelihood. Livelihood status is the state of individuals which indicates his/her socio-economic conditions, living environment or their standard of living (Rokonuzzaman,2004). The livelihood status of the women of Debidwar upazila of Comilla District are not remarkably high since their main source of income is subsistence agricultural practices.

However, the present study has focused on change in livelihood status of the rural women who are receiving micro-credit as launched by GB with the objectives of determining the selected characteristics of rural women; the change in livelihood status; exploring relationship between the selected characteristics of rural women and their change in livelihood status; and identifying problems faced by the beneficiaries after joining with GB micro-credit program.

Materials and Methods

Data were obtained with the help of interview schedule, from 100 randomly selected rural women, out of 663 population during 10 May to 05 June 2007 who participated in different activities and receiving the micro-credit from GB in the study area. Eleven selected characteristics of the women were described as independent variables, which includes, age, educational qualifications, family size, farm size, annual income, credit availability, organizational participation, communication with GB employee and staff, non-localite behaviour, attitude towards community, and attitude towards micro-credit program with change in livelihood status. Standard procedure were followed to measure the selected characteristics.

Change in livelihood status

The measurement procedure of dependent variable was 'change in livelihood status' which had three dimensions, namely, changes of farm and household materials; change of housing, health and sanitation; and change of annual family income are elaborated below:

Changes of Farm and Household Materials

Nine items, namely, furniture, poultry, cows and goats, irrigation pump, radio, cassette player, TV, rikswa and van included under sub variable of farm and household materials according to the information collected from the study areas. Then, coded scores were counted into amount of taka, and every thousand taka were assumed as 1 score. The change of farm and household materials was determined by the following formula: CFHM= Value on after receiving credit - Value on before receiving credit. Where, CFHM= Changes of farm and household materials

The measurement procedure of change of housing, health and sanitation; and change of annual family income also were almost similar with the measurement procedure of CFHM. However, an effort was also made to calculate the rank order of problems faced by participants. A Problem Confrontation Index (PCI) was developed to fulfill this objectives using the following formula-

$$PCI = N_1 \times 0 + N_2 \times 1 + N_3 \times 2 + N_4 \times 3$$

Where,
  PCI = Problem Confrontation Index
  N_1 = Number of respondent felt the problem not at all
  N_2 = Number of respondent felt the problem low
  N_3 = Number of respondent felt the problem medium; and
  N_4 = Number of respondent felt the problem high

So, the score of each individual statement ranged from 0 to 300, where 0 indicating no problem and 300 indicating the highest problem.

The data were coded, tabulated and analyzed using the statistics like frequency counts, percentage, mean and standard deviation.

Results and Discussion

Characteristics of participating members of GB

The characteristics included age, education, family size, farm size, annual income, credit availability, organizational participation, communication with GB employee and staff, non-localite behavior, attitude towards community, attitude towards micro-credit program of GB and change in livelihood status were described in Table 1.

Table 1. Distribution of GB Program Participants According to Their Characteristics

Characteristics	Scoring units	Maximum-Minimum	Obtained score	Categories of characteristics	Women Number and percent	Mean	Standard deviation
Age	Number of years	-	16-57	Young (up to 30) Middle aged (31-45) Old aged (above 45)	42 48 10	33.85	4.56
Education	Years of schooling	-	0-12	Illiterate Can sign only (0.5) Primary (1-5) Secondary (6-10) Higher secondary (> 10)	02 12 50 27 9	4.92	2.18
Family size	Number of members	-	2-10	Small family (below 4) Medium family (5-7) Large (above 7)	27 52 21	5.36	1.67
Farm size	Size in hectares	-	0.01-1.74	Landless (< 0.02 ha) Marginal (>0.02-0.2 ha) Small(>0.2-1.0ha) Medium(1.0-3.0ha) Large (>3.0ha)	10 34 36 20 00	0.11	0.05
annual income	In Taka ('000 Tk)	-	15.5-170	Low (up to 30) Medium (31-100) High (> 100)	18 71 11	47.35	14.79
Credit availability	In Taka ('000 Tk)		2.5-24	Low (up to 7) Medium (8-10) High (11 and above)	45 30 25	7.68	3.84
Organizational participation	Score	-	1-16	Low (up to 5) Medium (6-10) High (above 10)	63 31 06	3.24	2.19
Communication with GB employee and staff	Score	0-12	2-10	Low (up to 4) Medium (5-8) High (above 8)	29 58 13	7.37	3.14
Non-localite behavior	Score	0-42	7-30	Low (up to 14) Medium (15-24) High (25 and above)	32 54 14	18.94	6.85
Attitude towards community	Score	0-40	8-28	Low (up to 14) Medium (15-22) High (23 and above)	41 46 13	16.15	6.37
Attitude towards micro-credit program of GB	Score	0-40	10-32	Low (up to 14) Medium (15-24) High (25 and above)	05 53 42	22.46	8.92
Change in livelihood status	In '000Tk.	-	4-24	Low change (up to 10) Medium change (11-17) High change (18 and above)	25 62 13	13.94	4.85

Change in livelihood status

Change in livelihood status was found to range from 4 to 24 with mean of 13.94 and standard deviation with 4.85. Data furnished in Fig. 1 indicated that large proportion (62 percent) of the respondents fell under medium change in livelihood status while 25 percent and 13 percent fell under low and high change in livelihood status. Interestingly, it was found that 75 percent respondents got opportunity to change their livelihood status after involving themselves with micro-redit program of GB.
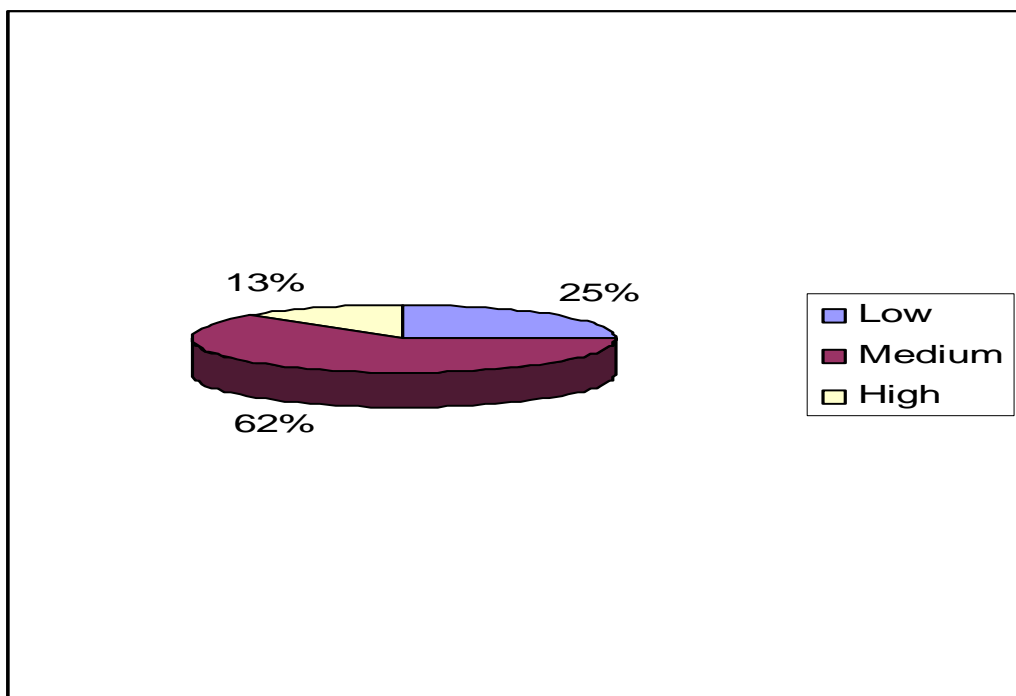

Figure 1 Different Categories of Change in livelihood status of beneficiaries

Relationship of selected characteristics of respondents with change of livelihood status

Correlation analysis indicated education, annual income, credit availability, communication with GB employee and staff and attitude towards micro-credit program of GB were positively significant and only age and non-localite behaviour were negatively significant with dependent variable of change in livelihood status. Also, it was found that family size, farm size, organizational participation and attitude towards community do not show any significant relationship with change in livelihood status.

Table 2. Co-efficient of correlation (r) between change in livelihood status of women beneficiaries and their selected characteristics

Dependent Variable	Independent Variables	Pearson Correlation (r) values with 98 df (n-2)	Tabulated value of (r)	
			0.05 level	0.01 level
Change in livelihood Status	Age	- 0.198*	±0.196	±0.254
	Educational qualification	0.270**		
	Family size	- 0.017^{NS}		
	farm size	0.183^{NS}		
	annual income	0.271**		
	Credit availability	0.207*		
	Organizational participation	0.108^{NS}		
	Communication with GB employee and staff	0.197*		
	Non-localite behavior	- 0.232*		
	Attitude towards community	0.173^{NS}		
	Attitude towards micro-credit program of GB	0.236*		

* = Correlation is significant; ** = Correlation is significant at the 0.01 level (2-tailed); and NS = Not significant

Comparative change pattern of livelihood status in terms of 'before' and 'after' involvement with Grameen bank micro-credit program

The results of t-test are presented in the Table 3.

Table 3.Comparative change pattern of livelihood status 'before' and 'after' involvement with micro-credit program

Variables	Average		Calculated t-value with 99 df
	Before	After	
Change of farm and house hold materials (score)	30.48	32.76	3.67**
Change of housing, health and sanitation (score)	33.38	37.67	3.14**
Change of annual family income (score)	45.57	51.87	4.54**

Critical value of (0.01) = 2.62 with 99 df and ** Significant at 0.01 level of probability

Change of farm and house hold materials

The findings indicated that the average farm and household materials of the respondents increased from 30.48   scores to 32.76   scores after involvement with micro-credit program.

The result showed in between 'before' and 'after' involvement clearly indicated improvement of farm and house hold assets, which was further supported by the highly significant t- value (3.67) (Table 3). Measuring that farm and house hold assets of the respondents after involvement with micro-credit program increased significantly.

Changing of housing, health and sanitation

The findings indicated that the average housing, health and sanitation of the respondents increased from 33.38 scores to 37.67.scores after involvement with micro-credit program. The result between 'before' and 'after' involvement indicated improvement of housing, health and sanitation, which was further supported by the highly significant t- value (3.14) (Table 3). Measuring that housing, health and sanitation of the respondents after involvement micro-credit increased significantly. Rokonuzzaman and Kashem (2005) observed similar result on their study.

Change of annual income

The findings indicated that the average annual family income of the respondents increased from 45.57scores to 51.87 scores after involvement with Grameen bank micro-credit program.

The results of before - after involvement comparison clearly indicated improvement of housing, health and sanitation. This was supported by the highly significant t- value (4.54) (Table 3). Measuring that annual family income of the respondents after involvement with micro-credit program increased significantly.

Rank Order of Problems

The data in Table 4 indicated that the problems faced by the beneficiaries of GB in respect of 'lack of sufficient amount of credit' was the most serious problems with problem index of 242. Credit disbursement was delayed due to linger process of disbursement was the second problem with problem index 234. The 3rd problem was 'belief on dogmatism and fatalism' with problem index 199. The 4th , 5th and 6th problems were 'high rate of interest',' delaying of receiving credit in due to less responsibility of concern staffs'and 'limited for IGAs viz. postharvest activities, cow fattening and milking, goat farming, backyard poultry rearing, pisciculture, agriculture, horticulture, food processing, cane and bamboo works, silk reeling, handloom, garment making, fishnet making, coir production, and handicrafts etc' with problem index 198, 196 and 159 respectively.

Table 4. Rank order of problems faced by participants

Statement of the Problem	Extent of Problem (%)				*PCI	Rank order
	High	Medium	Low	Not at all		
Credit disbursement delaying due to linger process	52	34	10	4	234	**2**
Lack of sufficient amount of credit	56	32	10	2	242	**1**
Limited for Rural income-generating activities (IGAs) (Rural IGAs include postharvest activities, cow fattening and milking,goat farming, backyard poultry rearing, pisciculture, agriculture, horticulture, food processing, cane and bamboo works, silk reeling, handloom, garment making, fishnet making, coir production, and handicrafts etc).	23	31	28	18	159	**6**
Delaying of receiving credit in due to less responsibility of concern staffs	34	33	28	5	196	**5**
High rate of interest	28	44	26	2	198	**4**
Belief on dogmatism and fatalism	34	38	21	7	199	**3**

*PCI= Problem Confrontation Index

Conclusion

More than three-fourth (87 percent) portion of the respondents belonged to low to moderate change categories of change in livelihood status which is not expected situation at all. Formulation of gender specific and pragmatic program related with IGAs viz. postharvest activities, cow fattening and milking, goat farming, backyard poultry rearing, pisciculture, agriculture, horticulture, food processing, cane and bamboo works, silk reeling, handloom, garment making, fishnet making, coir production, and handicrafts etc which have enough potentiality to increase their socio-economic conditions leading towards improving livelihood status was necessary. Credit availability had positive correlation with change in livelihood status. Credit is the most important assets to mobilize in IGAs which ultimately increase livelihood status. Communication with GB employee and staffs gives important way to utilize the credit in IGAs which increase their income as well as improve livelihood status.

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