



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Effect of Community Based Organization microcredit on livelihood improvement

R. Akter, M. A. Bashar and M. K. Majumder¹ and Sonia B. Shahid²

Department of Agricultural Finance, ¹Department of Agricultural Economics and ²Bangladesh Agricultural University Research System (BAURES), Bangladesh Agricultural University, Mymensingh-2202, Bangladesh

Abstract

The study was conducted to examine the effects of Community Based Organization (CBO) micro-credit program of Concern Worldwide on the livelihood improvement of beneficiaries in a selected area of Mymensingh district. In the study, 50 respondents were purposively selected of which 30, 12 and 8 were engaged in small trading, saloon and rickshaw pulling respectively. Tabular and statistical analyses were applied for achieving the objectives. All of the factors to measure the socio-economic condition such as awareness, family income, assets, clothing, etc has been changed. It was also found that the women participation in the household decision making increases. Repayment performance of CBO micro-credit program was highly satisfactory. Respondent's income and loan receipt amount were positively contributed to loan repayment, whereas respondent's age, education, family size and forced saving negatively affected the same. Ninety four per cent of the respondents mainly repaid their loan on time with the hope of getting loan in future. Overall, the CBO micro-credit program was found to have significant positive effects on livelihood improvement.

Keywords: CBO, Micro credit, Concern Worldwide, Livelihood Improvement

Introduction

Bangladesh is the birth place of micro-credit. Since after emergence of Bangladesh in 1971, the micro finance institutions (MFIs) also came into being in the country with a hope to alleviate poverty through assistance with some international organizations. Bangladesh is the first country to introduce micro-credit successfully, especially for the poor. At present, more than 1000 MFIs are operating in the country. These NGOs are one of the most important vehicles providing financial help to low income people, entrepreneurs and producers. Such NGOs are providing an alternative micro-credit model for poverty alleviation that would successfully reduce the problems of low income, low saving, low consumption and other aspects of poverty through their institutional design, credit policy and programs (Akter, 2006).

Community Based Organization (CBO) micro-credit is a program of Concern Worldwide for extremely poor and marginalized community members in urban areas of Bangladesh. It is working in four districts which are Chittagong, Khulna, Mymensingh and Nilphamari (Saidpur town). The implementation period of this program was April, 2001 to March, 2006. The direct participants of CBO is 12410, indirect participants is 60620 and group membership is 11469 (Concern Worldwide, 2006). CBO gives loan to its members for small scale IGAs (Income Generating Activities). It facilitates training courses for community members on issues related to human rights, gender, social violence, HIV/AIDS and democracy. The social and economic benefits from this project have enable people to move beyond the daily struggle to sustain their families towards developing sustainable livelihoods. Almost all members of the CBOs are engaged in at least one IGA and in this way have increased their income, saving, capitals and assets (Concern Worldwide, 2006). Many studies have been conducted on micro-credit program. But no systematic and comprehensive study has yet been conducted on CBO micro-credit program of Concern Worldwide. The main objective of this study is to assess the impact of CBO loan on livelihood improvement of the beneficiaries

Methods and Materials

The study was conducted to determine the impact of CBO loan on livelihood improvement in three areas namely Patgudam, Adarsha and Malancha colonies under Sadar upazila of Mymensingh district. The selected areas were under CBO micro-credit program of Concern Worldwide, Mymensingh. This study was based on field level data. The data were collected by the survey method. Collected data were classified, tabulated and analyzed in accordance of the objectives set for the study.

In this study Logit model was used because the dependent variables measured whether socio-economic well being of the CBO micro-credit respondent's household became improved or otherwise, after three years of CBO micro-credit operations. For the estimation purpose, Logit model (Gujarati, 2003) can be written as follows:

$$Li = \ln \left(\frac{Pi}{1 - Pi} \right) = \beta_0 + \beta_1 X_1 + \dots + \beta_k X_k + U_i$$

In this Logit model, dependent variable that was socio-economic well being and was given a score one for improvement of the household' well being, otherwise it was coded zero. The selected seven variables such as income, assets, food intake, clothing, sanitation, forced saving and housing from different items were included as independent variables in the model. In this case, the method of maximum likelihood was used. Thus specifically the Logit model can be written as follows:

$$Li = \ln \left(\frac{Pi}{1 - Pi} \right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + U_i$$

P_i = Probability that socio-economic well being would be better off

$1 - P_i$ = Probability that socio-economic well being would not be better off

$X_1, X_2, X_3, X_4, X_5, X_6, X_7 = 1$ for those CBO Micro credit respondents who responded that income, assets, food intake, clothing, sanitation, saving, housing, have increased due to CBO micro credit.

= 0 for otherwise

For better understanding particular item-wise changes, perception indices (PI) were computed. The PI was calculated by multiplying the frequency count of each cell of a degree of change with its corresponding weight, i.e., 2 for "increased", 1 for "unchanged" and 0 for "decreased". By adding all the values of each cell together the score of PI was calculated. The PI ranges from 0 to 100 in this particular case where 0 indicates no improvement and 100 implies maximum improvement.

Results and Discussion

The aim of this study is to present an impact of CBO micro-credit program on the livelihood of the respondent households after taking loan. The key objective of this is to determine the changes in contributing factors of livelihood which are involved in livelihood improvement, i.e., capital, food intake, clothing, health, sanitation and decision making capabilities of women.

A livelihood is the set of capabilities, assets and activities that furnish the means for people to meet their basic needs and support their well being (Islam, 1999). The building of livelihoods are not simply a localized phenomenon but connected by environmental, economic, political and cultural processes to wider national, regional and global arenas. In this guideline, "livelihood" does not just mean the activities that people carry out to earn a living. Rather, it means all the different elements that contribute to or affect their ability to ensure a living for themselves and their households. (Rahman, 1996).

Changes in overall socio-economic condition in the livelihood among the respondents

In order to identify the overall socio-economic improvement in the livelihood of the respondent households, the researcher asked about their opinion on their overall socio-economic changes by using CBO micro-credit. Table 1 and Table 2 represent the results of that endeavor. Table 1 shows that 92 percent of the CBO micro-credit respondents changed their awareness after taking loan.

The PI of awareness to be 96 indicates that notable improvement and rank order 1. Rate of improvement was higher for awareness. In case of income, 84 percent of the respondents were found to improve their income and the rest 16 percent respondents mentioned that no changed in their income. The PI of income to be 92 indicating that rank order 2.

Sixty percent of the respondents experienced changed their food intake after taking CBO micro-credit. Table 2 shows that the PI of food intake to be 80 which was rank order 6. Table 1 also shows that 66, 44, 50, 76 and 80 percent of the respondents responded that their assets, health facilities, clothing, education and furniture were changed respectively while 34, 56, 50, 24 and 20 percent of the same experienced no change. Table 2 reveals that the PI of assets (Rank 5), health facilities (Rank 9), clothing (Rank 8), education (Rank 4) and furniture (Rank 3) were 83, 72, 75, 88 and 90 respectively.

26 per cent, 24 per cent and 12 per cent of the respondents opined that their housing condition, sanitation and using tube well water respectively were changed but no change was found for 74 per cent, 76 per cent and 88 per cent of them (Table 1). The PI of housing condition (Rank 10), sanitation (Rank 11) and using tube well water (Rank 12) were 63, 62 and 56 respectively (Table 2). Table 1 also reveals that 68 per cent of the respondents responded that their saving was changed and 32 per cent mentioned no change. The PI of saving was 76 with rank order of 7 (Table 2).

Table 1. Changes in socio-economic condition of the respondents

Heads	Changed (%)	Not changed (%)	Total (%)
Awareness	92	8	100
Family income	84	16	100
Assets	66	34	100
Food intake	60	40	100
Health facilities	44	56	100
Clothing	50	50	100
Education	76	24	100
Furniture	80	20	100
Housing condition	26	74	100
Household saving	60	32	100
Sanitation	24	76	100
Using tubewell water	12	88	100

Source: Field Survey, 2006

Table 2. Changes in overall socio-economic condition in the livelihood among the respondents

Heads	Increased (No.)	Not changed (No.)	Declined (No.)	Perception index (PI)	Rank order
Awareness	46	4	-	96	1
Family income	42	8	-	92	2
Assets	33	17	-	83	5
Food intake	30	20	-	80	6
Health facilities	22	28	-	72	9
Clothing	25	25	-	75	8
Education	38	12	-	88	4
Furniture	40	10	-	90	3
Housing condition	13	37	-	63	10
Household saving	30	16	4	76	7
Sanitation	12	38	-	62	11
Using tube well water	6	44	-	56	12

Source: Field Survey, 2006

Participation of women in household decision making

Traditionally, women don't have any saying in making decisions about any sort of household affairs in Bangladesh particularly in poor households. They have had little expectations of being able to participate in decision making that could change their livelihood. The CBO micro-credit program is expected to make a breakthrough in this very aspect and so attempted to examine how far the CBO micro-credit program could explore the possibility of women's participation in decision making relating to family affairs. Table 4 depicts whether any change in decision making status of women has occurred because of involving into CBO micro-credit program in the study area.

It was found that the male dominated role in household affairs has been reduced to a greater extent after joining of women in CBO micro-credit program. The activities where the male members previously took monopoly decision could realize that females should also join in decision making process. The worth mentioning result in this aspect is evident in the case of purchasing rickshaw (100 percent), daughter's marriage (62 percent), housing (56 percent), business (54 percent), children education (50 percent) and taking care of children (40 percent) during the year of study (Table 3). It can, therefore, be said that the CBO loan operation has been helping the potential women empowerment in the society wherein the GoB at present has given priority as part of global importance of the matter. Equal participation of male and female in household decision has already been globally recognized for peaceful family life and the findings of the present study support existing knowledge in this respect.

Table 3. Participation of women in household decision making

Heads of participation	Before joining the CBO micro-credit program (%)			After joining the CBO micro-credit program (%)		
	Men only	Women only	Men in consultation with women	Men only	Women only	Men in consultation with women
Business	55	32	13	14	32	54
Purchasing rickshaw	-	-	-	-	-	100
Housing	68	10	22	34	10	56
Taking care of children	10	75	25	5	65	40
Children education	30	40	30	15	35	50
Daughter's marriage	64	6	30	32	6	62

Summation of percentages will not be equal to 100 because of multiple answers given by the same respondent
Source: Field Survey, 2006

Factors affecting the likelihood of the socio-economic improvement

In order to explain the likelihood of improvement in the overall socio-economic condition, various factors were used to estimate a logistic regression. The results are presented in Table 4. It may be mentioned that the dependent variable used in the regression were socio-economic well being where a score of 1 was assigned to the positive response while a score of 0 assigned to negative outcome (indicating the no improvement took place).

Among the seven independent variables, it was found that five variables had significant influence on the socio-economic well being. In case of logistic regression, the convention is to interpret the odds ratios not the co-efficient. Odd ratios were computed (computer output provide the odds ratio directly) by taking the anti log of the co-efficient.

In case of income and assets, odds ratios were 12.78 and 11.93 suggesting increased income were 12.78 and 11.93 times respectively likely to have an improved socio-economic well being.

Table 4. Results of logistic regression on the socio-economic well being

Variables	Co-efficient	Standard error	Significance	Odds ratio
Income	4.65*	2.20	0.04	12.78
Assets	3.85**	2.19	0.08	11.93
Food intake	5.30**	2.88	0.07	3.02
Clothing	2.90**	1.76	0.10	9.37
Sanitation	3.39*	1.66	0.04	3.22
Forced saving	-3.96	2.80	0.02	0.82
Housing	-1.98	2.20	0.37	0.62
Constant	-6.92	3.29	0.05	0.00
Likelihood ratio	15.89			
Cox and Snell R ²	0.47			
Nagelkerke R ²	0.76			

* Significant at 5% level

** Significant at 10% level

The odds ratios were 3.02, 9.37 and 3.22 for food intake, clothing and sanitation, respectively meaning that the likelihood of improvement appeared to be 3.02, 9.37 and 3.22 times higher for those respondents who increased expenditure on these items, due to income earnings from CBO micro-credit program as opposed to those who did not increase their expenditure.

The forgoing discussion provides enough evidence that significant improvement in the socio-economic well being and livelihood improvement had been occurred due to CBO micro-credit program. In all the indicators namely, the different items of livelihood, i.e., food intake, assets, income, clothing, sanitation, the changes were positive. These were also evident in tabular analysis and perception indices. The logistic regression once again provided supportive evidence to these as well.

Conclusion

From the above discussions it may be concluded the impact of CBO micro-credit program on livelihood of the respondent households brought positive impact on income, food intake, clothing, asset and sanitation. Females were now-a-days consulted by the male counterparts' in decision making regarding family affairs after joining CBO micro-credit program. This study also find out some problems and constraints related to different IGAs under the CBO micro-credit program in the study area such as, insufficient credit, high interest rate, lack of marketing facilities, lack of storage facilities, problem of theft, high transportation cost, etc.

The following suggestions were put forward by the respondents to overcome the problems identified by them in the study:

- (i) Credit should be provided as needed and at low rate of interest.
- (ii) Supports from the financial institutions in extending loans should strengthened for improving business activities and earn more income from business.
- (iii) Develop storage facilities for small traders.
- (iv) Create marketing facilities for improving the IGAs.

The study suggests for further study of similar type on other NGOs to represent whole of the country, which would encourage the policy makers to formulate pragmatic programs for national development in future.

References

- Akter, K. 2006. Micro Financing by RDS-An Impact Study in Sadar Upazila of Mymensingh District. An Unpublished Master's Thesis, Department of Agricultural Finance, Bangladesh Agricultural University, Mymensingh.
- Concern Worldwide. 2005. Annual Report, Dhaka, Bangladesh.
- Concern Worldwide. 2006. Annual Report, Dhaka, Bangladesh.
- Gujarati, D.N. 2003. Basic Econometrics, Fourth Edition, Singapore: McGraw-Hill, Inc.
- Islam, S. 1999. Micro-Credit for the Rural Poor: A Study of Small Farmers Development Project (SFDP) in Sadar Thana of Bogra District, Department of Agricultural Finance, Bangladesh Agricultural University, Mymensingh.
- Rahman, M.H. 1996. Participation of Women in Rural Development, An Experience of Comprehensive Village Development, Programme (CVDP), The Bangladesh Rural Development Studies, RDA, Bogra, Vol. VI, No. 1, 1996.