Full Length Research Paper

Effectiveness of community based organization (CBO) microcredit programme of concern worldwide: A case study of Bangladesh

Muhammad Sayeedul Haque[1*], Rexona Akter[2] and Khaled Laoubi[3]

[1]Department of Agricultural Finance, Bangladesh Agricultural University, Bangladesh
[2]Pubali Bank Limited, Bangladesh.
[3]Department of Bioresource Sciences, Hiroshima University, Japan.

This study was conducted to examine the effectiveness of community based organization (CBO) microcredit programmes of 'Concern Worldwide' in selected urban areas of Mymensingh district. The study is concerned with CBO microcredit use, assessing repayment performance, identifying the factors affecting repayment performance and assessing the impact of loan on livelihood improvement of the beneficiaries. Tabular and statistical analyses were applied for achieving the objectives. Overall, 84% of the total loan applied for was received by the respondents. Maximum amount of loan (89%) was received by rickshaw puller during the study period. The respondents used their maximum borrowed money productively. About 96, 94 and 98% of the total borrowed money were utilized purposively by small trading, saloon and rickshaw pulling respondents, respectively. Repayment performance of CBO microcredit programmes was highly satisfactory. Respondents' income and loan receipt amount positively contributed to loan repayment, whereas respondents' age, education, family size and forced saving negatively affected loan repayment. Almost all of the respondents mainly repaid their loan on time with the hope of getting loan in future. Self-consciousness and proper supervision by the CBO staff and Concern Worldwide field workers were the other important contributing factors for timely repayment of loan. Overall, the CBO microcredit programme was found to have significant positive effects on livelihood improvement of the poor beneficiaries.

Key words: Effectiveness, Concern Worldwide, livelihood, community based organization (CBO) microcredit programme, Bangladesh.

INTRODUCTION

Bangladesh is considered to be the highest densely populated country in the world. About 40% of her population lives below the national poverty line (MOF, 2009). Nowadays, the country is known as the land of microcredit revolution. By ensuring financial services to the poorest, microcredit programme is widening the concept of employment and livelihood improvement. At present, approximately 56,945 NGOs are serving more than 15 million households across the country (Hasan, 2009). Despite this success, microfinance services have been bemoaned for their inability to reach the extreme poor.

Concern Worldwide started work in present day Bangladesh, in November 1970, in response to the devastating Bhola cyclone. Recognizing the need for ongoing support to the new and independent nation that followed the liberation war, it later initiated a much needed relief programme to poor communities living in urban slums. In recent years, and as new generations of NGOs have emerged in Bangladesh itself, Concern has moved away from directly implementing projects, to build alliances with local development partners that bring wider and deeper benefits for poor people.

Concern supported extremely poor people to achieve their own socio-economic rights in remote rural areas and urban slums in different parts of Bangladesh through empowering their own organizations (Concern, 2007). It

---
*Corresponding author. E-mail: mshbau@yahoo.com

has adopted the approach of developing and promoting member owned community based organizations (CBOs) with flexible savings schemes suitable for the extreme poor people, with both savings and credit activities managed and owned by the groups themselves. Concern learned the group approach to microfinance from India's successful experience of the SHG approach where, groups are eligible to obtain loans directly from a commercial bank (Aryal, 2009).

In Bangladesh, Concern Worldwide currently focuses on urban poverty, rural poverty (specifically in the chars and haors), and poverty arising from social exclusion.

A successful credit programme is always conceived of its satisfactory loan use and level of loan repayment by the borrowers. CBO microcredit programme of Concern Worldwide gives emphasis on income generation, repayment aspect, livelihood improvement of beneficiaries and support service for poor and marginalized section of the urban population in Bangladesh which require systematic evaluation.

Many studies have been carried out on various issues of microcredit programmes of different NGOs working in rural Bangladesh, but no systematic and comprehensive study has yet been conducted on CBO microcredit programme of Concern Worldwide. Concern has developed a number of sectoral programmes which are facilitated by its credit, training and technical support services and are implemented through CBO. This has inspired the researchers to conduct a study on the CBO microcredit programme of Concern Worldwide. This study is expected to generate reliable information regarding loan distribution, loan received, adequacy of loan, purposive use of loan, repayment aspects, and its impact on the livelihoods of the urban poor.

The present study aims at examining the effectiveness of CBO microcredit program, addressing loan receipt, its adequacy, utilization pattern, repayment performance, livelihood improvement of poor people and also to identify the factors affecting loan repayment by the respondents.

However, the specific objectives of the study were to; i) assess the socio-economic profile of the CBO beneficiaries in the study area; ii) determine the adequacy, utilization and repayment performance of CBO loan by the respondents in the area; iii) assess the impact of CBO loan on livelihood improvement of the beneficiaries in the areas.

METHODOLOGY OF THE STUDY

Sampling and data collection

Primary data were collected from different urban and sub-urban areas, namely; Patgudam, Adarsha and Malancha colonies of Sadar Upazila of Mymensingh district. After selection of the study areas, a list of current beneficiaries who have had loan under CBO microcredit programme of the Concern Worldwide for a period of more than three years were collected. The borrowers were selected by following purposive sampling method for the study. Data were collected during the period from July to August, 2007 and for the

period of April, 2006 to March, 2007. The sample of the study consisted of 50 women members. Among them, 30 were small traders, 12 were saloon workers and 8 were rickshaw pullers. Tabular and statistical analyses were mainly used to achieve the objectives.

Analytical methods

The statistical analyses were as follows:

Regression analysis: The linear regression model (Gujarati, 2003) used in the present study to evaluate repayment performance of the borrowers.

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

$$L_i = \ln\left(\frac{P_i}{1-P_i}\right) = \beta_0 + \beta_1 X_i + \ldots\ldots + \beta_k X_k + U_i$$

Where, P_i = Probability that socio-economic well being would be better off due to participation in the microcredit programme and ($1-P_i$) = probability that socio-economic well being would not be better off. Besides, for the dependent variable, a score of '1' was assigned to the positive response while a score of '0' assigned to negative outcome (indicating 'no' improvement took place). The selected seven variables (X_i) 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.

RESULTS AND DISCUSSIONS

Socio-economic profile of the respondents

The general socio-economic profile of the surveyed respondents is presented in Table 1. The average age of the members was between 35 and 36 years old. The majority of the respondents (96%) belonged to the active age group between 18 and 57 years. The family members of the respondent varied from 2 to 9. Average family size was of 5.30 persons, comprising 2.62 males and 2.72 females with an overall dependency ratio of 4.13. Family size indicates a large family structure and integrated family system. Average land holding per household was 0.19 ha including homestead area during the study period.

All of the respondents were able to sign their names as a pre-requirement to apply for microcredit. On the other hand, excluding family members below 7 years, 11.91% were illiterate, having no formal education, particularly the old persons and, 5% had above secondary level education in the young generation during the study period.

All of the members under survey were housewives by occupation. Borrowed microcredit was operated by their husbands or sons or any male member of the family.

Table 1. Socio-economic profile of the microcredit borrowers.

Particular	Minimum	Maximum	Mean	S.D.
Age (years)	18	57	35.36	5.88
Family size (persons)	2	9	5.30	1.61
Education level (years of schooling)	0	10	1.77	2.11
Total landholding (hectares)	0.02	0.21	0.19	35.56
Annual income (Tk.)	25000.00	72000.00	40885.30	7419.13
Annual savings (Tk.)	930.00	4360.00	2012.30	142.94

Exchange rate as of June 2008, US$1= Tk. 68.52 (Field Survey, 2008).

Table 2. Broad purpose of loan utilization.

IGAs	Business expenditure (Tk.)	Capital expenditure (Tk.)	Family expenditure (Tk.)	Total expenditure (Tk.)
Small trading	6143 (95.98)	-	257 (4.02)	6400 (100)
Saloon	6608 (94.40)	-	392 (5.60)	7000 (100)
Rickshaw pulling	-	7840 (98.00)	160 (2.00)	8000 (100)

Figures in parentheses indicate percentages of total (Field Survey, 2006).

Self-operation of microcredit enterprise by women members was a rarity. Main occupations of the household head were running a small business (60%), working in saloon (24%) and rickshaw pulling (16%) with various subsidiary occupations, such as, cloth vending, grocery shop, fish, milk, meat and vegetable selling during the study period. Few of the households (2%) were found to be employed in local factories and local NGOs. Average annual family income was Tk. 40885.30 with an average expenditure of Tk. 38873.00. Expenditure pattern of the respondents shows that most of the family income was used for various items of family expenditure in the study area.

The overall average amount of saving was estimated at Tk. 2012.30 during the year. The average savings of the small trading, saloon and rickshaw pulling respondents were Tk. 1850.00, 2587.00 and 1600.00, respectively.

Adequacy, utilization and repayment of microcredit

Adequacy of microcredit

Adequacy of loan shows the sufficiency of funds available to the borrowers to invest in productive activities. Findings showed that, the respondents in general, received 80, 82 and about 89% of the amount applied for under small trading, saloon and rickshaw pulling IGAs, respectively. CBO microcredit programme of Concern Worldwide followed a single loan policy and provide one loan at a time. Members may borrow again after full repayment of the first loan. Since all the members under investigation were comparatively better off prior to their membership, they were capable of borrowing the desired

amount of loan. Average loan size was Tk. 7133.33. The average amount of credit obtained by rickshaw pulling members was the maximum (Tk. 8000.00), while the minimum (Tk.6400.00) was received by the members of small trading respondents. Credit was given after 4 weeks of application submission. It is revealed that the amount of CBO loan from Concerned Worldwide depends on the financial status of clients.

Pattern of loan utilization

An investigation was made to see the utilization pattern of credit in which the respondents spent their borrowed money during the study period. In the present study, loan use has been classified broadly into three categories, that is; i) capital expenditure; ii) family expenditure; iii) business expenditure which are further discussed.

i) Capital expenditure: It was found that the borrowers have invested loan in capital expenditure to mainly purchase rickshaw. About 98% of the total loan was invested in capital items by rickshaw pulling respondents during the study period. The borrowed money was not invested in capital items by any of the small trading and saloon respondents.

ii) Family expenditure: Among the respondents 4, 6 and 2% of the total loan was utilized by small traders, saloon workers and rickshaw pullers respectively, for meeting various items of family affairs (Table 2). The family expenditure constituted purchase of food and clothes, medicare and payment of loan installment. It was apparent that a negligible proportion of loan was observed to have been used in family expenditure, showing a good

Table 3. Repayment of loan according to IGAs.

IGAs	Average amount repaid				Total repayment (%)
	Installment (No.)	Principal (Tk.)	Interest (Tk.)	Total (Tk.)	
Small trading	40	6400	768	7168	100
Saloon	40	7000	840	7840	100
Rickshaw pulling	40	8000	960	8960	100
All	40	7133.33	856.00	7989.33	100.00

(Source: Field Survey, 2006).

Table 4. Estimated values of regression coefficients.

Explanatory variable	Estimated value of the coefficient	t-value
X_1, Age of the respondent (years)	-4.84***	-1.89
X_2, Respondent's education (years)	-6.59	-0.87
X_3, Respondent's income (Tk.)	0.01***	1.95
X_4, Family size (No.)	-7.035*	-3.78
X_5, Respondent's forced saving (Tk.)	-0.05**	-2.12
X_6, Amount of loan receipt (Tk.)	1.11*	196.86
Value of R^2	0.99	-
Value of F	7410.70	-

* Significant at 1% level; ** significant at 5% level; *** significant at 10% level.

sign of proper loan use by the respondents in the study area.

iii) Business expenditure: Business expenditure was the main heads of small trading and saloon respondents. Small trading and saloon respondents was reported to have incurred about 96 and 94%, respectively of the total borroed money for business expenditure during the study period (Table 2).

It indicates that most of the loan money was utilized in business activities by small trading and saloon respondents.

Loan repayment

The mode of loan repayment of CBO microcredit pro-gramme is on weekly basis, and the total amount of loan along with interest is to be repaid in 40 equal installments, starting from the week after receiving the loan in hand. Eight weeks are introduced to avoid holidays and grace period of loan. Interest rate is 12% per annum.

The average amount of loan due for repayment was found to be Tk. 7168, 7840 and 8960 for small trading, saloon and rickshaw pulling respondents, respectively and 100% loan was repaid by all categories during the study period (Table 3). So, the overall loan repayment percentage observed during the study period was fully satisfactory.

Factors affecting the repayment performance of the borrowers

It is evident from Table 4 that the independent variables, age, education, income, family size, forced saving and loan receipt amount, jointly explained 99% ($R^2 = 0.98$) of the total variation for the respondents loan repayment performance. A multicollinearity test was conducted to examine the existence of high degree of association among the variables and the test indicated that, multicollinearity among the variables did not exist.

Regression coefficient of the respondent's age was found to be negative ($b_1 = -4.84$) and significant at 10% level. It indicates that repayment is negatively and signi-ficantly affected by age of the respondents, because, aged person's earning ability is relatively lower, hence low repayment of loan. Regression coefficient of edu-cational level was found to be negative ($b_2 = -6.59$) but not significant. It means no significant effect by the variable. The coefficient of the respondent's income was found to be positive ($b_3 = 0.01$) which is significant at 10% level. It indicates that repayment of loan tends to increase with increase in respondent's income. Respon-dent's family size's regression coefficient was found to be negative ($b_4 = -7.0326$) and significant at 1% level. It indicates that repayment of loan tends to decrease with increase in respondent's family size.

Regression coefficient of the respondent's forced saving was also negative ($b_5 = -0.016$) and significant at 5% level. It indicates that repayment of loan tends to

Table 5. Factors affecting timely loan repayment.

Factor	Member	
	No.	**%**
To get further loan	47	94
Self consciousness	45	90
Proper supervision by CBO staffs and Concern Worldwide field workers	41	82
Pressure of group leaders and other group members	12	24
Easy to pay by installment	39	78
Having more income by using loan	26	52

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

Table 6. Overall changes in the livelihood of the CBO microcredit borrowers.

Head	Increased	Same as before	Declined	Perception index (PI)	Rank order
Family income	46 (92.00)	4 (8.00)	0 (0.00)	96	1
Awareness	42 (84.00)	8 (16.00)	0 (0.00)	92	2
Assets	33 (66.00)	17 (34.00)	0 (0.00)	83	5
Food intake	30(60.00)	20 (40.00)	0 (0.00)	80	6
Health facilities	22 (44.00)	28 (56.00)	0 (0.00)	72	9
Clothing	25 (50.00)	25 (50.00)	0 (0.00)	75	8
Education	38 (76.00)	12 (24.00)	0 (0.00)	88	4
Furniture	40 (80.00)	10 (20.00)	0 (0.00)	90	3
Housing condition	13 (26.00)	37 (74.00)	0 (0.00)	63	10
Household saving	30 (60.00)	16 (32.00)	4 (8.00)	76	7
Sanitation	12 (24.00)	38 (76.00)	0 (0.00)	62	11
Using tube well water	6 (12.00)	44 (88.00)	0 (0.00)	56	12

Figures within parenthesis indicate % of total respondents who have changed their livelihoods (Field Survey, 2008).

decrease with increase in respondent's force savings. Coefficient of the respondent's loan received amount was found to be positive ($b_6 = 1.110$) as well as significant at 1% level. So, respondent's loan amount positively influences loan repayment performance. It indicates that repayment of loan tends to increase with increase in respondent's loan amount.

Factors affecting timely loan repayment

The respondents were asked to express the reasons which inspired them to repay the loan installments timely. Tabular analysis has been done to identify the relative contribution of various factors towards loan repayment performance which is shown in Table 5.

In this connection, six relevant questions were put to the respondents. Out of 50 beneficiaries, 94% reported that they repaid their loan in time with the hope of getting credit in future. Almost 90, 82, 78, 52 and 24% of the total respondents were observed to have repaid their loan on time respectively, due to self consciousness, proper supervision by CBO staff and Concern Worldwide field workers, easy to pay by installment, having more income

by using loan and pressure of group leaders and other group members in the programme activities during the study period.

Impact of CBO microcredit programmes on livelihood of the respondent households

Generally, microcredit is provided for self-employment projects that generate income, allowing the borrowers to care for themselves and their families. In order to assess the overall socio-economic changes in the livelihood, opinions of the microcredit borrowers were gathered regarding some of the indicators of socioeconomic well being. For better understanding of the level of particular item-wise changes in the livelihood of the borrowers, perception indices (PI) were computed and presented in Table 6. The PI was calculated by multiplying the frequency count of each cell of a degree of change with its corresponding weight, that is, 2 for "Increased", 1 for "Same as before" and 0 for "Declined". By adding all the values of each cell together, the score of PI was calculated. The value of PI ranges from 0 to 100 in this particular case where '0' indicates no improvement and

Table 7. Participation of women in household decision making.

Head of participation	Before (%)			After (%)		
	Men only	Women only	Jointly	Men only	Women only	Jointly
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 (Field Survey, 2006).

'100' implies maximum improvement.

The PI of family income (96) indicates notable improvement and rank order 1. About 84% of the respondents were found to have improved their awareness of social, economic and environmental aspects (Rank 2) and the rest of the respondents reported no change. Concerning all members, every 1 out of 3 respondents felt that participation in microcredit programmes has increased their asset accumulation (Rank 5) and 60% respondents experienced a notable change in their food intake.

On the other hand, 44, 50, 76 and 80% of the borrowers opined that their health facilities, clothing, education (Rank 4) and furniture possession (Rank 3) had been improved, respectively. Despite a significant rise in family income, housing conditions of 74% of respondents remained the same as they were before. The fact is that, all the members used to live in semi-pucca or tin-shed houses prior to their membership. Concerning savings behavior, 60% of the respondents were able to increase their level of saving. Weekly forced saving with NGOs helped them to increase their level of saving. The remaining respondents thought that investing in productive purposes was more profitable than saving with NGOs; because microcredit providers offer a maximum of 8.5% interest on saving balance. As a result, their savings converted into investment. All of the members used to drink arsenic-free tube well water prior to their membership, because, use of arsenic-free pure drinking water is universal.

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 (Akter, 1996). The CBO microcredit programme is expected to make a breakthrough in this very aspect and so, attempted to examine how far the CBO microcredit programme could explore the possibility of women's participation in decision making, relating to family affairs. Table 7 depicts whether any change in decision making status of women has occurred because of involving in the CBO microcredit programme, in the study areas.

It was found that, the male dominated role in household affairs has been reduced to a greater extent, after joining of women in CBO microcredit programme. The activities where the male members previously took monopoly decision could realize that, females should also join in decision making process. The result, worth mentioning in this aspect, is evident in the case of purchasing rickshaw (100%), daughter's marriage (62%), housing (56%), business (54%), children education (50%) and taking care of children (40%) during the year of study. It can therefore be said that, the CBO loan operation has been helping the potential women empowerment in the society wherein, the CBO 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 may at least be a new addition to existing knowledge in this respect.

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 8. 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. The odds ratios were 3.02, 9.37 and 3.22 for food intake, clothing and sanitation, respectively, meaning that the likelihood of improvement

Table 8. Results of logistic regression on the socio-economic well being.

Variable	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	
Negelkerke R^2			0.76	

*Significant at 5% level; **significant at 10% level.

appeared to be 3.02, 9.37 and 3.22 times higher for those respondents who increased expenditure on these items, due to income earning from CBO microcredit programme 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 microcredit programme. In all the indicators, namely, the different items of livelihood, such as, 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. The present study has also identified several problems and constraints, which were faced by the respondents. The problems faced by the respondents were insufficient credit, high interest rate, lack of storage facilities, lack of marketing facilities, etc.

Conclusion

CBO microcredit programme of Concern Worldwide could well reach the target groups. The respondents received loan, mostly in accordance with their requirements. The programme could positively contribute to reducing poverty in the study areas. All respondents under study were all along, regular in repaying their installments. This finding leads to the conclusion that the loan repayment

performance of the CBO microcredit respondents was highly satisfactory because of purposive utilization of borrowed money in productive purposes. The CBO microcredit programme positively changed some of the socio-economic variables of the beneficiaries including women's decision making ability.

REFERENCES

Akter S (1996). Rural Women in Microcredit Program for Poverty Alleviation in Bangladesh Participation and Constraints to their Activities. Bank Parikrama. BIBM, 20 (102): 53-68.

Concern Worldwide (2007). Annual Report. Concern Worldwide Bangladesh. Dhaka, Bangladesh.

Hasan S (2010). Desh e Aarai Lac NGOs!. The Daily Prothom-Alo. Dhaka, Bangladesh, 15th January, 2010.

Gujarati DN (2003). Basic Econometrics. Fourth Edition, McGraw-Hill Inc, Singapore.

MOF (2009). Economic Review. Finance Division, Ministry of Finance, Government of the People's Republic of Bangladesh. Dhaka, Bangladesh.