

Impact of Micro-Credit to Reduce Poverty: A Case Study of Mymensingh

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Abstract: *Poverty reduction is a fundamental goal of economic development. The objective of this paper is to examine the impact of micro credit to reduce poverty at Trishal Upazila in Mymensingh. For the purpose of the study a survey was conducted on 100 microcredit receivers. Data have been collected from 100 respondents in Trisal Upazila through structured questionnaire. Tabular method is used to analysis the impact of microcredit on poverty. Study shows that microcredit disbursed through major NGOs including Grameen Bank, BRAC, ASA plays an important role to reduce poverty by generating employment, improving level of living by better education, better health facilities, and higher health expenditure.*

Key words: Poverty, Micro credit, Microfinance Institutions (MFI), Micro Credit Regulatory Authority (MRA).

1. Introduction

“Poverty means a critical threshold of income, consumption and access to goods and services below which individuals are declared to be poor” (Roy, D, 2012). Poverty is a condition where people's basic needs for food, clothing, and shelter are not being met. Poverty is generally of two types: (1) Absolute poverty is synonymous with destitution and occurs when people cannot obtain adequate resources measured in terms of calories or nutrition to support a minimum level of physical health. (2) Relative poverty occurs when people do not enjoy a certain minimum level of living standards as determined by a government and enjoyed by the bulk of the population that vary from country to country, sometimes within the same country. Relative poverty occurs everywhere, is said to be increasing, and may never be eradicated. In developing country, poverty is abysmal. Bangladesh is a

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developing country where poverty was a major problem but over the last 30 years, Bangladesh has been successful in arresting poverty at a remarkable rate. Overall poverty was 57 per cent in 1991 which reduced to 32 per cent in 2012, a 1.25 per cent reduction rate per year. Similarly, extreme poverty reduced from 41 per cent to 18 per cent during the same period. On the other hand, in rural areas where more than 70 per cent of the country's 150 million people live, overall poverty reduced from 59 per cent in 1991-92 to 35 per cent in 2012. The economy of Bangladesh was growing at more than 6 per cent in recent years (World Bank 2012). Besides GDP growth, other factors contribute to poverty reduction. This paper examines whether microfinance expansion has helped reduce poverty. More specifically, we are interested in finding out if the huge microcredit expansion helped contribute to the country's poverty reduction during this period. Bangladesh microcredit sector is regarded as the largest and most efficient in the world. It still leads the global microfinance industry in terms of both its total size and its productivity. Microfinance has been working for about three decades to give poor and resource less people of Bangladesh, easy access to financing facilities and hence in the long run eradicate poverty. It started operation in Bangladesh with support from Bangladesh bank and donors' grants during late 1970s. At present, several efficiency indicators are quite in favor of Bangladesh Microfinance Institutions (MFIs). Initially microfinance activities were focused on social welfare and mostly done by NGOs. They are thought of having an enormous contribution to the lives and the livelihood of common people of our country. The industry has evolved from its initial focus on credit, disbursing standardized loan products and collecting obligatory savings to the products. This sector has now attained maturity and entered into dynamic phase in terms of financial inclusion, positive impacts and sustainability.

In Trishal upazilla the total population is 471,000. In this area 30 micro finance institutions are works among them four main types of institutions involved in microfinance activities. In these credit sectors, total loan outstanding is around TK. 129 crore and disbursement TK.147 crore. The total clients of this sector is 78,858 that accelerates overall economic development process. The clients is 16.74% of the total population.

Credit services of this sector can be categorized into six broad groups: i) general microcredit for small-scale self employment based activities, ii) microenterprise loans, iii) loans for ultra poor, iv) agricultural loans, v) seasonal loans, and vi) loans for disaster management. Loan amounts up to BDT 50,000 are generally considered as microcredit; loans above this amount are considered as microenterprise loans.

In view the above facts, this study attempt to exams impacts of micro credit to reduce poverty in Trishal Upazilla. The study uses both Secondary and Primary data based on field sway in 2014.

2. Literature Review

Latif (2001) examined the relationship between microcredit and savings of rural households in Bangladesh. He studied on “Credit Programmes for the Poor” He found that the microcredit programmes of the MFIs, targeted to alleviate poverty by supplying small credit to rural poor in self-employment activities. The result from this study is positive role in influencing household’s savings. He concluded that microcredit programmes should continue and should be extended to the landed category as well.

Islam (2008) evaluated the impact of microfinance on household consumption using cross section data set from Bangladesh. The overall results indicate that the effects of micro loans are not robust across all groups of poor household borrowers. It appears that the poorest of the poor participants are among those who benefit most. The impact estimates are lower, or sometimes even negative, for those households marginal to the participation decision.

Suborno Borua (2009) disseminated those problem mentioned and further added some problematic issues like dependency on a single revenue generation model, multiple borrowing or overlapping, severe lack of training and education, lack of innovation, misuse of credit by borrowers, lack of central database, sectoral disbursement without technical expertise, lack of intention to serve in the apparently inaccessible location, etc.

There are some studies relating to target of micro finance programs such as Grosh and Baker (1995), Matin (1998), Zaman (1998). The major impact studies on micro finance are Hossain (1994 & 1998), Nigar Nargis (2008), and S. R Osmani (2012). Most studies show positive impacts on income, saving and employment of the poor, women in particular. Sustainability is vital for survival of micro finance institutions but only a few studies are undertaken to address the issue (Khalily (1991), Khandaker, Khalily and Khan,(1995); Conning,(1999) and Khalily, Imam and Khan, (2000).

3. Salient Features of Microcredit Program

- Microcredit is used mainly in off-farm income generating activities. Small business accounts for the highest share (43.02%) followed by livestock (18.11%), agriculture (12.23%), fisheries (4.91%), food processing (3.78%) and others (3.03%).
- According to the size of institutions in terms of the number of borrowers served, MFIs are grouped into four major types: very large, large, medium and small, three of the largest MFIs, viz. GRAMEEN BANK, BRAC & ASA, are serving over 78,858 borrowers .These institution are control over 80 percent of the total clients, 74% of the total loan disbursement, and 65% of the total loan outstanding.

Table - 1: Coverage of Microcredit Program as of December 2013

Name of institution	No. of Clients	Loan disbursement (In Crore Tk.)	Loan Outstanding (In Crore Tk.)
Grameen Bank	42624	53.01	49.29
ASA	13400	34.89	16.89
BRAC	7834	19.59	18.16
others	15000	40.35	45.22

Sources: ASA, BRAC, Grameen Pnone

- Both loan per borrower and outstanding per member are increasing gradually. The loan outstanding per borrower has increased over the years and average growth rate of loan disbursement per borrower is around 34 percent (from Tk.13848 in 2010 to Tk.18260 in 2013) and outstanding per borrower is around 49 percent (from Tk.10938 in 2010 to Tk.10938 in 2013).
- Most of the NGO-MFIs have negative net surplus .There are different reasons for the negative surplus, the major causes of losing are: (i) High staff salary (ii) Low repayment rate (iii) Low service charge realization (iv)High loan loss provision (LLP) (v) High depreciation charge and (vi) Poor fund management.
- Microcredit Regulatory Authority (MRA) monitoring to these NGO's regularly under the "Microcredit Regulatory Authority Act -2006" to promote and foster sustainable development of microfinance sector.

Indicators Used in Microfinance Programs

One of the contentious issues has been the definition of poor to include them under a microcredit program. The targeting of the poor is important to ensure that the loan reaches the poor not the wealthier families .The common indicators that provide loans are given below:

- Nutritional definition: Often poverty, poverty line and poor people are categorized according to calorie intake, which is a good definition for analytical purpose. For example, a person's income to afford daily food consumption for at least 1800 Kcal is categorized as hardcore or extreme poor. But this definition has little application to a credit officer of an MFI who is interested to quickly identify such persons to include under hardcore poor financial services program. To circumvent the practical difficulties more operational but proxy indicators or criteria are devised that may approximately find the same group of people. For example, families without any homestead land or strong house, any male member or earning member, very irregular income, live on charity etc.

- **Land-based definition:** Microcredit programs in Bangladesh have traditionally used land ownership criteria to determine target group. The most common definition is landless and asset less people as the target population. Landless is defined as any person owning less than 0.5 acre of land. But sometimes MFIs also see the quality of land, that is, this definition is relaxed according to geographical areas. Similarly marginal, small, medium and large farmers have been defined according to land size. This definition can very easily be applied.
- **Housing characteristics:** Quality and size of house has been very popular criterion in microcredit sector to determine qualification of a person for regular microcredit program. House is a very visible asset.
- **Income criterion:** Often income criterion is mentioned in various documents as determining criteria for inclusion in or exclusion from a program.
- **Profession:** Profession-based indicators are easy to identify and apply such as: small and marginal farmers, day labor, weavers etc. The current practice is to find out a more or less a homogeneous group of village women who are willing to take small loans, meet once a week and follow other rules and regulations. It boils down to accepting any woman who is happy to join a group and remain happy with small size loan. No formal selection process is applied or necessary.

Interest Rate of Microfinance institutions

The rate of interest on loans varied over the period of time. Grameen Bank used to charge 16% (effective rate) same as commercial banks' lending rate. But it then increased to 18% then to 20% to reflect its cost of operations and cost of fund. Incidentally Grameen's rate of interest on loan is the second lowest and interest paid on savings is highest in the sector. That has been possible due its economies of scale and higher average loan size due to long microcredit operations, longer than any other organizations. ASA and BRAC continued to charge 15% (flat) rate. But ASA and BRAC later reduced their rates to 12.5% for a short period but both moved to 15% in 2013 to reflect rising cost of operations (ASA) and cost of fund (BRAC).

Table -2 provides interest rates of prominent MFIs both on savings and credit products:

Table-2: Interest rate (May 2013)

Organizations	Interest on credit products (%) ['flat' rate]	Approximate effective rate on credit products (%)	Interest on savings (%)
ASA	14.4	28.8	<5%
BRAC	15	30	<5%
Grameen Bank	10	20	Regular savings: 8.5 Time deposit: 12.5
Other MFIs	15	30	4-6

Sources: ASA, BRAC, Grameen Phone 2014

Activities of Borrowers Financed by Microcredit Institutions in Trishal

Of the various employment activities (mainly self-employment), small-scale business/trade is the most important, accounting for more than 40% of fund disbursed by the MFIs. On the other hand agriculture, food processing, transport, housing and livestock sectors were getting relatively small portions of fund. This is shown in Table-3.

Table -3: Sub-sector-wise microfinance disbursement of NGO-MFIs

Sub-Sector	% disbursed up to June 2000	% disbursed up to December 2000	% disbursed up to June 2001
Agriculture	12.63	12.77	12.23
Fisheries	4.74	4.48	4.91
Food Processing	6.99	7.11	3.78
Small business	41.31	41.81	43.02
Cottage industries	3.03	3.08	3.03
Transport	3.42	3.49	2.78
Housing	1.28	1.30	1.16
Health	0.39	0.37	0.45
Education	0.02	0.02	0.08
Livestock	20.91	20.53	18.11
Others	5.28	4.71	10.45
Total	100	100	100

Sources: Respective organizations, 2014

The table shows that, a transformation is taking place in the economic activities of the poor households in the rural areas. In the initial years of microcredit operation during eighties, the traditional sector including fisheries and poultry accounted for a larger segment of self employment activities of the poor.

Findings of Study by field-survey

Clients of microcredi

A total of 64 branches serve these members/clients. The total estimated in ASA (18%), BRAC (9%) and Grameen Bank (30%). The rest of 43% is under about 34 smaller MFIs that shows heavy concentration of these three organizations. The important issue is that the three MFIs have become so big that microfinance sector cannot afford any one of them to fail. Due to resource and management constraints the smaller MFIs are not expected to grow fast to increase market share. Such skewed structure is expected to continue.

Table-4: Total number of clients (%)

No. of respondent	Grameen Bank	BRAC	ASA	Others
100	30	9	18	43

Source: Field survey, 2014

Total loan received by the borrowers

In case study examines that, 32% persons receives 10000-19999 taka, 30% persons receives 20000-29999 taka, 17% persons receives 30000-39999 taka, 11% persons receives 40000-49999 taka and 10% persons receives 50000-above. Most of the people are poor and landless. For that, institution gives low amounts of loan.

Table-5: Total amount of loans (Thousands)

No. of respondent	10-19	20-29	30-39	40-49	50-above
100	32	30	17	11	10
percents	32%	30%	17%	11%	10%

Source: Field survey, 2014

4. Economic Impacts of Microfinance

(a) Income

The survey found the average annual income of participant households to be higher than before taking loans. Self-employment activities had more than 50% contribution to total income for the participants as against 43 percent in case of non-participants. Compared to non-participants the participant households were better able to cope with flood, sustain their income, to achieve higher purchasing power and consumption level.

Table-6: Total income before loans (%)

No. of respondent	Name of organization	0-49000	50000-99000	100000-149000	150000-199000	200000-above
100	Grameen Bank	2	14	11	-	-
	ASA	1	10	3	4	-
	BRAC	-	6	2	1	-
	Others	-	19	19	4	1

Source: Field survey, 2014

Table-7: Total income after loans (%)

No. of respondent	Name of organization	0-99000	100000-149000	150000-199000	200000-249000	250000-above
100	Grameen Bank	2	6	4	5	1
	ASA	4	11	7	2	3
	BRAC	-	5	2	1	1

Source: Field survey, 2014

(b) Wage

Wage earning contributed about 23 percent of total annual income for the poor households. Microcredit helped participant households to earn about 8 percent higher income than that of the non-participants.

(c) Food Security

The case study finds the program participants, due to greater access to share cropping, had better food security therefore expenditure level increased than out of loans. And about 26 percent of rice consumption increased from their own production.

Table-8: Food Expenditure (%)

No. of respondent	Period of time	0-49999	50000 -99999	10000-149999	150000-above
100	Before loans	25	56	17	2
	After loans	9	55	28	8

Source: Field survey, 2014

(d) Employment

The participant households are better able to ensure more employment on own farms due to their better access to the land rental market. Wage and self-employment in non-agricultural sector is also higher for the participant households due to their access to microcredit program.

(e) Assets: land and non-land

Average size of land owned by participant households is higher than the non-participants. Higher percentage of program participants own poultry, goat/sheep and cows. A higher percentage of the participants own bicycles, irrigation equipment and rickshaw/van thus showing higher asset ownership of the participants.

(f) Investment

Table -9 presents areas of microcredit investments based on information from a large number of MFIs as mentioned in the loan application by the borrowers. The trend over the last five years has remained the same: trade and transportation (45.18% in 2013) topped the list followed by agriculture (24.85%). Within agriculture the highest amount went for livestock (11.85%), followed by crop production (9.89%), and fisheries (3.12%). In coming years, the crop sector is expected to grow larger because of expansion of microcredit in this sector. But one must be aware that the rural economy is not diversifying fast, which is precisely the reason

of similar pattern of investment.

Table -9: Activities financed by microcredit (%)

Sectors	Up to 2013
A. Productive Activities	48
A1. Agricultural Sector	48
a) Crops	15
b) Livestock	31
c) Fisheries	2
A2. Processing and Industries Sector	0
B. Trade and Transport Sectors	36
a) Small business	31
b) Transport	5
C. Social Sectors	12
a) Health	4
b) Education	2
c) Housing	6
D. Others	4
Total (%)	100

Source: Field survey, 2014

5. Social and Other Development Impacts

(a) Health and Nutrition

There is positive program placement effect on nutrition status. Sample survey shows that average health expenditure of the clients increased after they had taken loan.

Table-10: Health Expenditure (%)

No. of respondent	Period of time	0-9099	10000 -19999	20000-29999	30- above
100	Before loans	54	26	20	-
	After loans	34	40	23	3

Source: Field survey, 2014

(b) Sanitation and Drinking Water

The case study finds small positive influence of participation on waste disposal and use of sanitary toilets. The use of pure drinking water from hand tubewell was found universal.

(c) Education expenditure of Children

The case study found that, program participation increases the expenditure on their children's education.

Table-11: Educational Expenditure (%)

No. of respondent	Period of time	0-9099	10000 -19999	20000-29999	30- above
100	Before loans	38	37	18	7
	After loans	37	20	25	27

Source: Field survey, 2014

(d) Empowering Women

Microcredit programs' main target is women. There are strong evidences that, microcredit programs contribute to women's empowerment. Now women's are increased in decision making in the areas of family planning, children's marriage, buying and selling of properties and sending daughters to school.

6. Problems Policy Options of microcredit programs

Microfinance is the provision of financial services (Loans, savings, insurance) to people on a small scale, such as businesses with low or moderate incomes. Despite good intentions, microfinance still has several hurdles to cross over:

(a) Problems

Multiple borrowing or overlapping: Overlapping or multiple borrowing by an individual borrower or household is considered as an alarming issue or problem, according to the respondents.

Misuse of credit by borrowers: As in most of the cases MFIs do not review what is the borrower doing with the money borrowed. Misuse or unproductive use of credit is a usual practice.

Lack of innovation: From almost the beginning till today almost every MFIs follow Grameen Model of micro financing.

Severe lack of training and education: The research and training capability of MRA is poor. MFIs are facing many emerging issues to meet the present and

future challenges.

Reaching economically backward region: MFIs/ NGOs could not effectively reach the people of economically backward regions of the country. As a result, MFIs showed poor performance in economically backward areas.

Targeting women as borrower and its Social Dilemma: Most of the microfinance borrowers are women. In usual practices rural community does not appreciate women to go in public and participate in financial activities. Inappropriate targeting of poor households is a major problem to the microfinance providers.

Higher interest rate: High cost involved in small loan transactions for Microcredit providers. Higher interest rate is a financial disadvantage of microfinance. Due to higher interest rate charges, Grameen Bank has been criticized, as the interest rate is roughly 32.5% (Field survey), while the interest of conventional banking is 10-15% in Bangladesh.

Less attention to ultra poor: Micro financing is to deal with poor, so does it. But there are not much significant interventions for the ultra poor segment.

Lack of capital: Although the microfinance sector has reported an impressive growth, there is a lack of capital for some of the microfinance institution in the country.

Insufficient repayment time by the microfinance institution to the borrower: Most of the micro-loans are given for the start of micro-enterprises for a short period and the loan would have to be rapid from the cash flows generated from the business.

(b) Policy

Microfinance institutions have been viewed as an important tool in poverty alleviation. It is an important sector which would improve the living conditions of the poor and lead to the development of the country. Some of the policies are hinted below:

- ☞ To enhance the outreach in remote area and provide fast services to existing customers.
- ☞ Loans should be given more amounts in first time and loans installments should be paid less amount.
- ☞ MFIs should enhanced supply of more funds to serve graduated clients and unbanked poor people to meet various needs.
- ☞ Rate of interest should be decreased. The interest rate is high as compared to that of commercial banks. NGOs charge such interest rate to cover operational cost with a view to achieving sustainability and attracting huge commercial funds into microfinance industry by improving the technology model used by microfinance institutions.

- ☞ The microfinance institutions should ensure that the loans are given for useful purpose which would earn a living for the household and not for uneconomic purpose.
- ☞ To make MFIs more transparent, accountable and people oriented, new measures may be taken to include representative from micro borrowers and nonpolitical highly honored professionals having good grounding on microfinance and its mission.
- ☞ Multiple borrowing or overlapping should be restricted by the borrowers. Central data base will remove the overlapping problems.
- ☞ Research and training program should be extended. To meet the present and the future challenges it is necessary to strengthen research and training capability of NGOs.

7. Concluding remarks

This study aims to the study impacts of micro credit to reduce poverty in Trishal Upazilla. We conducted a field survey to collect data. In Trishal, microfinance institutions now play an important role for the improvement of poor people's life. Our findings from questionnaire survey show that most of the poor people in Trishal upazilla are covered under microcredit facilities. The major microfinance institutions are Grameen Bank, ASA, and BRAC played a vital role for the uplift of the people of study area. Study shows that microcredit disbursed through major NGOs including Grameen Bank, BRAC, ASA plays an important role to reduce poverty by generating employment, improving level of living by better education, better health facilities , and higher health expenditure .

References

1. BRAC (2014). BRAC At a Glance March 2014.
2. Grameen Bank (2013). Annual Report 2013, Dhaka.
3. Grameen Bank (2014). Grameen Bank Monthly Report December 2014.
4. ASA (2013). BRAC Annual Report 2013
5. BRAC(2013) . BRAC Annual Report 2013
6. Latif, M. A., 2001, "Microcredit and Savings of Rural Households in Bangladesh", *Bangladesh Development Studies*, 27, 1, 51-71.
7. Islam, A., 2008, Who Benefits from Microfinance? The Impact Evaluation of Large Scale Programs in Bangladesh, Discussion Paper 29/08, ISSN 1441-5429, Department of Economics, Monash University Clayton Vic 3800 Australia
8. Barua, Shuborno, (2009), Microfinance industry and problems confronting it, *The Financial Express*, retrieved. <http://www.thefinancialexpress-bd.com/2009/01/31/57470.html>.
9. MRA (2013), *NGO-MFIs in Bangladesh*, Volume7, Micro Credit Regulatory Authority, Dhaka, Bangladesh.
10. Conning J, 1999: "Outreach, sustainability and leverage in monitored and peer-monitored lending", *Journal of Development Economics*, Vol-60, No.1, October, 1999.
11. Grosh and Baker,1995: "Proxy Means Tests for Targeting Social Programs: Simulations and Specialization", LSMS Working Paper No.118, World Bank, Washington, DC.
12. Hossain, M. 1984: Credit for the Rural Poor, The experience of Grameen Bank in Bangladesh, Research Monograph No. 4, BIDS, Dhaka.
13. Hossain, M. 1988: Credit for Alleviation of Rural poverty: The Grameen Bank in Bangladesh', Research Report 65, International Food Policy Research Institute, Washington, D.C.
14. Khalily, Imam and Khan: "Efficiency and Sustainability of Formal and Quasi-formal Microfinance Programmes"- An Analysis of Grameen Bank and ASA, *Quarterly Journal of The Bangladesh Development Studies*, BIDS, VOL-XXVI, June-Sept. 2000.
15. Khandker, S.R 2003: Microfinance and Poverty: Evidence Using Panel data from Bangladesh, World Bank Policy Research Working Paper 2495, Washington DC, USA.

16. Khandker, S.R, Khalily, B and Khan, Z. 1995: *Credit Program for the Poor; Household and Interhousehold Impacts and Program Sustainability* by BIDS and the World Bank.
17. Meyer, Nagarajan and Dunn, 2000. "Measuring Depth of Outreaching", *Quarterly Journal of Bangladesh Institute of Development Studies* (BIDS), Vol-XXVI, July-September, 2000.
18. S. R. Osmani (2012): "Asset Accumulation and Poverty Dynamics in Rural Bangladesh: The Role of Microcredit" Working Paper No.11, Institute of Microfinance (InM), Dhaka.
19. Roy. Debraj, (2012) *Development Economics*, Oxford University press.