

# The Impact of Microcredit on Household Expenditure Patterns of Rural Women Borrowers: A Comparative Study on Government Organization and Nongovernment Organization of Bangladesh

[Bohi Shajahan, Samia Shabnaz, Tahsina Khan]

**Abstract-** Microcredit is a powerful tool which contributes significantly for alleviating poverty and improving living standard for sustainable development of the rural women. In Bangladesh several government and nongovernment organizations are engaged in providing microcredit facilities. This study aims to compare the government and nongovernment organizations microcredit interventions have more impact on the expenditure pattern to improve the living standards of respondent. A total 172 rural women borrowers were interviewed based on structured questionnaire. The study revealed that although the income level of the borrowers of both the organization is same, but the Government organization's borrowers are spending more on various sectors of household expenditure to improve the living standard. The microcredit programs can be made more effective by charging a reasonable interest rate and by adjusting the microcredit policy.

**Keywords:** Microcredit, Expenditure Pattern, Rural Women Borrowers, BRAC, BRDB.

## I. Introduction

Micro-credit has come a long way since its start by Professor Yunus, Managing Director of Grameen Bank, in 1974 in Jobra, a village in Chittagong of Bangladesh. The strength of micro-credit lies in its ability to organize idle women into a productive workforce with their proven creditworthiness (Chavan and Ramakumar, 2002). Micro-credit plays an important role for accelerating economic growth in any developing country. Women constitute around 70% of the world's poorest people. The Micro-credit Summit Campaign Report 2009 (Harris, 2009) states that as of December 31, 2007, 3,552 microfinance institutions reported reaching 154,825,825 clients, 106,584,679 of whom were among the poorest when they took their first loan. Of these poorest clients, 83.4 percent, or 88,726,893, are women.

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Micro-credit is a system of small loans for income-generating activities, which enable poor communities to gain some economic stability. The system is carefully planned to provide people with the resources they need to improve their economic status, without encouraging debt. Micro credit is one of the most important factors for enhancing socio-economic development of the rural poor. Micro credit is considered now not merely an instrument for credit extension to the poor borrowers but also a movement to emancipate the poor especially women to alleviate their poverty, improve their quality of life, build their capacity and awareness and to integrate them economically and socially into the mainstream of the economy. (Sultana and Hasan, 2010)

In Bangladesh, GOs and NGOs play the most important role in distributing micro credit to clientele to overcome poverty and helping the poorer sector to uplift their situations that are living below the poverty line. Among the NGO's in Bangladesh Rural Advancement Committee (BRAC) established in 1971 is one of the largest microcredit providers. BRAC organizes landless groups of 30-40 women into self-selected groups commonly known as village organizations (VOs). BRAC provides two different microfinance products: micro-loans (group-based, exclusively for women) and micro-enterprise loans (individual loans for bothmen and women) under three different schemes which are Dabi, Unnoti, and Progoti. Group based small loans are particularly designed for the lower end poor to assist them in undertaking income generating activities. Micro-enterprise loans are available for small entrepreneurs to offer scope for expanding their businesses and capital base (BRAC, 2007).

Bangladesh Rural Development Board is the prime government agency engaged in rural development and poverty alleviation. BRDB basically operates by organizing the small and marginal farmers into cooperative societies for increasing agricultural production through improved means and by forming formal or informal groups of landless men and distressed women to promote income generating activities in the rural areas. There are many poverty alleviation programs of BRDB out of which Integrated Poverty Alleviation Program (IPAP) is one of the successful programs targeting the rural women. Under the auspices of Bangladesh Govt. BRDB launched three programs at a time namely Small Farmers & Share Corps Development Program (SFDP), Self-Employment Program of Women for Poverty Alleviation Program (SEPWPA) and Integrated Poverty Alleviation Program (IPAP) during 2003-04. Afterwards these programs were unified being entitled "Integrated Poverty Alleviation Program (IPAP)" and

started operation since July 2006. The aims of the program is to form informal groups, imparts skill training, self-employment, accumulation of own capital through thrift deposits, supply of micro-credit for income generating activities, raise awareness and rebuild the confidence of the poor, human resource development, up-keeping environment and ensuring the sustainability of the previously completed projects under BRDB. At present, IPAP is being implemented in 450 upazilas and is planned to be expanded in all the upazilas of the country.(BRDB, 2013)

Several research have been conducted to evaluate the impact of micro credit on house hold expenditure pattern of rural women borrowers of the NGO's but very few research have been done on the comparative analysis of government and nongovernment organization. The objective of this research is to

Compare the impact of microcredit on selected household expenditure patterns of the rural women borrowers under BRAC and BRDB.

The rest of the paper is organized as follows. Section II focuses on the previous studies done related to impact of microcredit on income and expenditure. Section III discusses the data and methodology. Section IV presents the analysis of the study and conclusion follow in section V.

## **ii. Literature review**

Microcredit have brought millions especially women out of poverty and prompted economic sustainability. Microfinance clients have been able to increase their household income, decreased economic vulnerability and in some cases wipe out poverty completely (Glazer, 2010). By using the loans provided by numerous MFIs, rural women engage themselves successfully in various productive activities to earn money. The additional money earned by women increases household's disposable income that improves the consumption patterns and lifestyles of the rural families. Micro credit program has significant impact on income and economic security on the socioeconomic lives of rural women. It increases income and helps the women to spend more for the development of their lives and families. It helps to increase household income that improves the consumption patterns and lifestyles of the rural families. (Hossain et al. 1992; Navajas, et al. 2000)

Ghalib, Malki & Imai (2011) in their research confirmed that microfinance programs improved significantly in household income, expenditure on healthcare, clothing, water supply and building a quality of dwelling house. Further study also reveals that borrower's income and their contribution to the family expenditures increased significantly after joining MFIs (Kamal, 2012). In addition, they have been enjoying better nutrition, health facilities and greater empowerment as a result of microfinance operations (Sowpe 2005). These observations were supported by the findings of an evaluation study commissioned by the Asian Development Bank (ADB 2007) on the effect of microfinance operations on rural households and the status of women of Bangladesh, Philippines and Uzbekistan. The study concluded that the microfinance projects had positive impacts on the status of women by generating higher volume of cash in the household, greater involvement in making major expenditure decisions and making savings.

Pitt and Khandker (1998) carried out a survey in 1991/1992 involving about 1800 households in Bangladesh and found that for every 100 taka borrowed by a woman, household consumption expenditure increased by 18 taka. For male borrower the figure was 11 taka. The study examined programs of BRAC, Grameen Bank and Bangladesh Rural Development Board (BRDB), a public sector organization. The findings revealed that per capita expenditure has increased due to microfinance among the borrowers of all these programs. Household's net worth has increased too. (Khandker, Shahidur1998). A BRAC research findings showed that among the BRAC members there has been gradual improvements in the indicators such as wealth, revenue earning assets, value of house structures, the level of cash earned, per capita expenditure on food and total household expenditure (Husain, 1998).

Women's participation in such programs increased their mobility to visit market place for buying products, medical center for medication, and cinema hall for watching movie, other houses in the village, and outside village for more relations. It enhanced the ability to make small and large purchases. Small purchases include small items used for daily in preparation for the family (e.g., kerosene oil, cooking oil, spices), for oneself (e.g., hair oil, soap, glass etc), buy ice-cream or sweets for the children. The large purchases are related to pots and pans, children clothing, own clothing (e.g., Saries), family's daily food etc. the ability to major household decisions is concerned with repairing and innovation of house, buying animals, lease land, buy land, boat, rickshaw etc. (Hashemi, et al., 1996)

Using an alternative approach, Morduch(1998) finds no evidence of increases in consumption using the same data. However, he does find that micro-credit contributes to reducing household vulnerability, since consumption variability is 47% lower for eligible Grameen households, 54% lower for eligible BRAC households and 51% lower for eligible BRDB households compared to a control group. This consumption smoothing is driven by income smoothing as evidenced by the significantly lower labor supply variability experienced by micro-credit members compared to the control group

Chemin (2008) applied the propensity score matching (PSM) technique to evaluate the impact of participation in microcredit programs on a number of outcome indicators. He found that microfinance had a positive impact on participants' expenditure, supply of labor and male/female school enrolment.

According to the research of Patel (2014) the impact of microcredit varies depending on the type of expenditure. When it comes to food expense impact of microcredit is high however when considering the expense of education and healthcare the impact of microcredit though positive but still not significant. Microfinance is slowly but surely changing the economic status of its members.

## **iii. Methodology**

This study attempts to compare the impact of income and expenditure of rural women borrowers towards microcredit intervention of both Government and Non Government organization. The analysis of this research is based on primary and secondary data. The primary data was

collected based on structured questionnaire. Extensive Micro credit research papers of academicians and practitioners are evolved from renowned international journals, (PROQUEST, EMERALD, EBSCO, IEEE, ACM, JSTOR, Science Direct, etc) annual reports, online database, digital libraries, books and conference papers. The impact of microcredit program was discussed in the literature review.

Bangladesh is divided into 64 administrative districts. The Kaliakoir Thana of Gazipure District was selected because of time and budget constraints. The research focused of the “DABI” program of BRAC and “Integrated Poverty Alleviation Program” of BRDB. Three criteria used to select the program was that the program should provide microcredit, the target should be rural women and the mode of repayment of loan should be weekly installment. In order to select the target respondents from each program the criteria used were the age and duration of involvement in the organization. The Age limit was set from 18 to 50 years and the duration of involvement in the organizations was more than 1 year and less than 4 years. These criteria narrowed the number of eligible number of respondents to 306 (N = 306 households). The total number of women borrowers interviewed is 172 of which 94 was from BRAC and 78 from BRDB. The sample was selected using simple random probability sampling method. The analysis reported below is based on a household-level survey of micro-credit program participants carried out in 2013 . The data was collected through face-to-face interviews.

#### iv. Analysis

Table 1 presents the characteristics of the rural households in the sample. All of our respondents are women. From Table 1 it has been observed that about 46.81% of the sample from BRAC and 41.03% from BRDB have not attended school at all. Overall, the average monthly income of the sample households for BRDB and BRAC is Tk. 18480 and Tk. 18462. The table also indicates the respondents of BRDB own Tk.68233 assets on an average which is more than BRAC’s respondents who own Tk. 45451 worth assets on average

TABLE I. DEMOGRAPHIC CHARACTERISTICS OF SAMPLE

Variable	BRAC	BRDB
Age of respondent (Mean Value)	34.48	33.96
Illiterate members	46.81%	41.03%
Primary Education	9.57%	19.23%
Secondary Education	30.85%	25.64%
Post- Secondary Education	11.70%	11.54%
Post- Graduate Education	1.06%	2.56%
Family Size	4.6	5.23
Average Monthly Income (In Taka)	18462	18480
No. of Earners per household (Avg)	1.92	2.19
Average Assets Owned by Members (In Taka)	45451	68233

#### A. Monthly Expenditure on Food

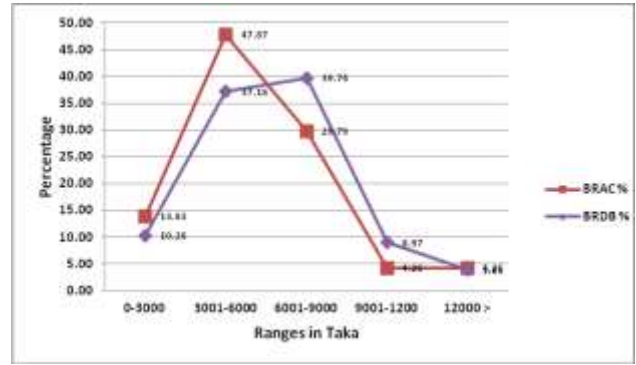


Figure 1. Monthly Expenditure on Food

Figure 1 displays the monthly expenditure on food of the respondents’ families. Food is the first priority in life; hence the consumption spending on food items is of much importance to assess the impact on household expenditure of the respondents. It is also observed that 10. 26% of BRDB respondents’ and 13.83% BRDB respondents spend less than Tk. 3000 on food. In case of BRDB, most of the respondents’ (39.74%) monthly food expenditure falls between the ranges of Tk.6001 – Tk.9000; whereas, for BRAC, 47.87% respondents’ expenditure is in the range of Tk.3001– Tk.6000. In the range of food expense from Tk.9001- Tk.12000, percentage of respondents from BRDB (8.97%) is higher than from BRAC (4.26%).

#### B. Monthly Expenditure on Non-Food

All the other consumables that are not included in food expenditure like kerosene, electricity and soap was considered as non-food expenses shown in Figure 2. Here, we observed that, most of the respondents’ of BRAC (43.62%) spend less than Tk.500 on Non-food items; whereas in case of BRDB the non-food expenditure for the most respondents (52.56%) falls in the range of Tk. 501-Tk.1000. Out of the total families 8.97% BRDB respondents’ and 10.64% of BRAC respondents’ expenditure falls in the range of Tk.1001 – Tk.1500. In the range of Tk.1501 – Tk.2000, percentage of respondents from BRDB (5.13%) is higher than that of BRAC (2.13%). Also in case of non food expense above Tk.2000, BRDB respondents have slightly higher percentage (6.41%) in comparison to BRAC (5.32%).

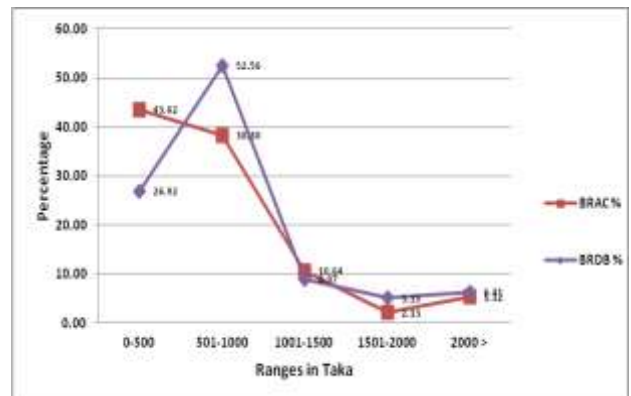


Figure 2. Monthly Expenditure on Non Food Items

### C. Monthly Transportation Expense

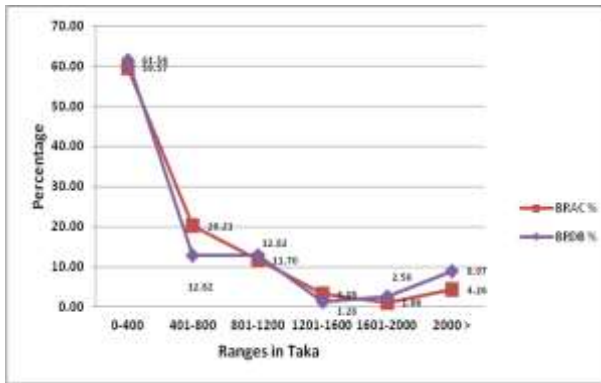


Figure 3. Monthly Expenditure on Transportation

From Figure 3, it is evident that majority of the BRDB respondents' (61.54%) as well as BRAC respondents (59.57%) monthly expense on transportation fall below Tk.400. In the range of Tk.401 taka – Tk.800 taka, for monthly transportation expense the respondents from BRAC (20.21%) is higher than respondents from BRDB (12.82%). It has been noticed that 11.70% respondents from BRAC & 12.82% respondents from BRDB are spending Tk.801 to Tk.1200 monthly in this sector. In case of transportation expense BRDB respondents have slightly higher percentage (8.97%) in comparison with BRAC (4.26%) who spends more than Tk. 2,000.

### D. Monthly Social Function Expense

Bangladesh, with a score of 20 is considered a collectivistic society. This is evident in a close long-term commitment to the member 'group', be that a family, extended family, or extended relationships. Loyalty in a collectivist culture is paramount, and over-rides most other societal rules and regulations. Although religiously, ethnically and linguistically homogenous, the dominant cultural pattern in Bangladesh appears to be hierarchical (Kochanek 1993; Bertocci 1996; Hussain and Khan 1998), this implies that the society is characterized by high group values. Individuals identify strongly with groups in society and these groups aid to organize a great deal of day-to-day life in the country. As a result it is clear that being part of society is an important requirement for an individual and thus different social events are significant. Social Functions like celebrating birthdays, anniversaries, weddings, social and religious festivals etc are integral part of the society. Thus spending on social functions is an essential segment of household expense.

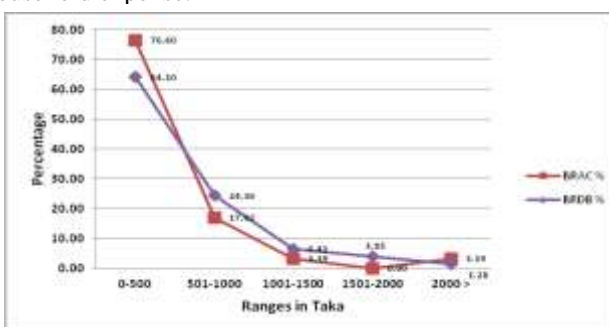


Figure 4. Monthly Expenditure on Social Function

Figure 4 displays the monthly social function expense of the respondents' families. Here it has been recognized that for majority of the BRDB respondents' (64.10%) as well as BRAC respondents (76.60%) monthly expense on social function falls below Tk. 500. Out of the total number of families who spend in the range of Tk. 501 – Tk. 1000 for social function the percentage of respondents from BRDB (24.36%) is higher than from BRAC (17.02%). Similar scenario is also observed in the social function expense from Tk. 1001 – Tk. 1500; here BRDB has higher percentage of respondents (6.41%) than that of BRAC (3.19%). On the other hand, BRAC has higher respondent's percentage (3.19%) than that of BRDB (1.28%) for the social function expense above Tk. 2000.

### E. Monthly Expense on Children's Education

Education is one of the primary needs for a human being. Although most respondents are illiterate they are spending a considerable amount on their children to get them educated. Figure 5 represents the monthly expense of the respondents' families on their children's education. Here we observe that a most of respondents from BRAC (73.40%) and BRDB (51.28%) are spending less Tk1000 for their children's education. In the range of Tk.1001 – Tk.2000, percentage of respondents from BRDB (24.36%) is higher than respondents from BRAC (18.09%). Similar scenario is also observed in terms of expense on education from 2001 taka to 3000 taka, percentage of respondents from BRDB (12.82%) is higher than BRAC (5.32%). Also, higher percentage (3.85%) of BRDB respondents is spending above 4000 taka on education in comparison to respondents (2.13%) from BRAC.

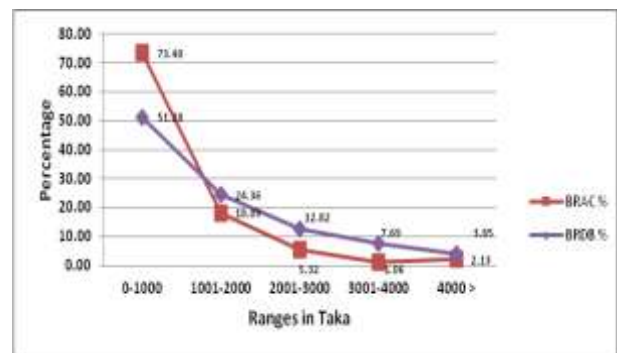


Figure 5. Monthly Expenditure on Children's Education

### F. Monthly Expense on Clothing

Figure 6 displays the monthly clothing expense of the respondents' families. Here we observe that BRDB respondents' (47.44%) as well as BRAC respondents (52.13%) monthly expense on clothing is less than Tk.500. A considerable percentage of respondents from both BRAC (32.98) and BRDB (24.26%) spend in the range of Tk. 501–Tk.1000on clothing Whereas, in the range of Tk.1001 – Tk.1500 of clothing expense, percentage of respondents from BRDB (17.95%) is higher than respondents from BRDB (8.51%). Also BRDB has higher respondents (3.85%) than that of BRAC (1.06%) for the clothing expense above 2000 taka.

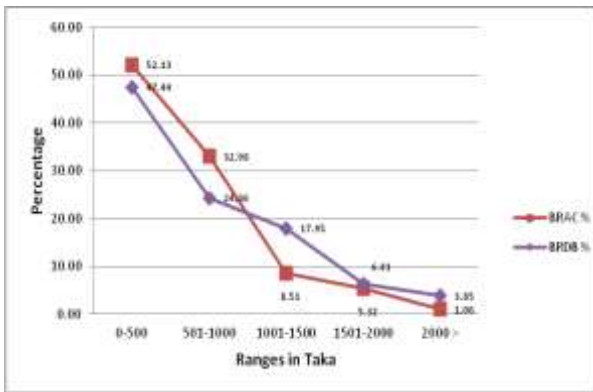


Figure 6. Monthly Expenditure on Clothing

### G. Monthly Health Care Expense

Figure 7 represents the monthly health care expense of the respondents' family. In this sector, a greater percentage of respondents' expense of both BRAC (64.89%) & BRDB (55.13%) is below Tk.500. While in the category of health care expense from Tk. 501 to Tk.1000, the percentage of respondents from BRDB (26.92%) is higher than that of BRAC (17.02). On the other hand, percentage of BRAC respondents (7.45%) is higher than BRDB (2.56%) in the expense range of Tk.1501 to Tk.2000. Lastly, 11.54% BRDB respondents and 3.19% BRAC respondents are spending above Tk. 2000 monthly.

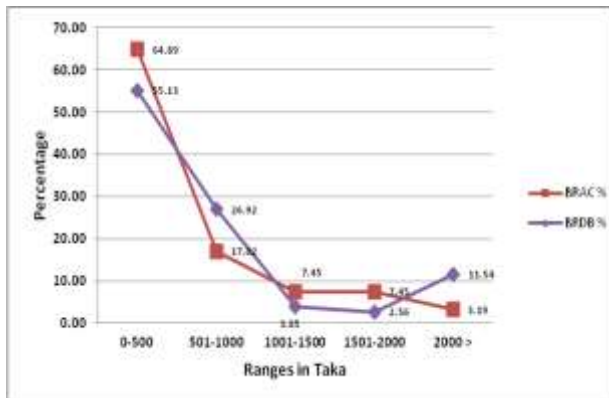


Figure 7. Monthly Expenditure on Health Care

### H. Monthly Other Expense

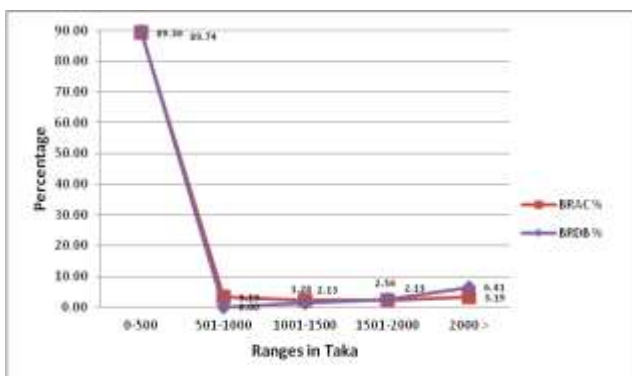


Figure 8. Monthly Expenditure on Other Items

Figure 8 represents the monthly expense of the respondents on other items that are not part of food, non-food, education, clothing, social function and healthcare. Here it has been observed that a higher percentage of respondents from BRAC (89.36%) & BRDB (89.74%) are spending below 500 taka in this category. In case of monthly other expense above 2000 taka, the percentage of respondents from BRDB (6.14%) is higher than respondents from BRAC (3.19%).

## v. Conclusion

Microcredit has enabled the rural women borrowers to enhance their overall economic independence. The study compared the respondent's household expenditure of GO and NGO. It indicated that the demographic characteristics of age, literacy, family size, monthly income and number of earners, however on average GO respondents own more assets than the respondents of NGO.

The study shows that the food and nonfood expenditure of the GO respondents are significantly higher than NGO whereas the expense on social function, children education, clothing and health care is slightly higher for the GO respondents. In the category of transportation and other expenses, there is no considerable difference among the respondents of GO and NGO. So from the study it can be concluded that although the income for GO and NGO borrowers are same but GO borrowers are able to spend more on improving their living standard than NGO because of the lower interest rate of government organization. This research concentrated on only expenditure pattern, however, this study will help the GO and NGO to reevaluate their programs to maximize the benefit of microcredit as the process and policies of microcredit can also influences the impact in their expenditure pattern.

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