

# Women Empowerment and Microfinance: A Case from North-Western Bangladesh<sup>1</sup>

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In a country like Bangladesh, poverty alleviation is one of the prime concerns of any development plan, where equality and considerable equity needs to be ensured. Women make up nearly half of the population of the country, but they, especially from the poverty-stricken groups, are more vulnerable in terms of denial of fundamental human rights. Microfinance, as a development program, primarily targets the poorer female clients. From a development perspective, it could be anticipated that provision of financial resources and effective utilization of those resources along with group-based activities can strengthen women's economic roles. In due course, it is also anticipated that it may empower women and reduce inequality. This paper attempts to assess the effectiveness of one special microcredit program (PRIME) in promoting women's life living in a poverty-stricken area of rural Bangladesh. Taking into consideration the existing complex and conflicting results from the other studies, a total of 54 items have been gathered to address ten empowerment indicators. In order to generate an aggregate index for women empowerment, a popular Item Response Theory (IRT) model namely, the Rasch test for dichotomous responses has been used, which was previously undertaken by a revealing study conducted by Pitt, Khandker and Cartwright (2006). Results remain steady with the view that there is a significant positive association between microcredit and women empowerment.

**Keywords:** Women Empowerment, Gender Equality, Microfinance, Poverty, Rasch Test, Bangladesh

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## INTRODUCTION

Women frequently suffer various forms of social exclusions and remain more isolated from opportunities toward advancement than men. Hence, the goal of any development project is to improve the condition of people's lives. However, it has been observed that socially determined disparity, conventional power relations between men and women, and mostly, the dominant patriarchic nature of society repeatedly disregards women's rights and therefore affect their roles, quality and behavior within all levels of society. A UNESCO (2005, pg. 1) report claims that "if poverty is to be seen as a denial of human rights, it should be recognized that women amongst the poor, bear doubly from the denial of their human rights – first in terms of gender inequality, and second in terms of poverty". Thus, there remains serious concerns over whether development programs fail to promote the status of men and women in the same ways.

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Gender equality is crucial to accelerating sustainable development. Since 2000, UNDP, with the UN partners and the rest of the global community, has set gender equality as one of its major development goals. In Bangladesh, government initiatives and significant strategies for gender equality has developed emanating from the Fourth Five Year Plan. During the formulation of the Fourth Five Year Plan, the approach was to focus more on the human rights of women and their empowerment in an inclusive development process. Successive five-year plans and poverty reduction strategies have also gradually integrated specific measures and approaches that promote gender equality and women's rights. Over the past few years Bangladesh has made significant progress jumping 25 places to be ranked 47th out of 144 countries in the 2016 Global Gender Gap Index calculated by the World Economic Forum (WEF, 2017). Bangladesh is also the top ranked country in South Asia. Although much work is still to be done, Bangladesh has observed remarkable progress in promoting women empowerment.

Among the various government and non-government initiatives taken toward sustainable development, microfinance activities have become a legitimate tool to fight against poverty and gender imbalance. Microfinance, as a provision of financial services mainly targets female clients in rural areas, as rural women are more dependable in terms of higher propensity to save and repaying credit (D'Espallier, B. et. al., 2009, Karlan, D. S., & Appel, J., 2011). Moreover, they are seen as hard working, easier to mobilize into groups, more honest and less risky to provide loans to (Brau, J. and Woller, G., 2004, Lott, C. E., 2008, Aggarwal, R. et. al., 2015). Therefore, it could be expected that successful implementation of microfinance programs can help boost efforts toward women empowerment by strengthening women's economic roles; shifting economic resources into hand and gaining recognition for their role as entrepreneurs at all levels. Moreover, access to productive resources and financial strength would weaken conventional social and gender roles and allow women living in poverty to make further inroads. Besides credit facilities, group-based activities may create wisdom of unity and could enhance true empowerment of rural women (Deininger, K., & Liu, Y., 2013, Orton, L., 2016).

To evaluate the association between women empowerment and participation in microcredit programs, this paper examines the effect of a special program named, "Programmed Initiative for Monga<sup>2</sup> Eradication" (PRIME). The prime objective of this project was aimed at helping households living in extreme poverty in the Greater Rangpur district, who consistently suffer food uncertainty and incidences of seasonal starvation. The geography of this area is flat, intricately crisscrossed by major rivers, and yearly swamped by water, i.e., during October and November, which are the pre-harvest months. As the majority of people were engaged in agricultural wage-based income earning activities, a lack of wage employment during this period resulted in persistent and continual lack of food. PRIME mainly incorporates two types of interventions, such as, year-round interventions and time specific seasonal intervention. The first includes flexible microcredit, skill and capacity building and technical assistance support, vocational training and primary health care services, while the second includes emergency loan and cash for work. Under the program primary health care service activities were initiated with a special focus on women and children in 2008. This included preventive health care, de-worming, immunization, health referral services, nutrition, hygiene and sanitation, and primary health education (Khalily M. A. B., et. al., 2016).

PRIME has been evaluated periodically and the major findings of the impact of the program have confirmed considerable improvements for PRIME participant households. PRIME participant households fared better in terms of income, expenditure, asset accumulation and livestock than non-participant households (InM, 2007-2015).

Almost all participants in the PRIME program are women. In the socio-economic context of Bangladesh where patriarchal dominance is considered a norm, women empowerment is a difficult sell. Theoretically, it can be expected that once women become members of micro finance organizations, they may gain some sort of authority over the power relations within a household through control over their own finances. This can lead to more economic security, decision making capacity and mobility. These are the well-known dimensions of women empowerment documented in the literature (Hashemi et. al., 1996, Pitt and Khandker, 1996 and Cartwright,

<sup>2</sup>Cyclical seasonal starvation.

2006, Jejeebhoy 2000, Kishor 2000, Osmani, 2007, Huis, 2017).

## OBJECTIVE OF THE STUDY

The basic objective of the study is to evaluate the effectiveness of the microfinance program, PRIME, in Bangladesh and what it has done to improve the lives of women participants. It aims to appraise its effectiveness in promoting women's lives in a severely poverty-stricken area of rural Bangladesh. For this purpose, the study evaluates the effect of participation in microfinance program on an index of empowerment and its proxy indicators using a significant number of responses that illustrates women's empowerment. A multi-purpose household survey was conducted in the North-western regions of Bangladesh in 2014 in 23 upazilas of 5 districts. This survey provides the data for the analysis and arguments of this paper.

## DEFINING WOMEN EMPOWERMENT

World Bank's Empowerment Sourcebook, (Narayan 2002) defines empowerment as "the expansion of freedom of choice and action to shape one's life". Kabeer (2001) defines empowerment as "the expansion in people's ability to make strategic life choices in a context where this ability was previously denied to them". Derived from this general understanding we can conceptualize empowerment for poverty-stricken groups as the growth of capabilities and economic resources so that they may take part in, influence, control and have power over institutions that affect their lives.

Understandably, there is no fixed definition for women empowerment, as it has varied meanings in different socio-cultural, economic and political framework (Narayan, 2002, Malhotra, A., & Schuler, S. R., 2005). Women have often been seen as just wives and mothers involved in household activities but not directly in economic production. Basically, they were made responsible for work that is usually unpaid. And consequently, they have been left out of public and paid employment (Kabeer, N., 2008, Ferrant, G., 2014). However, over the years it was recognized that despite women's huge contribution to both productive and reproductive activities especially at household levels, women remained invisible to policy makers and national accounts (Ferrant, G., 2014). Against this backdrop, the first world conference on women was held in Mexico City from June 19-2 July, 1975 in which Bangladesh actively participated. The conference was a part of a larger United Nations program which declared 1976-85 as the 'Decade of Women' and included the drafting of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). Since then, March 8, has been celebrated as International Women's Day. As an approach to include women in development plans, the Millennium Development Goals (MDGs) and its successor the Sustainable Development Goals (SDGs), aim to end all forms of discrimination against women and girls everywhere. The Bangladesh government subsequently took up initiatives in its first five-year plan (1973-78) and has extended these initiatives over the years.

It has to be noted that women are not just a single homogenous group with simply fixed indicators. Unlike other disempowered groups (racial/ethnic/sexual minorities, different poverty-stricken groups, Dalit etc.), women are a fundamental part of society whose identity overlaps with all groups (Malhotra, A., & Schuler, S. R., 2005). Moreover, interfamilial relations play a crucial role for creating women's disempowerment (Malhotra, A., & Schuler, S. R., 2005). implying that issues need to be addressed with broader policy actions at the community, as well as the family level.

According to African Women's Development and Communication Network, "Women's empowerment means developing their ability to collectively and individually take control over their own lives, identify their needs, set their own agendas and demand support from their communities and the state to see that their interests are responded to. In most cases the empowerment of women requires transformation of the division of labor and of society as well as changes in prevalent ideologies about the roles and responsibilities of men and women" (Chege, R., 2004). The United Nations Population Information Network (POPIN) defines women's empowerment based

on five components, which are: women's sense of self-worth, their right to have access to opportunities and resources, their right to have the power to control their own lives, both within and outside the home, their right to have and to determine choices and their ability to influence the direction of social changes to create a better social and economic order, nationally and internationally (Rahman, et al., 2009).

## LITERATURE REVIEW

As the main target population for the microfinance sector tends to be women (Microcredit Summit Campaign Report 2007, D'espallier, B., et. al. 2013), it could be recognized as an important instrument for women's empowerment. However, evidence in the field as to how effective microfinance is on women's empowerment are extremely divergent. Some group of researchers have found microfinance works well in setting up viable pathways of development, whereas others have identified it as an instrument of aggravating stress on women.

For the former, Hashemi et. al., (1996), who developed a methodological framework analyzing eight different dimensions of empowerment, found that microcredit leads to significant positive effects on most of the pre-identified indicators. Evaluating two rural credit programs offered by Grameen Bank and Bangladesh Rural Advancement Committee (BRAC) in Bangladesh, the study claimed that simple credit programs also empower women. In doing so challenged the findings of Goetz and Sen Gupta (1996) (discussed later in this review), Hashemi et al, established that women who participated in these programs, were more empowered compared to non-members. However, an endogeneity criticism was levelled at this study questioning whether women who participated in these groups might previously have been "more empowered" to join the group. This problem was tackled in a study by Pitt, Khandker and Cartwright (2006) who also concluded that availability to women of credit had positive and significant effects on most of the indicators of empowerment, such as taking greater roles in household decision making, greater access to financial and economic resources, having greater social networks, bargaining powers and having greater freedom of mobility. The study also found that the gender of the borrower influenced household decision making and the impact of male borrowers on women's empowerment is generally negative. Another study in Bangladesh by Rahman (2002) also illustrated that microcredit supported economic activities help women in strengthening their own position.

Several studies (Morduch 1998; Todd 1996) confirm that poor agriculture-based households' access to microfinance programs is associated with substantially lower variation in labor supply and consumption across seasons. Moreover, many borrowers were found to be using loans to purchase land rather than completing their projects; the positive effects of which would reveal strong impacts given more time. Positive results have also been found from Kabeer (2001), whose study illustrated the link between credit access and reduced violence experienced directly by several women. Orso, C. E., & Fabrizi, E. (2013) has shown that in Bangladesh microcredit interventions may actually contribute to changing gender beliefs and social attitudes. Musonera, A., & Heshmati, A. (2017) stated that for women to realize their self-worth and human rights, emphasis should be put on variables which are positively associated with women's empowerment that facilitates their access to resources and knowledge such as education, employment and media exposure. A recent study, Haider. et. al. (2017) based on Pakistan, also found that micro-credit has a positive impact on women's familial empowerment, hence suggested it be encouraged to be expanded to help reduce poverty. Kumar. et. al. (2015) showed that microcredit improves women's roles and behaviors in decision making processes.

In contrast to these studies that show the positive effect of microcredit programs on women's empowerment, Goetz and Sen Gupta (1994), documented that women usually handed over their loans to men. Women, in their study, were passive rather than active participants, surrendering their loans to men in exchange for the right to have more to spend for themselves and for their children's clothing and health. Certainly credit, it is often pointed out, offers an overabundance of welfare gains for the low-income households where women increase their home based livelihood functions and also utilize it for improving health, nutrition and education of household members (Rahman et al., 2008; FAO/BIDS; Goetz and Gupta, 1996). In addition, although time, health and gen-

eral well-being have been noted as being compromised by Gobezie, G. (2010), it would be worthwhile to verify from other sources how these same indicators are being optimized by poor women, to improve well-being of their households. Regarding the argument of loss of time, health and well-being, Rahman et al (2008) argues that apart from total earnings, the income and profitability of activities in which women are involved is likely to enhance the position of these women, their consciousness and aspirations. The benefits from their own toil, that is, by having a say in decision making, by way of control on spending of the money, by enjoying improved family's consumption, etc. women may be considered better off having access to microcredit. Whether they are merely being exploited by new opportunities of income and employment and manipulated by the unfriendly structural forces into surrendering their time, health and energy, is yet to be proved beyond reasonable doubt.

Some other scholars have raised other pertinent questions about the true credibility of microcredit programs in empowering women. It might be valid to observe that findings on early impact and second generation impacts of microcredit as these results may vary, as pointed out by Goetz and Gupta (1996). At the same time, there is also a strong argument that unless the duration of program participation is of considerable length, say for at least two to three years, impacts, especially the beneficial impacts are difficult to perceive (Schelur, 1997).

Several studies have also claimed that due to the dominant patriarchal social structure of Bangladesh, programs that provide credit with minimal training or other supplementary support services do not empower their female participants and may even worsen their situations (Ahmed, 1982; Hasan, 1985; Rahman, 1986; NijeraKori, 1990; Goetz and Gupta, 1994). Analyzing several existing empirical studies and findings, Ali and Hatta (2012) claimed that microfinance itself does not necessarily bring capacity building to poor women clients, rather the researchers have found evidence of increased workload on women due to additional responsibilities for being a microfinance client which imposes additional burdens on them. Another researcher Linda Mayoux (2005) argued that though microfinance has the credibility to significantly impact the lives of women by empowering them, it is doubtful and it 'is not an automatic consequence of women's access to savings and credit or group formation per se.

The Expert Group on "Empowerment of Women Throughout the Life Cycle as a Transformative Strategy for Poverty Eradication", (26-29 Nov. 2001, New Delhi, India), identified two overriding issues that had to be resolved in the present scenario, and these were, (i) Poverty in a Globalizing World at different stages of women's life cycle, and (ii) Transformative Strategies of Empowerment through Institutional and policy change at micro, meso and macro levels and within a right's perspective.

Given the extremely divergent results established by different studies based on older datasets in Bangladesh, research on the impacts of microfinance on women empowerment using comparatively recent data and multi-dimensional indicators is highly required. None of the literature has focused on all dimensions of empowerment at the same point in time. Most of the studies have focused on a particular part of women empowerment. But research on composite empowerment covering all dimensions is very scarce. Therefore, this study puts the representation of an expression under serious examination by addressing intense dimensions of empowerment.

### **Measuring Women's Empowerment**

When assessing empowerment of women, one must keep in mind that the process of empowerment may take time. Measurements of empowerment must be sensitive to and cognizant of women's inherent changes when provided with resources, productive skills and awareness raising training including education for themselves as well as their children (UN, 2013). The rights of women begin from the home where she is able to participate in minor and major decisions of the family (Malhotra, A., & Schuler, S. R., 2005). Once taken as an equal or even a more resourceful member, this status could also ensure her proper justice within the confines of the home as well as outside, which is the larger threshold, encompassing the community. Therefore, this, in turn, is expected to infuse new life into households, thus, the community and the nation create a more positive base for a democratic state.

We deduce from this that with microcredit programs, the balance of intra-household power structure shifts to



some extent, as a natural consequence to the changed circumstances, when the perceived as passive, less-assertive hands receive credit, in this case women. Although it might well be resolved by a transfer of income between hands and absorption within the common household resource pool, nonetheless, the woman within the household has been instrumental in accessing the loan, which improves her image. She has also been identified from outside, as representing that household, as a pseudo household head to whom resources are bound to follow for as long as she is willing to participate.

In measuring women's empowerment, there are explicit constraints and compulsive forces which underlie a dual focus. They are: "Women's empowerment being a Protean Concept with many meanings (Sirivardana 2001). Hence it is necessary to clarify the notion of Women's Empowerment focusing on its transformative status. It is essential to identify the key elements and principles of empowerment strategy that would ensure that women of all ages have equal access to entitlements and capabilities that would enable them to overcome poverty in a sustainable way. Thus, a rights-based strategy is needed for women's emancipation and approach to eradicating poverty (Kapur, A., & Duvvury, N., 2006).

To ensure a rights-based strategy for women, regardless of age, to have equal access to entitlements and capabilities by strategizing a transformative and regenerative system. If, a distributive justice approach to development implicitly assumes that welfare for women would follow automatically from the household, by subsuming the latter as a unit of converging interest, it fails on two counts. Firstly, women's human capital is not optimally developed and secondly, women do not automatically reap the benefits from development. Thus, it becomes imperative to recognize female integration in the development process as a distinct issue, focused primarily on women, so that they may also partake of the improvements, for example, as in microcredit.

Both positive and negative evaluations of microcredit have used households as a unit, where gender inequality is a pervasive phenomenon (R I Rahman et al., 2008; FAO/BIDS; Goetz and Gupta, 1996). Within the household, collaboration, disagreement and conflict that arises, impinges significantly upon the development of the female member and consequently her right to establish her autonomy and independence. The interdependence, of members within the household, created by microcredit creates the platform for intra-household negotiation by targeting women who then grasp it as a tool for furthering their rights to reap the benefits of development.

## RESEARCH METHODS

### Measuring Women Empowerment as a Latent Variable

Women's empowerment is theoretically multifaceted and methodologically challenging to compute and evaluate. It is not directly observable but can be measured indirectly through its effects on observable indicators. Overtime, significant progress has been made in analyzing women empowerment as a dynamic process that has been quantified, measured, and described in a variety of ways by a number of studies (Jejeebhoy 2000, Kishor 2000, Malhotra et al., 2005, Pitt et. Al 2006, Ibrahim and Alkire, 2007). This study has adopted an Item Response Theory (IRT) approach, which provides a statistical model for the relationship between item responses and the latent variable, here, women empowerment indicators. The study has adopted the IRT approach because, it is also referred to as latent trait theory, which is a type of modern test theory. The focal points of conventional approaches such as Classical Test Theory is mainly on internal consistency, test-retest reliability, various forms of validity, and normative data and standardization. Modern test theory or IRT homes in on inherent within item responses and focuses on how specific test items function in assessing constructs. Thus, IRT focuses on the item level information, in contrasting to the test-level focus of classical test theory. IRT makes it possible to scale test items for difficulty, to design parallel forms of tests, and to provide for adaptive computerized testing (DeMars, 2010). Item analysis presents a way of measuring the quality of questions - examining how fitting they were for the respondents and how precisely they calculate their ability/trait.

This strategy was formerly undertaken by Pitt, Khandker and Cartwright (2006) to construct unobserved empowerment scores from observed cursors. In this method, for each dichotomous variable, we presume that there

is an underlying continuous variable, which ranges from  $-\infty$  to  $+\infty$ .

The Rasch test<sup>3</sup> is a popular IRT model for dichotomous responses, where the total latent trait score reflects a person's standing on a variable. In this one parameter logistic model, the probability of a positive or correct response to a given assessment item  $i$  by person  $n$  is modeled as a function of an item parameter,  $\delta_i$  representing item difficulty and a person parameter,  $\beta_n$  representing the person's magnitude of the latent trait. The probability of the outcome  $x_{in} = 1$  is given by equation (1),

$$\Pr(x_{in} = 1 | \beta_n) = \frac{e^{\beta_n - \delta_i}}{1 + e^{\beta_n - \delta_i}} \quad (1)$$

Thus the probability of a correct response increases with the person parameter for a given item and decreases with the item difficulty for a given person. The log-odds of a positive or correct response by a person to one item, conditional on a correct or positive response to two or more items is equal to the difference between the item locations. The latent trait or ability score for each person has been generated through application of Conditional Maximum Likelihood (CML) estimation. While for dichotomous responses we have used IRT method and for estimating the combined empowerment score used continuous factor analysis which is drawn by considering all the indicators drawn by the IRT approach.

Cross sectional regression models are constructed to assess the influence of independent variables, —participation in PRIME, years of schooling, age, economic status, occupation, distance from market, distance from road, household demographic status and geographic variation on the women empowerment indicators. The estimation of the cross sectional data has been performed as following equation (2)—

$$Y_{iu} = \alpha + \gamma_{iu}PP + \beta_{iu}X_{iu} + \varepsilon_i \quad (2)$$

Where,  $Y$  is the outcome variable which stands for women's mobility, economic security, purchasing power, decision making, not dominant by family, political and legal awareness, social awareness and speaking in public, contribution to income and efficiency, and composite empowerment score for individual ' $i$ ' in upazila ' $u$ '. ' $PP$ ' stands for the participation in PRIME program;  $X$  is the vector of household characteristics—which stands for, education level, age, occupation, geographic division. Some of the household characteristics like, female household head, having multiple earning source, primary occupation agriculture or non-agriculture or wage earner are explanatory variables taking binary values of 0-1.  $Y_{iu}$ ,  $\beta_{iu}$  are statistics to be estimated.  $\varepsilon_i$  is random error term that varies among individuals.

## DATA

PRIME was introduced for the broadening of opportunities and incorporating various aspects of choice simultaneously with a mix of resources, capacity to negotiate and ability to sustain the welfare of the home in rural Bangladesh. Therefore, in order to recognize the opportunities to support women's active participation at all levels and to critically analyze the impact of the PRIME microcredit program on them, a household level survey was conducted based on a detailed module encompassing a total of 54 queries regarding women empowerment.

The multi-purpose household survey was conducted in the North-western regions of Bangladesh in 2014 in 23 upazilas of 5 districts. The impact of PRIME on women empowerment has been evaluated using a sub-set of the dataset comparing between 'Never participants' and 'PRIME participants'. This includes 2201 respondent households, of which 60 percent were PRIME participating households and 40 percent had never participated in the program before. This study particularly focuses on the empowerment of rural disadvantaged women. In Bangladesh, more than 65% people live in rural areas (world Bank, 2016) and compared to urban women, rural women are more affected by inequality of opportunities (like, nutrition, access to education, healthcare, financial

<sup>3</sup><http://www.stata-journal.com/sjpdf.html?articlenum=st0129>

service) and less involved in paid employment and activities. Hence, special focus is required in that sector. Additionally, the PRIME program was specifically designed and implemented in the severely poverty-stricken areas of rural greater Rangpur district. Therefore, empowerment of rural women through development intervention via microcredit programs is the focus of this paper's analyses.

Respondents of the PRIME participant households are female members of households, mainly female loanee or female household heads, and for non-participating households, wife of male household heads or female household head. Widowed or separated female adults if members of MFI or acting as household head were also included in the study and 85 percent were married. Indicators have been selected very carefully as improper merging of indicators connecting to empowerment may lead to misleading outcomes. After examining a large number of studies (e.g., Jejeebhoy 1995, 2000, Kishor 2000, Malhotra et al., 2002, 2005, Pitt et. Al 2006, Ibrahim and Alkire, 2007) and considering the socio-economic and cultural characteristics of the study area, this study has developed a set of potential indicators within each dimension. As the target group is poor women living in rural areas, indicators are selected in such a manner so that they reflect women's financial, geographical, cultural, power relation and intra and outer household status. Those indicators are the most effective depictions of the process of empowerment as they are closest to measuring agency. To capture the effect of the PRIME program on women empowerment, a wide range of questions was administered covering information on 10-dimensions of women empowerment. They are (1) Mobility, (2) Economic Security, (3) Purchasing Power, (4) Involvement in Major Household Decisions, (5) Involvement in Family Planning Issues, (6) Overall Control Over Loan Use, (7) Participation in Household Income and Efficiency, (8) Freedom from Domination Within Household (9) Leadership and Political Awareness, and (10) Social Awareness and Speaking in Public.

## RESULTS AND DISCUSSIONS

### Socio-Economic Characteristics of the Comparable Respondent Groups

Socio-economic characteristics, economic development, infrastructural facilities and cultural factors have strong influence on the activities of any household. Respondents of the control group i.e., women from those households who have never participated in any sort of microfinance program were selected, to reflect an equivalent socio-economic group like the respondents of the PRIME participant households.

Both groups are quite comparable in terms of household size, land holding, average age of respondent and household head, maximum education level, household head having multiple earning source and having access to safe drinking water. Though, in terms of average annual income and food expenditure the PRIME participants are in a comparatively better position (Table 1).

### ANALYSIS OF WOMEN EMPOWERMENT

The relation among microfinance and women empowerment has become a critical concern in both academic and policy levels. The findings in the earlier studies were diverse and ranged from extreme positive to extreme negative assertions. However, our descriptive analysis shows that participation in the PRIME increases women's right to access resources, opportunities and better treatment. The following section presents the responses and results across groups<sup>4</sup>. The answers are consolidated into ten indicators.

#### Mobility

Mobility of women has been evaluated by using five items. Respondents were asked about a set of places (market, health centers, bank/MFI, outside village) and their frequency of usual movement to those places. Mean latent score on mobility for the PRIME participants was significantly higher than that of 'non participants' (Table 2). The PRIME participants have significant higher mobility on three of the five items (such as usually go to bank/

<sup>4</sup>Tables of the proportion tests of all 54 items are not shown in the text due to the space constraint but available upon request.



**Table 1.** Characteristics of households by participation status

sl. No.	Socio economic status (Avg. values)	Never participant (n=888)	PRIME Participant (n=1313)
1	Age of respondent	40	38
2	Age of Household Head	47	45
3	Maximum Education of HH member	4.21	5.25
4	Household Size	3.74	4.28
5	Average annual income earned by the household	54k	73k
6	Average land owned by the household (decimal)	10	10
7	Annual average food expenditure	36k	42k
8	% of HH head have multiple earning source	38	40
9	% of HH head's primary occupation is wage earning	60	51
10	% of HH have electricity access	16	25
11	% of HH use sanitary latrine	55	65
12	% of HH have access to safe drinking water	99.77	99.54

Source: InM Field survey (2014).

**Table 2.** Average latent score across treatment and control groups

Sl. No.	Determinants	If Never Member (Control group)	If PRIME member (Treatment group)	Proportion test
1	Mobility	3.33	4.32	Significant at 1% level
2	Financial Security	2.08	2.74	Significant at 1% level
3	Ability to Purchases	3.59	3.59	Not significant
4	Household Decision Making	3.72	3.91	Significant at 1% level
7	Participation in Economic Activity	2.29	2.91	Significant at 1% level
8	Freedom from Domination within Household	3.47	3.52	Not Significant
9	Leadership/ Political Awareness	2.98	3.22	Significant at 5% level
10	Social Awareness	3.2	3.2	Not significant

Source: InM Field survey (2014), Author's creation.

MFI, 'usually go to health centers' and frequency of usual movement) and the mean differences of the other two items are not statistically significant. The average number of movement to the public domains is also higher for PRIME participants. This is expected as member-borrowers are required to visit the bank at least once to draw down a loan amount.

### Financial Security

The respondents were asked about a set of questions that reflected upon their income and asset status, hence their individual economic security. Overall, as the significant latent score of the five items shows, PRIME participants have higher financial and economic security (Table 2). It implies that women from participant households hold higher degrees of economic resources and enjoy higher freedom to spend those resources or own income (in part or full) at their own behest i.e., without their husband's/other family member's permission compared to the women from non-borrowing households. Moreover, women from participant households have reported higher capability to manage emergency funds (by borrowing, selling assets or from savings).

### Purchasing Power

The indicator, ability to make purchases engross, queries regular purchases of any household, for example,

items for daily food preparation, toiletries, items for children, utensils, clothing for self and for family members etc. Three of the six items, women from PRIME participant households reported slightly higher autonomy compared to the women from never member households. While examining purchasing power, it was found that there is no significant difference among the two groups' mean latent score (Table 2). These are more family specific, rather spouse specific purchases that benefit the members of the family. But results from the econometric analysis shows significant positive results once we controlled for other variables. The results showed that female headed households have a positive impact on women's purchasing power (see Table 3). This implies that in the absence of male members they are primarily in charge of performing all the tasks of her household.

### **Participation in Major Investment Decisions**

The queries regarding decision making involved whether women of those households participated in the decision-making process for repair or construction of house, land purchase or sale, education or matrimony of children, livestock purchase or sale etc. In all the issues, a considerable proportion of women from PRIME participant households reported some sort of involvement (discussing with other family members or alone), which is higher than the never member group (Table 2). These results also hold in our econometric results with the exception that female headed households are more likely to make major investment decisions on their own.

### **Involvement in Family Planning Issues**

On average almost 90 percent of the women from both the groups reported that they did have some kind of influence or control over the issues related to birth control methods and family planning issues. However, it was found that PRIME participation has a significant effect on women autonomy in initiating and deciding family planning issues. The mean difference between the two groups are significant (Table 2). Though, in our econometric analysis after controlling for other variables no significant difference was found (Table 3).

### **Control Over the Overall Loan Use or Management**

It has been quite evident from previous studies that micro finance participants were involved in the process of loan use by their spouses. In this study, due to data constraints i.e., limited responses from the never member group, made comparison between the two groups difficult. However, we found that spouse borrowers were involved in the total loan use process. Respondents from the PRIME group were asked about their loan use or management and respondent from the non-participant group were asked about their participation and informal loan control. An overwhelming majority (95 percent members) of the women-borrowers reported participation in the loan use process, and only 5 percent reported no control. The econometric results did not turn out to be significant.

### **Participation in Income Generating and Training Activities**

Efficient participation of women in generating household income can improve food security, nutrition, health and overall family welfare. This can also be considered an important proxy variable clarifying the impact of microcredit programs on women empowerment. As a credit-plus program, PRIME has been offering various technical and skill development trainings. As a result, women's PRIME participation significantly increases their participation in any training program (Table 2). Overwhelming, a majority (91 percent of PRIME participants) of the women-borrowers reported participation in any kind of income generating activity.

### **Freedom from Domination within Household**

This indicator is crucial for women's ability to make choices and capacity to gain self-esteem and autonomy. No matter how empowered they look in terms of other indicators, if they are facing domestic violence (physical or psychological by their partner or other family members), it cannot be convincingly argued that they are empowered. This also has a substantial negative effect on the community at large. Our results show that both the groups are quite similar in terms of being blocked from working outside the home or facing physical or mental

**Table 3.** Effects of participation in PRIME on ten women empowerment indicator (OLS)

Sl. no.	Determinants	Mobility	Economic Security	Ability to Purchases	Household Decision Making	Domination within Household	Control over the Loan Use	Social Awareness	Family Planning Issues	Household Income/Efficiency	Leadership/Political Awareness	Total Empowerment Score
1	PRIME vs never participant	.93***	.53***	.26**	.13*	.08*	.25	.14*	.09	.60***	-.002	.54***
2	Female headed household	.88***	1.49***	1.64***	.40***	.21**	.22	-0.04	-.04	.10	-1.02***	.62***
3	Age of the respondent	.04**	.09***	-.01	.04**	-.002	.04	.03	.015	.08***	.12***	.05**
4	Age of the respondent square	-.0005***	-.001***	.00002	-.07	.0002	-.0004	-.0005*	-.0003	-.001**	-.001***	-.001***
5	HH head's primary occupation is self-employment in agriculture	.06	.04	-.04	.07	.06	.41	-.10	-.03	.35*	-.31	.26
6	HH head's primary occupation is self-employment in non-agriculture	.38**	.23*	.04	.14	.04	.33	-.15	.09	.15	-.35**	.33
7	HH head's primary occupation is wage earning	.21*	.32**	.16	.06	-.03	.37	-.19	.14	.19*	-.15	.18
8	HH head have multiple earning source	-.01	-.06	.11	.05	.10*	-.02	.11	.12*	.23**	.27**	.14
9	Distance from nearest pucca-road	.001	-.06*	.02	-.08**	-.06**	-.03	-.15***	-.07**	.03	-.08*	-.11*
10	Distance from market place	-.07**	-.09**	-.23***	-.05	-.05*	-.08	.003	-.05**	.007	-.02	.012
11	Distance from nearest MFI branch	-.03***	-.008	.05*	.03**	.02	.02	.005	-.001	-.02	-.02	.05*

Note: Standard errors in parentheses \*\*\*p<0.01, \*\*p<0.05, \*p<0.10. Model adjusted for age, education, household demographic status, geographic division, income, occupation, distance from market & road, and, upazilas. (Regression analysis has also been done without the variables-- years of schooling and different occupational characteristics of the households and results remain the same as shown in the above table. So we have considered the variables as explanatory variables.)

Source: InM Field survey (2014), Author's creation.

abuse. A similar percentage of women (19%) reported that they had faced physical abuse. Women from PRIME participant households faced fewer obstacles from their husbands or other family members from going to group meetings though the mean difference of the latent score is not significant (Table 2).

### **Leadership/Political Awareness**

Although an overwhelming majority (87 percent nonmember and 91 percent PRIME member) of both the groups reported to have cast votes in the last election, their voting decisions were not free of any influence from their spouses. 41 percent of non-participants and 38 percent PRIME members reported that their spouses convinced them to vote for specific candidates. This is contrary to what was originally perceived to be women empowerment principles. Almost none of the women participated in any member election or campaigned for any political candidate. Though, the mean difference of the latent scores is significant at 5 percent level (Table 2). Female headed households also showed a reluctance to participate in any political activities.

### **Social Awareness and Speaking in Public**

Some queries were designed to get a glimpse of survey participants' responsiveness against any oppressive activities practiced in society. Dowry, early marriage, wife beating, unfair wages, rape are still prevalent, mostly in poverty-stricken groups Miaji, A. B. (2010), Banna. et. al. (2017). Around 95 percent of households in both groups thought giving or receiving a dowry was bad. Almost 80 percent women (81 percent nonmembers and 79 percent PRIME members) from both groups are unaware of the legal process for divorce. The descriptive results don't show any significant difference among the mean latent scores of the two groups (Table 2). The PRIME participants are more socially engaged, which appears to be because of their platform of attending weekly group meetings. Although 'never participants' are not an organized group, they are also aware of social issues. There may be a spill-over effect of the social engagement of the PRIME participants who are members of their communities. A phenomenon that could be investigated further in qualitative studies.

## **EVALUATION OF WOMEN EMPOWERMENT (ECONOMETRIC ANALYSIS-CROSS SECTIONAL)**

This study followed a comparatively well accepted methodology in generating latent scores which would reflect the observable score of various indicators of women empowerment. To get a better understanding, a cross sectional regression analysis was performed. Where a dummy variable, i.e., participation in PRIME vs never member has been included. Results show that compared to the women from the non-participant group, PRIME participant households are significantly in a better position in terms of most of the indicators except political awareness and involvement in family planning issues. This study has found that participation in PRIME has significantly affected the most relevant indicators, namely mobility, economic security, purchasing power, involvement in household decision making, participation in household's income generating activities, freedom from domination and social awareness and speaking in public. Participation in the program also positively and significantly affects the composite empowerment indicator that covers all the queries asked to the respondents (Table 3). Though the mean difference of some of the indicators (e.g., purchasing power, freedom from domination, social awareness and speaking in public) among the program and control group are not significant, the results of the econometric analysis are showing significant positive association of participation in the PRIME program. This is because the marginal effect of program participation on the latent score is significantly positive and other variables have been controlled during the regression analysis. It is evident that wider social and economic impact can occur through not only participation in economic activities but also through participation in social and political processes. Female headed households (mainly widow, separated) positively explain mobility, economic security, purchasing power, involvement in household decision making, freedom from domination. In the absence of male members in the family, they usually do most of the tasks (e.g., economic activities, purchasing goods etc.) by themselves. Age of the respondent is more likely to have positive impact on mobility, economic security,

household decision making, and participation in income generating and training activities. Due to the unparallel sample size regression coefficients of the loan control indicator did not turn out to be significant.

## WHO ARE NOT EMPOWERED AMONG THE PARTICIPANTS?

In order to validate our results, we classified the respondents into three categories with respect to their obtained scores. Socio-economic characteristics also showed that more empowered PRIME participants have a higher duration of membership and they are relatively older (Table 4). Head of the household are wage earners; they have higher access to sanitary latrine as well as television media. These households live near the Pucca road and have better access to market. But empowerment of women does not show any positive relation with household's financial status i.e., total income or land holding. A probable explanation would be that widow/divorced/separated female, eventually who are the head of the household, get higher scores because they must do everything independently. However, due to the absence of male counterpart/male earner, total income (and asset) of those households are lower than male headed households.

## DISCUSSION AND POLICY IMPLICATIONS

Women are not just a homogeneous group across different geographical locations, socio-cultural context and economic status. Thus, empowering women is a vast, slow and complicated process. Moreover, true empowerment depends on many factors, ranging from the household to community levels. A single approach therefore is most likely to fail. However, development programs like microfinance or any long-term strategy diligently implemented may play a significant role. Still, caution must be exercised as microfinance on its own like other development programs is not a panacea. Monetary empowerment can be a route for improving certain critical elements at the household and family levels; but is certainly not adequate in addressing the plethora of issues cutting across societal and economic stratum, which efforts to improving gender equality aim to achieve.

**Table 4.** Who are not empowered among the participants

Sl. no.	Socio economic status (Avg. values)	Bottom 33%	Middle 33%	Top 33%
1	Age of MFI membership	1.22	1.73	2.58
2	Age of respondent	38	38	41
3	Years of schooling of the respondent	1.47	1.49	1.3
4	Family Size	4	4	4
5	Average annual income (thousand)	68	67	66
6	Total land owned by the household	13.73	7.89	7.41
7	% of female headed household	4.44	12.25	24.07
8	% of respondent currently married	93.17	87.75	75.75
9	% of HH with multiple earning sources	43	38	39
10	% of HH head with wage earning	52	55	56
11	% of HH have electricity access	23	20	23
12	% of HH use sanitary latrine	59	65	66
13	% of HH use tube-well drinking water	100	99	100
14	% of HH having access to TV	6	4	7
16	Distance from small market place (km)	1.86	1.5	1.29
17	Distance from big market place	4.27	3.92	3.69
18	Distance from nearest pucca road	1.39	1.02	0.83
19	% of HH living in Char areas	27	21	18

Source: InM Field survey (2014), Author's creation.



Social-structural settings have dictated that women be viewed as wives and mothers, be transferred to invisible household activities post-marriage, which were mostly unpaid, and made to not be direct participants of economic production. Without the recognition of women's contribution to productive and reproductive activities especially at the household level, the national accounts are truncated, and women's unseen contribution remain baffling to policy makers.

Within this context, where poor women in Bangladesh often had no voice and agency, the PRIME microcredit program was administered through sixteen Partner Organizations since 2006. PRIME aimed to help people to cope with shocks, through short-term assistance, strategically supported through financial and non-financial instruments like crisis loans, working relatedly with accessibility to food. Our study has demonstrated a significant improvement in financial security for women who participated in the PRIME program consistent with the overall goals of the program. The result is consistent with the other empirical studies, like, Pitt, Khandker and Cartwright (2006), Osmani, (2007), Hashemi et. al., (1996).

The brief results reported here have shown that women from PRIME participant households are in a better position compared to women from the non-participant group. The program design itself influenced participants to be more mobile, demonstrated an improved position in terms of financial security, rendered visible by their authority to spend their own income, control their own savings, manage emergency money etc. They can also participate more actively in the decision-making process of their households and a positive externality appears to be experiencing less rates of domestic violence. Although PRIME women members were no more involved in the political process and control over the family planning issues their participation in a micro finance program has improved their status in the family overall.

Despite this, it must be recognized that women's position in relation to men must also be assessed when interventions are planned and implemented. Effective training on different activities and gender education can play a vital role here. Thus, efforts should strategize a way for women to harness the greatest benefit for the society and ensure true women empowerment as well as gender equality. This study opens up various avenues for future research on women empowerment, particularly in the developing country context. Future researchers could extend the research findings by undertaking comparative studies covering other countries which would be very crucial and interesting. Many countries in Asia, especially India, Pakistan, Nepal, Sri Lanka, the Philippines, Thailand, Indonesia are implementing microfinance through MFIs. The research is also applicable to the broader Asian context as this study offer a small window into investigating the milieu of factors that make up a country's specific context. Replicating a study like this with cross-sectional analysis may be broadly pertinent in comparison with other South Asian rural settings.

The findings of the study have several policy implications and significance. The findings have established that in order to achieve Bangladesh's development aspirations, young and adult women from disadvantaged groups need to have access to financial (i.e., credit, savings, insurance) and non-financial services (i.e., skill development training, awareness building education, technical assistance) that will enable them to gain competitive skills, involve them engaging in income generating activities, enhance their standard of living, become aware of health issues, enrich decision making autonomy, reduce gender gaps within the family as well as society, improve their sense of self-worth and achieve their desired competencies. PRIME is only one of several instruments for employment generation which has significant influence on women empowerment in Bangladesh. Women empowerment has a bi-directional relationship with growth. It is a cross-cutting issue that will determine the success of the new SDG development agenda in both direct and indirect ways. In summary the findings of the study suggesting regulators and senior policy makers that women's empowerment through program participation may be a prevailing instrument that can make positive sustainable changes in the social norms along with growth of the society.

Findings of the study will help develop a more effective policy environment to make women empowerment as a dynamic tool for promoting gender equality and women's rights in Bangladesh. Bangladesh has adopted several legal and policy actions to advocate the rights of women like, reformulation of the Women Development Policy

(WPD) 2011; Domestic Violence (Prevention and Protection) Act 2010 and Rules 2013; Overseas Employment and Migration Act 2013; Prevention and Suppression of Human Trafficking (PSHT) Act 2012; National Children's Act 2013; Child Marriage Restraint Act 2014 and others. But the challenge for policymakers is to combine growth-promoting strategies with policies that allow women (especially poor women) to participate fully in the opportunities unleashed and thereby contribute to and benefit from growth. Through microcredit along with skill development training, technical assistance, primary healthcare services and awareness building campaigns, make the labor market work better, remove gender inequalities and increase financial inclusion.

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