

Microcredit, Financial Inclusion and Women Empowerment Nexus in Bangladesh

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Abstract

This paper examined the role of microcredit in women empowerment through financial inclusion. A survey was conducted among the low profile unprivileged rural women living in southwestern part of Bangladesh. Data were collected on the usage and effectiveness of microcredit and analyzed using STATA 11. Multiple regression and descriptive statistics were used to interpret data. The study found that microcredit promoted financial inclusion and played significant role in empowering low profile rural women in terms of income generation, saving mobilization, creation of household assets and overall poverty reduction. Thus, microcredit can be a useful tool for women empowerment and potent tool for economic development.

Keywords: Microcredit, financial inclusion, women empowerment and Bangladesh.

1. Introduction

The term financial inclusion has gained attention during the early 2000s, and has been a result of findings about financial exclusion, which is related to poverty. That is the poor and disadvantaged people cannot afford the modern financial services by banking sector and hence are excluded from the financial service delivery. This calls for financial inclusion which refers to the delivery of financial services at affordable costs to disadvantaged and low income sections of a society, and remains a common objective for many central banks among the developing nations.

Women and their empowerment is one of the burning issues in developing world, as they are confined to less remunerative jobs, specially the disadvantaged women. In many developing countries, female headed households are the poorest among the poor households. Experience shows that the 'hard-core' poor are largely the women, because they face social barriers in accessing economic assets such as skill, property and credits that make it is much harder for them to overcome poverty and they are more susceptible to becoming poor when they lose the male earning member of the family due to abandonment, divorce or death.

Thus continued disparities between women and men in employment and income opportunities, education, and control over assets demonstrate that development activities are centered around on the men. Therefore several NGOs including government in many low income countries have introduced credit programs targeted to the poor in recent years. Many of these programs specifically target women, based on the view that they are more likely to be credit constrained than men, have restricted access to the wage labor market, and have an inequitable share of power in household decision making.

The reason behind microcredit is that there exist poverty, and it does not require any collateral for the rural women to avail credit facility. Thus, microcredit is now a proven strategy to reach and target the poor women because they are otherwise excluded from modern financial services. The Grameen is perhaps the best-known example of these small-scale production credit programs for the poor, where more than 90 percent of its clients are

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women. The Grameen Bank has been extending small credits to poor borrowers primarily women to promote self-employment and income generation since 1976. The apparent success of the Grameen Bank has made microcredit a new model for poverty alleviation and sustainable development that attracted other NGOs such as BRAC, ASA, and PROSHIKA including government directorates with similar microcredit programs. They have a significant positive effect on empowering the disadvantaged women by providing microcredit.

Women are involved in various income generating activities such as agriculture, poultry and livestock rearing, household gardening, and handicrafts to be economically solvent through microcredit which can ensure financial inclusion of women with market based work and establish their opinion in the household activities as well as outside the house and also ensure their participation in development process.

Bangladesh is a predominantly rural based and agrarian country, where women constitute half of the population, and all modern financial institutions having credit operations of various types are almost exclusively located in urban areas, and thus rural areas in general and particularly rural women are specifically excluded from the financial intermediation. Thus microcredit operation provides an ample way of financial inclusion for rural women who have no access to financial services otherwise.

Hence the term 'women empowerment' is used in this study to refer economic empowerment of disadvantaged women who had no income and assets, and thus no control over family wealth. Financial inclusion through microcredit seems to be a viable option for the rural women having no access to income and wealth. Therefore this study envisages whether microcredit facilitates financial inclusion, women's income generation, enhances family assets, provides greater control over family wealth and thereby eventually economically empowers them, and tries to justify users' satisfaction and suggest appropriate policy option addressing financial inclusion for women empowerment.

2. Literature Review

A huge volume of research has been surfaced in the field of microcredit and women empowerment. The author tried to glimpse the representative ones and reviewed twenty available literatures on microcredit and women empowerment. The majority of these literatures support the notion that microcredit facilitates women empowerment. However, a few of these support the notion that microcredit does not facilitate women empowerment. Haider (1991) and Kuddus (2000) provided a *description of the survival strategies of poor women in Bangladesh*. They reviewed a number of GO-NGO projects, with a view to design an action research project for mainstreaming rural women and *described the disproportionate and oppressive social burden the women carry in the society*.

Berger (1995) found that increasing women's access to microfinance services lead to individual economic empowerment through enabling women's decisions about savings and credit use, enabling them to control income and set up micro-enterprises. It is then assumed that this economic empowerment lead to increased well-being of women and then sociopolitical empowerment.

Salahuddin and Shamim (1996) identified the impact of poverty focused NGO programs on rural women beneficiaries in terms of employment and income. The study revealed wide gender gaps in employment and income, literacy and education, nutritional intake, and access to health facilities.

Cheston and Susy (2000) showed that many microfinance institutions seek to empower women as an implicit or explicit goal, and believe they cannot afford to focus on empowerment because it is incompatible with financial sustainability or because it detracts from the core business of providing financial services.

Latifee (2003) found that the indicators such as respect from neighbors and spouses, self-esteem, self-confidence, self-expression, ability to protest social injustice, capacity to solve social issues are applied to measure changes in social conditions of poor women; this has all been possible because of their access to credit.

Slee (2004) identified that women particularly from disadvantaged families cannot participate in or benefit from development efforts. In climatic and economic vulnerabilities, men tend to migrate leaving their families behind, where women bear the burden of poverty in a discriminatory situation.

Malik and Luqman (2005) revealed that microfinance raised economic status of women. It assisted women to earn extra income through which they can earn significantly greater financial autonomy.

Hasan (2005) observed that poor women are involved in various income generating activities such as agriculture, poultry and livestock rearing, household gardening, fisheries, forestry, handicrafts, service providing activities to be economically solvent. Thus women can establish their opinion in household affairs and also can ensure participation in development process.

Umashankar (2006) explored the impact of participation in Self Help Groups on the empowerment of women in the context of the great importance being given to the group approach while conceptualizing any program for rural women. The study looked at various dimensions of empowerment – material, cognitive, perceptual and relational. Access to credit can help in expansion of material base of women by enabling them to start and expand small businesses, often accompanied by market access; the women also experienced ‘power within’: feelings of freedom, strength, self-identity and increases in levels of confidence and self-esteem.

Gupta (2006) showed that though women have made great stride in improving their education status; gender gaps still persist. Even though female employment has increased in most regions of the world, the vast majority of women still work in low-paying, seasonal and insecure jobs in the informal and semi-formal sector of the labor market.

UNFPA (2007) showed the relationship between microfinance and women’s empowerment and improvements in their health. This study supports the link between microfinance and social performance, exemplified by microfinance’s strong positive impact on women’s empowerment and a less verifiable impact on sexual and reproductive health. When microfinance is offered in conjunction with health education services, however, this link is strengthened with a positive impact on both empowerment and sexual and reproductive health.

Hossain (2008) empirically examined the role of microfinance institutions in promoting rural livelihoods in Bangladesh. The study reflects on recent arguments against micro credit and shows that despite some criticisms, microfinance is making significant contribution in uplifting the livelihoods of disadvantaged rural communities.

Mayoux and Hartl (2009) showed that microfinance has been seen as contributing not only to poverty reduction and financial sustainability, but also to a series of ‘virtuous spirals’ of economic empowerment, increased well-being and social and political empowerment for women themselves, thereby addressing goals of gender equality and empowerment.

Haugen (2008) examined the effect of micro-finance on the empowerment of women. It showed that when women start saving money, and work with small businesses, their practical needs are fulfilled. The strategic needs of women are however not fully met through micro-finance, particularly within the area of household work, where traditional gender roles seem to prevail. Thus, it concluded that that women are not fully empowered through micro-finance, but still has to undergo tremendous progress, both individually and community-wise.

Asim (2008) found impact of microfinance on indicators of women empowerment in urban center of Lahore district in Pakistan. This study considered indicators involving economic decision, social mobility decision, child and health related decision, resource allocation decision and autonomy in household purchase decision. To investigate the relationship between women empowerment and microcredit participants the study took three different estimates such as simple parametric framework of conditional mean dependence, randomization of treatment and bivariate probit model. The result showed that microcredit program was insignificant in explaining all the outcome indicators of empowerment for sampled households.

Shah and Butt (2011) showed the role of microcredit in income generating activities of women and its impact on their socio-economic empowerment. They found that microcredit has significant impact on the up lift of socio-economic empowerment of the borrowers. The results showed that most of the females who availed the facility of microcredit finally got socioeconomic empowerment.

Khan et al. (2011) studied impact of microcredit scheme of Punjab Rural Support Program (PRSP) on empowerment of women. This study compared status of women before and after taking microcredit. Microcredit program increased awareness of women and women's empowerment. It raised involvement in the children education, self-identity, literacy, visiting shopping and participation in family budgeting.

Noreen (2011) found that utilization of loan by women extracts better result than male family members. The study also found that empowerment status of rural women in Bahawalpur City of Pakistan can be significantly developed by enhancing their income generating activities by imparting loan without any collateral through different microfinance programs.

Islam and Reza (2012) explored a sustainable way of poverty reduction through coordinated micro-credit operations and social overhead capital (SOC) in rural areas, which calls for a Government and NGO partnership. They test the viability of SOC as a determinant of efficiency of micro-credit operations in rural areas of Bangladesh.

The studies cited examined different socioeconomic dimensions of women empowerment. None of them considered women empowerment as a nexus with microcredit and financial inclusion. Thus, it appears that in spite of the huge literature on microcredit and women empowerment, there is ample scope to examine whether extension of microcredit to disadvantaged women really creates any room for financial inclusion and leads to their real empowerment. Hence this study focuses on the financial inclusion of disadvantage women through microcredit services and examines their real impact towards women empowerment in Bangladesh.

3. Methodology

The study is based on primary survey in addition to study of available records. A primary survey was conducted based on multistage sampling technique. At the first stage the southwestern part of Bangladesh was selected as the study area. At second stage, out of 11 southwestern districts 10 percent, namely Khulna district was purposively selected. In Khulna district there are 9 upazilas, out which Dumuria (10%) upazila was selected purposively at third stage. At the fourth stage out of 14 union parishads in Dumuria upazila 3 unions (20%) namely Gutudia, Shahos-Noakati, and Vanderpara union were selected purposively. At the fifth stage, from each of these 3 unions, 3 viallages (20%) namely Gutudia, Zelardanga, and Panchu from Gatudia union; 3 villages (20%) from Shahos-Noakati union namely, Sahosh, Noakati and Joykali, and 2 villages (20%) from Vanderpara union namely village Razapur and Kuloti were selected. At the last and 6th stage, from each of these conveniently selected 8 villages 20 respondents totaling 160 microcredit receiving women were randomly surveyed.

Thus the women living in the so selected eight villages, who had no financial access to any modern financial sector, but availed microcredit facilities from various microcredit providing institutions (MPI) were treated as the active population of the study. That is to say availability of microcredit to the targeted women ensured financial inclusion. To draw a representative sample of target population at least 20 percent of the credit receiving women were surveyed randomly.

A structured questionnaire containing close and open ending questions were used to conduct the survey. The questionnaire was pretested before final data collection. The survey was conducted during February 2012. Collected data were processed through computer software mainly STATA 11 and both descriptive and inferential statistics were used to interpret data.

Model Specification

Definition of women empowerment: There is no fixed definition of women empowerment which is used in several meanings. In this study it is used to refer economic empowerment of disadvantaged rural women who had no income and assets, and thus no control over family wealth. For measuring women empowerment we construct an index including income generation, savings accumulation and growth in net assets. A rating index consists of 5- point scale: 1-very low, 2- low, 3- average, 4- high, and 5- very high was used to measure women empowerment.

To test whether the financial inclusion of disadvantaged women through microcredit empowers women; following multiple regression model was formulated:

$$Wem = \beta_0 + \beta_1 MCr + \beta_2 Edu + \beta_3 Trn + \beta_4 AcMed + \beta_5 PMF + u_i \dots \dots \dots (1)$$

Where, Wem= Women empowerment of disadvantaged women; MCr = Use of microcredit, recorded as a dummy variable: if micro credit was used for credit purpose then 1, otherwise 0; Edu = Level of education, recorded as 1= illiterate, 2= primary, 3= secondary, 4= higher secondary, and 5= bachelor degree and above; Trn = Training, recorded as a dummy variable: have training 1, otherwise 0; AcMed = Access to media such as radio, television and newspapers, recorded as a dummy variable: 1= have access, otherwise 0; PMF = Public market facility, recorded as 1 = very poor, 2 = poor, 3= average, 4 = good, and 5 = very good; β_0 = intercept, β_i = coefficients ($i = 1, 2, \dots, 5$), and u_i = stochastic disturbance term.

In addition, the overall satisfaction level of the receiving microcredit respondents was also measured by a weighted mean index (Wmi) using 5- point scale. The formula of Wmi is:

$$Wmi = \frac{w_1 f_1 + w_2 f_2 + \dots \dots \dots + w_5 f_n}{f_1 + f_2 + \dots \dots + f_n} = \frac{\sum w_i f_j}{\sum f_j}$$

Where, $w_i = 1, 2, \dots, 5$, assigned score of satisfaction scale as 1= strongly dissatisfied, 2 = dissatisfied, 3 = moderately satisfied, 4 = satisfied, 5 = strongly satisfied; and $f_j = 1, 2, \dots, n$ corresponding frequency of assigned scores.

4. Result and Discussion

General Information of Women

In order to provide an insight into the women empowerment situation in Bangladesh, the Table 1 provides the socio-demographic indicators of rural working women with reference to surveyed population.

Table1: Socio-demographic Characteristics of Women

Characteristics	Categories	No.	%	Mean
Age	20-29	78	48.75	32.40
	30-39	55	34.375	
	40-49	20	12.5	
	50-59	7	4.375	
Marital Status	Unmarried	8	5.00
	Married	142	88.75	
	Widow & divorced	10	6.25	
Family Size	2-3	35	21.875	5.04
	4-6	86	53.75	
	7-9	27	16.875	
	9+	12	7.5	

Source: Field Survey, 2012

The study found that the mean age of working women was 32.40 years and the majority of them were 20-29 years old (48.75 percent). About 89 percent of the respondent women were married, followed by 6 percent widow and divorced, and 5 percent unmarried. The average size of their families was five, where most of the families consist of 4-6 members (53.75 percent) within joint family.

Microcredit and Financial Inclusion:

All 160 microcredit receiving women were asked whether they had any access to formal credit. It was found that none of the sampled women had any such access, and thus they were excluded from the formal financial services. With the provision of microcredit service they are included in the financial market.

Use and Borrowing Purpose of Microcredit:

Table 2 captures information on the purpose of borrowing credit and shows that most of the working women borrowed credit for the purpose of agriculture (39.38 percent), followed by business such grocery and nursery (26.88 percent), fish cultivation (14.37 percent), buying land, furniture (10.62 percent) and repaying previous loan (8.75 percent).

Table 2: Use and Borrowing Purpose of Credit

Purpose	Borrowing		Use	
	Frequency	Percent	Frequency	Percent
Agriculture	63	39.38	54	33.75
Business	43	26.88	40	25.00
Fish cultivation	23	14.37	21	13.13
Buy assets: land, furniture	17	10.62	14	8.75
Repay previous loan	14	8.75	9	5.62
Buy medicine and health care facility			8	5.00
Food consumption			6	3.75
Children's education			5	3.13
Pay dowry			3	1.88
Total	160	100.00	160	100

Source: Field Survey, 2012

However there has been a gap between borrowing purpose and actual use of microcredit. Table 2 captures data on using pattern of microcredit. The study found that almost 14 percent of respondents deviated from their purpose for what they borrowed fund from MPI. The credit borrowers for the purpose of agriculture, fish cultivation, business, and buy assets deviated towards buy medicine and health care facilities, food consumption, children's education, and payment dowry. Thus a significant number of women used borrowed credit for the unproductive purposes.

Impact of Microcredit

The first impact of microcredit is the inclusion of disadvantaged women who had no access to the formal financial market otherwise. With the access to collateral free small credit, this class of marginal women has had the taste of finance. The MPI extend loan to the poor women for the purpose of productive activities so that they can enhance their income which will accelerate their standard of living and reduce poverty. Such activities also open up the room to accumulate saving of the poor women in rural areas. Table 3 captures data that reveal the impact of microcredit on income, expenditure and saving.

Table 3: Impact of Microcredit on Income, Expenditure and Saving

Indicators	Before	After	Test of differences between sample means			
			Std. error	Z _{cal}	Z _{tab}	A
Mean Income (BDT)	7564	9771	378.68	5.82	2.58	0.01
Mean Expenditure	5963	7575	264.77	6.08	2.58	0.01
Mean Saving	983	1513	143.46	4.18	2.58	0.01

Source: Author's Compilation based on Field Survey, 2012

The study found that mean income of household was monthly BDT 7564 before taking microcredit and BDT 9771 after taking microcredit. The test of difference between mean incomes is significantly higher at 1 percent level of significance. Once the respondents' mean income increased it enabled both their mean monthly expenditure and saving also to increase. Data on Table 3 shows those mean expenditure of households increased from BDT 5963 to BDT 7575 and mean savings from BDT 983 to BDT 1513. The tests of difference between mean expenditures and savings are also significantly higher at 1 percent level of significance. It means microcredit paved the way to attain higher income, expenditure and savings of women simultaneously.

Women Empowerment Statistics

Since use of microcredit paved a way to attain higher income, expenditure and savings of disadvantaged women, it seems that there has been women empowerment through microcredit use. The women empowerment score was estimated as a weighted index of income generation, saving accumulation and growth of net assets. The weights were 0.4, 0.3, and 0.3 for income, saving and net assets respectively. These three factors were counted towards total women empowerment in a scale of 1-5. Data in Table 4 depict the empowerment score of women in terms of income generation, saving accumulation and growth of net assets of the respondents. It reveals that microcredit had different impacts on women empowerment. The mean women empowerment score of income generation by microcredit was 1.03 (out of 2). The mean score of saving accumulation was 0.76 (out of 1.5), and the mean score of growth of net assets was 0.48 (out of 1.5). Thus the overall women empowerment score was 2.27 only (out of 5.0), owing to perhaps non-compliance of microcredit use as per purpose of borrowing. Therefore here exists ample scope to strengthen women's empowerment further through proper monitoring of credit use.

Table 4: Women Empowerment Statistics

Indicators	Statistics
Women Empowerment Score (Out of 5)	2.27
• Mean Income Generation (Out of 2)	1.03
• Mean Saving Accumulation (Out of 1.5)	0.76
• Mean Growth of Net Assets (Out of 1.5)	0.48

Source: Author's Compilation based on Field Survey, 2012

Summary of Regression Analysis

Equation 1 was estimated using STATA 11, and the result is summarized in following Table 5. The coefficients of explanatory variables gives the rate of change in the conditional probability of the event (women empowerment) occurring for a given unit change in the value of the explanatory variable.

Table 5: Summary of Regression Analysis

Variables (Explanatory)	Value of β_s	Standard error (<i>se</i>)	<i>t</i> -value	<i>p</i> -value
Constant	1.209	.135	8.98	0.000
MC	.258	.095	2.72	0.01
EDU	.234	.044	5.34	0.00
TRN	.108	.067	1.68	0.10
ACM	.041	.088	0.47	0.64
PMF	.149	.039	3.80	0.00

R-squared = 0.3868, Adj R-squared = 0.3669, Number of obs. =160, F(5,154) = 19.43, Prob> F= 0.00

Source: Author's Compilation based on Field Survey, 2012

Most of the explanatory variables except access to media have had statistically significant impact on women empowerment. Use of microcredit significantly influences women empowerment because it enables women to enhance their income by utilizing it for productive purpose. The coefficient of microcredit indicates that one unit increase in use of microcredit enhances women empowerment by 0.26 units.

Education and training generally enhances ability and competencies. However there prevailed a mass illiteracy (49.38%) among the respondents, and majority (40%) of the rest of others had only primary level of education, while only 10.62% of them had secondary and higher secondary level of education as captured by data in Table 7 in appendix. Accordingly the coefficient of education indicates that one unit increase in level of education will lead to an increase in women empowerment by 0.23 units. This calls for investment in education to form human capital to attain greater development.

Similarly training is a critical tool for improvement of women's knowledge, and skill which lead them to be more empowered. It is found that the coefficient of training is very small and reflects that one unit increase in training increases women empowerment by 0.11 units only. This is because in the study area a significant portion of the surveyed credit receivers (35.63%) did not receive any training during their credit period (Table 7).

Access to media such as radio and television, had no impact on women empowerment, because 14% of the respondents had no access at all, while rest of the others having access to radio- television use them only for recreation purpose. They do not use such access as a means of gaining insight or information, perhaps because they have no such abilities as reflected by their mass illiteracy and low level of education.

Public market facility is vital for marketability of products the rural women produce. However the study found that this facility remained either poor or very poor in the rural areas, and accordingly it had a small but positive impact on women empowerment.

Microcredit Users' Satisfaction Level

How were the microcredit users in term of their satisfaction towards service delivery and supports of MFI? To answer this query the study summarized microcredit receivers' satisfaction perception in Table 6.

Table 6: Microcredit Users' Satisfaction

Satisfaction level	Types	Percentage	Mean
	Strongly Dissatisfied	2.5	
	Dissatisfied	13.13	
	Moderately Satisfied	31.25	
	Satisfied	18.75	
	Strongly Satisfied	34.38	

Source: Field Survey, 2012

The data in Table 6 shows that there was a mixed rating about the satisfaction level. Almost more than one-third (34.38 percent) of the microcredit users were strongly satisfied, while about 16 percent were dissatisfied with a mean score of 3.69 in a scale of 1-5. This implies that credit users' average rating of satisfaction level was quite high, in spite of the fact that their empowerment was not at par with their satisfaction level. The main reason of their satisfaction is availability of the credit without any collateral at times they need it, while the reason of their dissatisfaction is high interest rate.

5. Conclusion and Recommendation

The foregoing analyses suggest that there exists a nexus among women empowerment, microcredit use, education and training, and public market facility. Use of microcredit had a positive impact on women empowerment although empowerment score was quite low due to non-compliance of microcredit use as per purpose of borrowing. Education and training, and public market facility also played significant role in empowering women in spite of the fact that almost half of the respondent women remained illiterate with no access to training and with low level of public market facilities. Therefore proper monitoring of microcredit use should be geared up to have its full impact. Investments in human capital formation in terms of education and especially vocational training must be undertaken by the government and NGOs as well to raise the literacy, skill and awareness among rural women to attain better outcome of microcredit use. Similarly provision of public market facility needs to be upgraded to enhance the marketability of the rural women producers.

References

- Asim, S.A. (2008). Evaluating the Impact of Microcredit on Women's Empowerment in Pakistan. CREB Working Paper No. 2-9, Social Science Research Network.
- Berger, M (1995). Key Issues in Women's Access to and Use of Credit in the Micro and Small scale Sector, London, IT Publications.
- Cheston and Susy (2000). Measuring Transformation: Assessing and Improving the Impact of Micro credit, Part II: Implementing Impact Assessments and Monitoring Systems: A Practitioner Perspective from Zambia. Washington, D.C: Microcredit Summit Campaign.
- Gupta, G. R (2006). Unlocking the power of Women: Is Education the Key? International Center for Research on Women (ICRW) Washington, D.C: Harvard Graduate School of Education (HGSE).
- Haider, M (1991). The assault that failed: a profile of absolute poverty in six villages of Bangladesh. Geneva: United Nation Research Institute for Social Development (UNRISD).
- Hasan, M Y (2005). Skill Training Program for Women in Bangladesh: Assessment and Directions, Bangladesh Center for Women and Development.

- Hossain, M T R. (2008) Nature and Impact of Women's Participation in Economic Activities in Rural Bangladesh, CPD-IRRI Policy Brief 7, Dhaka: Centre for Policy Dialogue.
- Haugen, K (2008). Micro Finance and Empowerment from a Woman Perspective Copenhagen Business School, cand merc. Int.
- Islam, M S and Hasib Reza (2012). Micro-credit's Efficiency and Social Overhead Capital: GO-NGO Coordination, *Journal of Business and Management Sciences*, 2:2, International Islamic University, Islamabad, Pakistan.
- Khan, S., Sajid M R, and Rehman H (2011). Women's Empowerment through Microcredit: A Case Study of District Gujrat, Pakistan. *Academic Research International*, 1: 2, pp. 332-343, ISSN: 2223-9553. [http://www.savap.org.pk/journals/ARInt./Vol.1\(2\)/2011\(1.2-36\).pdf](http://www.savap.org.pk/journals/ARInt./Vol.1(2)/2011(1.2-36).pdf)
- Kuddus, M A (2000). Impact of Major Ongoing WID Projects on Rural Women. Kotabari, Commilla: Bangladesh Academy for Rural Development.
- Latifee, I H (2003). Poverty Reduction through Micro credit' an international conference paper, Taksim-Istanbul.
- Malik, N H and Luqman M (2005). Impact of Microcredit on Women Empowerment: A Review Paper. *Pakistan Journal of Agriculture Science*, 42: 3-4, pp. 100-105. <http://www.pakjas.com.pk/papers/446.pdf>
- Mayoux, L and Hartl M (2009). Women's Empowerment through Sustainable Microfinance: Rethinking Best Practice.
- Noreen, S (2011). Role of Microfinance, in Empowerment of Female Population of Bahwalpur District. *International Conference on Economics and Finance Research*, 4.
- Salahuddin, K and Shamim I (1996). Rural Women in Poverty: NGO interventions for Poverty Alleviation Dhaka: A Research and Study Group.
- Shah, H T and Butt H (2011). Income Generating Activities Through Micro credit and Women's Socio-Economic Empowerment: A Study of District Kasur, Pakistan, *Academic Research International*, 1: 3, pp. 218-226. [http://www.savap.org.pk/journals/ARInt./Vol.1\(3\)/2011\(1.3-23\).pdf](http://www.savap.org.pk/journals/ARInt./Vol.1(3)/2011(1.3-23).pdf)
- Slee, D (2004). Women, Development and the Environment: A Method to empowerment of Poor Women. Dhaka: University Press Limited.
- Umashankar, D (2006). Women's Empowerment: Effect of Participation in Help Groups, Indian Institute of Management Bangalore, Chandigarh.
- UNFPA (2007). Exploring Linkages: Women's Empowerment, Microfinance Health Education. Available from: <http://www.unfpa.org/gender/micro/htm>

Appendix: Table 7: Comparative Scenery of Explanatory Variables

Category		Frequency	Percent	Cumulative
Education	Illiterate	79	49.38	49.38
	Primary	64	40.00	89.38
	Secondary	13	8.12	97.50
	Higher secondary	4	2.50	100.00
Training	No training	57	35.63	35.63
	Have training	103	64.38	100.00
Access to media	No access	22	13.75	13.75
	Have access	138	86.25	100.00
Pubic market facility	Very poor	29	18.13	18.13
	Poor	55	34.38	52.50
	Average	69	43.13	95.63
	Good	7	4.38	100.00
Total		160	100	

Source: Field Survey, 2012