



Effect of Microcredit on Handloom Weavers of Grameen-Check Producers of Sirajganj District of Bangladesh: A Case Study in Six Selected Villages

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Abstract

Handloom industry of Bangladesh is having wonderful past, debatable present and hazy future due to a lot of internal and external specter factors that are acting behind the sight. In this paper, we have identified those leading factors. The repayment behaviour of individuals suggests that the loans were properly used and that investment in handloom activities is profitable in the study area. It was found that the difference in previous financial conditions and financial conditions used after credit was statistically significant at the 0.001 level. It was also reported that taken credit was not sufficient at all for handloom weavers of the study areas. In our study area has 80.27 percent dependency ratio where as the national rural dependency ratio was 74.2%. Handloom weavers' facing threats of destruction due to lack of Govt. patronage, shortage of funds abnormal price hike of yarn.

Keywords: Microcredit, Grameen-check, Dependency ratio, Least significance difference and statistical inference

Introduction

The word "Microcredit" did not exist before the seventies. Now it has become a buzz-word among the development practitioners. In the process, the word has been imputed to mean everything to everybody. The term "Microcredit" to mean agricultural credit, or rural credit, or cooperative credit, or consumer credit, credit from the savings and loan associations, or from credit unions, or from money lenders. Microcredit is the extension of small loans to enterpreneurs too poor to qualify for traditional bank loans. It has proven to be an effective and popular measure in the ongoing struggle against poverty (Yunus, 2006). The Microcredit helps eliminate the exploitation of the poor by money lenders, create opportunities for self-employment for the vast multitude of unemployed people in rural area, bring the disadvantaged, mostly the women from the poorest households, within the fold of an organizational system which they can understand and manage by themselves. The rural credit market in Bangladesh is highly segmented. Public formal institutions provide about 20 percent of rural credit, while informal sources provide less than 45 percent. The total share of Microcredit programs has been increasing. Bangladesh's NGOs provide Microcredit to some 8 million people, mostly women (World Bank 1998) and their number has increased substantially over the years. Microcredit has penetrated in all sectors to support investment in micro, small and medium enterprises. One of the important sub-sector is handloom.

The handloom sector is the largest traditional cottage industry in Bangladesh. It provides employment for more than 888115 people and is the second largest employment provider after agriculture (BBS 2005). Handloom products have shown decisive upward trend in the export market since 1972 and Bangladeshi handloom products with their distinctive design and superior quality have created a niche for themselves in overseas markets. We can now proudly claim to be equipped to meet the demand for the latest fashion. An international expert's study reveals that the technical skill of weavers of Bangladesh is second to none in the handloom producing world (The Bangladesh Observer, 2004). The sector has a prospect for labour intensive and capital saving growth. Handloom weaving can reduce unemployment and underemployment of rural households. Concerning the handloom industry, a few studies (Chowdhury, 1989; Latif, 1988) indicated the overall growth of handloom industries and efficiency between handloom and powerloom weaving. In this context data and information interms of capacity, output. technological upgradation, product specialization and modernization are all the important to look at. In Bangladesh, it was found that 10 largest cloth producing districts namely Sirajgang (31.8%), Tangail (10.9%), Narayanganj (10%), Pabna (9.8%), Narshingdi (9%), Kustia (6.5%), Bogra (3.2%), Dhaka (2.3%), Brahmanbaria (2.3%) and Satkhira (1.6%) account for about 87.3% of total monthly cloth production in the handloom industry (BBS 2005). Within Sirajganj district there were approximately 14870 handlooms weaving families and 100757 year round working handlooms (BBS 2005). Handloom industry of Sirajganj faced with manifold problems since long because of increase in price of yarn and dye, lack of government loan facilities and unavailability of quality chemical dying. A new handloom product has been developed by Grameen Bank- a leading non-government rural oriented financial institution with trade name "Grameen Check" which is soft, colour fast and 100% cotton. The "Grameen Check" fabric and the apparels made out of it have already made a breakthrough in European markets with potential of penetrating other parts of the world. Sirajganj district earned a name for quality handloom products such as Grameen check, Aarong check, lungi, dhuti, bed sheets and saris. Handloom industry of Sirajganj district is account for more than 31% of the total handloom production of the country (BBS 2005). Due to shortage of investment, a large number of looms were closed in the last two decades. Many skilled weavers left the occupation. The government introduced loan disbursement programme in 1984 to restore the handloom sector. Loans of Tk. 5,500 for each semi-automatic handloom and Tk. 3,500 per handloom were distributed in cooperation with Bangladesh Handloom Board. But soon after the disbursement of loans, it was found that a big amount of total money was given to the fake weavers. In view of the fact the programme remained suspended (Internet Edition, HOLIDAY, 2003). Taking this premise as the point of departure, a micro level study was conducted to asses the status and effect of Microcredit of handloom sector in six selected villages of Sirajganj district. Moreover, our broad objective is to find out the nature and magnitude of problems and irregularities existing of the Handloom industry of Bangladesh, to provide a way out to these problems.

However, the specific objective of the study was (i) to estimate the dependency ratio of Microcredit users' households and to compare with national level; (ii) to identify the percentages of coverage of Microcredit by Institutions; (iii) to study the repayment behaviour of Microcredit to handloom weaving households; (iv) to identify the impact of Microcredit to handloom weavers' households and (v) to identify the nature and magnitude of problems and irregularities existing in this sector.

Materials and Methods

The necessary data has been collected from primary and secondary sources. Primary data was collected through a field survey of randomly selected 106 Grameen-check producers' households using a pre-tested questionnaire to elicit the required information. The field survey has been conducted during the month of October-November, 2009. The sample households conducted in one hundred six weaving producers of six villages; among them 13%, 14%, 16%, 17%, 19% and 21% respondents were inhabitants of Bowra,

Benotia, Sennagar, Mokundagati, Delua and Meghulla village respectively under Belkuchi upazila in Sirajganj district of Bangladesh. The average number of Micro-credit holder of a village was 17.67 where minimum was 14 and the maximum was 20 households. Secondary data was collected from published and unpublished sources, official records of different government and private institutions. After collection of data from different sources, a matrix was developed for analysis keeping the objects of the study in view. The data was analyzed using Statistical Package for Social Science (SPSS 2004) version 12.0 for windows and MSTAT-C (MSTAT-C 1989). Descriptive statistics such as analysis of variance

(ANOVA), multiple comparison test, *t*-test, χ^2 test, multiple regression analysis etc. were performed. A simple tabular technique has been used in the study to classify the data into meaningful categories with estimates of statistical parameters and coefficients.

Results and Discussion

Socio-economic characteristics of the Microcredit borrowers

Knowledge on the household characteristics may help to understand different pattern of borrowing households. Their detailed characteristics have been presented in Table 1.

Table 1. Socio-economic characteristics of the respondents (Microcredit borrowers) of the stud	y area
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		A	Categorie	s of age (yea	ars)	Level of e		
	±	Age (years)	20-35	35-50	50-65			
	No. of Microcredit holder	Mean \pm SD				No formal education	1-5 years schooling	6-9 years schooling
Benotia	15 (14.2)	41.2±11.76	4 (3.77)	7 (6.60)	4 (3.77)	3 (2.83)	6 (5.66)	6 (5.66)
Bowra	14 (13.2)	44.93 ± 8.3	2 (1.89)	7 (6.60)	5 (4.72)	3 (2.83)	7 (6.6)	4 (3.77)
Delua	20 (18.9)	39.8 ± 5.53	2 (1.89)	17 (16.04)	1 (0.94)	5 (4.72)	12 (11.32)	3 (2.83)
Meghulla	22 (20.8)	40.27 ± 7.59	4 (3.77)	16 (15.09)	2 (1.89)	5 (4.72)	11 (10.38)	6 (5.66)
Mokundagati	18 (17.0)	41.72 ± 7.62	3 (2.83)	11 (10.38)	4 (3.77)	3 (2.83)	10 (9.44)	5 (4.72)
Sennagar	17 (16.0)	39.94 ± 11.01	5 (4.72)	9 (8.49)	3 (2.83)	4 (3.77)	7 (6.6)	6 (5.66)
Total	106 (100)		20 (18.87)	67 (63.21)	19 (17.92)	23 (21.7)	53 (50)	30 (28.3)
Mean \pm SD	17.67	41.12 ± 8.56						

Figures within parentheses indicate percentages

Source: Compiled from field survey 2009

Age of the respondents

We found only the middle aged people (the mean age was 41.12 years where by the minimum and maximum ages were 22 and 63 years respectively) still continuing to eke out a livelihood from weaving. This may be due to the availability of alternative sources of livelihood is relatively better, low wages and continual insecurity in the handloom sector has forced the youth to abandon their family vacation.

Education

Educational levels of the respondents include both formal and informal education. In terms of their level of education, they are classified into three groups, namely: no formal education, 1-5 to years of schooling and 6-9 years of schooling. Results revealed that 21.7% is illiterates but 50% have primary education and 28.3% has 6-9 years of schooling. It was also observed that among those respondents primary and secondary education may did not complete the levels required. As a consequence, this has lead to higher illiteracy rate among inhabitants/handloom weavers of the study areas.

Educational level is an important tool and is needed to stimulate, create, achieve and enhance active participation of grameencheck weaving. The rate of respondent's participation in development initiatives is strongly influenced by their educational levels. The higher a respondent is educated, the greater the livelihood s/he would be included in the labour force and the lower the livelihood s/he would be unemployed (Kriefer 1985; Browne and Barrlt, 1999). A lack of education is enhanced by inequalities and disparities in the labour markets including absolute poverty in the rural areas (Adam and Kruppenbach, 1987).

The details presented in Table 2 reflect the household size, years of experience, number of looms, amount of Microcredit disbursement and purposes of the Microcredit of the sampled weavers.

Household size, years of experience and number of looms

The average household size was found to be 6.29 persons per family where the individual size of family varies from 4 persons to 12 persons. The mean years of experience as GC producer were found to be 6.26 years with standard deviation 2.04 years. Average loom holding was found to be 2.42 numbers with standard deviation 0.89 varying from 1 to 4 (Table 2).

Amount of Microcredit disbursement

Grameen Bank and Bangladesh Rural Advancement Committee (BRAC) have made provision for granting loans to group members for individual handloom enterprises which are repaid by the beneficiaries through weekly installments. Every one of them has taken credit of Tk. 7689 to produce grameencheck against 2.42 looms with standard deviation of Tk. 2460 (Table 2).

Purposes of the Microcredit

The analysis of variance was carried out on three objectives of Microcredit such as "Grameen-check", "Grameen-check and others" and "except Grameen-check". It was found that F ratio was statistically significant at the 0.01 level. Since F ratio was significant, multiple comparison procedure was applied. In 27.4% of household used Micro-credit for GC production, 49.1% of respondents used their Microcredit jointly in GC production and other activities such as buying cattle, fertilizer etc. On an average it could be said that 76.5% of the respondents used their credit in GC production. The rest 23.6% of the respondents used their credit in different purposes except GC production (Table 2).

Table 2. Distribution of lend amount, purposes of the credit, household size, years of experience and number of looms in the study area

	Amount of credit	Purposes of	the credit		Household	Years of	No. of
Village	(Tk.) Mean \pm SD	Grameen check	Grameen check and	Except grameen	size	experience	looms
			others	check	Mean \pm SD	Mean \pm SD	Mean \pm SD
Benotia	8366.67 土 1807.39	6 (5.66)	6 (5.66)	3 (2.83)	5.27 土 1.67	6.13 ± 2.23	$_{2.6} \pm _{0.83}$
Bowra	8071.43 ± 2744.63	4 (3.77)	7 (6.60)	3 (2.83)	6.07 ± 1.94	5.93±2.59	2.21 ± 0.7
Delua	6150 ± 2401.21	2 (1.89)	12 (11.32)	6 (5.66)	6.6 土 1.31	5.85 土 1.31	2.3 ± 0.92
Megulla	7454.55 ± 2849.01	6 (5.66)	11 (10.38)	5 (4.72)	6.91 ± 1.72	6.7 土 1.86	2.27 ± 0.99
Mokundagati	8222.22 ± 2129.01	6 (5.66)	8 (7.55)	4 (3.77)	6.5±2.33	6.33 土 1.97	$_{2.44} \pm 1.04$
Sennagar	8323.53 ± 2015.11	5 (4.72)	8 (7.55)	4 (3.77)	6.0±2.42	6.47 ± 2.48	2.71 ± 0.77
Mean \pm SD	7688.68 ± 2459.63	9603.45 土 2185.09	7653.85 土 1725.07	5540 土 2309.1	6.29 土 1.95	6.26 ± 2.04	2.42 ± 0.89
Total		29 (27.4) b Least significa	52 (49.1) a Int difference	25 (23.6) c			
		$Isd_{1\%} = 1.33$					

Figures within parentheses indicate percentages.

Source: Compiled from field survey 2009.

Table 3. Percentage distribution of repayment difficulties and category of interest rate

	Type of repa	yment difficulties	5	Category of interest rate				
Village	Not at all	Somewhat difficult	Very difficult	Very high	High	Reasonable		
Delua	80.00	15.00	5.00	20.00	75.00	5.00		
Meghulla	72.73	18.18	9.09	27.27	68.18	4.55		
Mokundagati	72.22	22.22	5.56	27.78	66.67	5.56		
Benotia	66.67	26.67	6.67	20.00	73.33	6.67		
Bowra	64.29	28.57	7.14	28.57	64.29	7.14		
Sennagar	70.59	23.53	5.88	29.41	64.71	5.88		
All	71.08	22.36	6.56	25.51	68.70	5.80		

Source: Compiled from field survey 2009.

Repayment behaviour of the borrower with interest rate

The results of the repayment behavior and category of interest rate have been furnished in Table 3. Different NGOs made provision for granting loans to group members for individual handloom enterprises which are repaid by the beneficiaries through weekly installments. The highest proportions of the borrowers (71.08%) were found to be serious to pay their weekly installments and keeping their loan pass books updated. On the other hand remaining of 22.36% borrowers reported that they were facing somewhat difficulties to repayment weekly installment and 6.56% of borrowers were facing very difficulty to repayment weekly installment. Unless the loans were productive in generating additional income, such repayment behaviour would not have been expected from those operating under serious limitation in their asset base. The repayment behaviour of individuals suggests that most of the cases the loans were properly used and that investment in handloom activities was profitable. When asked about the category of interest rate of Microcredit, the highest proportions (68.7%) reported that the rate of interest was high and about one-fourth (25.51%) believe that interest rate was very high and a tiny proportion (5.8%) consider that the rate of interest was reasonable to handloom weavers' of the study area. It was interestingly found that "*Type of repayment difficulties*" and "*Category of interest rate*" are associated at 0.005 probability level since $\chi^2 = 14.76$ with 4 degrees of freedom. This is because unless some positive steps were taken by the authorities to provide adequate loans with minimum rate of interest to the weavers directly.

Impact of Microcredit on weavers' household

Table 4 shows the living standard of people participating in Microcredit has improved that of 43.4% of Microcredit participant previous financial condition was 'not good' which decreases become 10.3%, previous condition was 'somewhat good' 52.8% decreases become 37.7% and previous condition was 'good' was 3.8% increases become 51.9%. In order to examine the hypothesis that there is no difference (*d*) between previous financial conditions (*pfc*) and financial conditions used after credit (*fcuac*) $[H_0: \mu_{d=pfc-fcuac} = 0]$.

Table 4. Distribution of previous financial condition and condition used after credit of the respondents

		Pre	evious fin		Marginal total		
		Not good S					mewhat good
Financial	Not good	7	(6.6)	4	(3.77)	0 (0)	11 (10.34)
conditions	Somewhat good	17	(16.04)	21	(19.81)	2 (1.89)	40 (37.74)
used after credit	Good	22	(20.75)	31	(29.25)	2 (1.89)	55 (51.89)
Marginal total		46	(43.4)	56	(52.83)	4 (3.77)	106 (100)
Test statis	tic (Paired <i>t</i> -test)	t	= 10.07	, df	=105	. ,	

Figures within parentheses indicate percentages.

Source: Compiled from field survey 2009.

It was found that the difference in *previous financial conditions* and *financial conditions used after credit* was statistically significant at the 0.001 level (Table 4). In other words, it is concluded that Microcredit plays a significant role to promote the financial conditions of the Grameen-check producers' of the study area. Microcredit has allowed poor people to become more self-reliant, create employment opportunities and engage in economically productive activities.

The dependency ratio

The dependency ratio is a measure showing the number of dependents (Non-earning group: aged 0-14 and over the age of 60) to the total population (Earning group: aged 15-60). This indicator gives insight into the amount of people of non-working age compared to the number of those of working age. A high ratio means those of working age - and the overall economy - face a greater burden in supporting the aging population.

Table 5. Distribution of earning, non-earning and dependency ratio of study area

		Study area									
Earning Status	Delua (n=20)	Meghulla (n=22)	Mokundagati (n=18)	Benotia (n=15)	Bowra (n=15)	Sennagar (n=17)	Total/average (n=106)				
Earning	70	92	62	46	45	55	370				
Non-earning	62	60	55	33	40	47	297				
Dependency ratio	88.57	65.22	88.71	71.74	88.89	85.45	80.27				

Source: Compiled from field survey 2009

In our study area has 80.27 percent dependency ratio where as the national rural dependency ratio was 74.2% (BBS 2007). This implies that every 100 economically active persons, on an average 80.27 are dependent persons. It is clear that the dependency ratio of the study area is higher than the national average (Table 5). A considerable number of people are using Microcredit in Grameen check handloom production (Table 2) and their financial conditions are improving than the before (Table 4). So, it can be said that the

dependency ratio may be reduced by providing the Microcredit in this sector.

Nature and magnitude of problems and irregularities existing in the handloom sector

Several problems were reflected in the Table 6 according to the respondent of handloom households.

	Shortage	of				Facing threa			
Village	Dyes	Chemicals	Yarn	Dyeing Toolkit	Total	Lack of Govt. patronage	Shortage of funds	Abnormal price hike of yarn	Total
Delua	15.00	30.00	45.00	10.00	100.00	30.00	45.00	25.00	100.00
Meghulla	8.18	35.45	47.27	9.09	100.00	31.82	31.82	36.36	100.00
Mokundagati	5.56	22.22	66.67	5.56	100.00	16.67	44.44	38.89	100.00
Benotia	10.67	24.00	63.33	2.00	100.00	40.00	20.00	40.00	100.00
Bowra	20.86	28.57	50.57	0.00	100.00	21.43	28.57	50.00	100.00
Sennagar	17.65	29.41	52.94	0.00	100.00	5.88	52.94	41.18	100.00
Average	19.32	29.28	43.96	7.44	100.00	24.30	37.13	38.57	100.00

Source: Compiled from field survey 2009

The handloom industry in Sirajganj district of Bangladesh, once the hub of handloom industry in the country, is passing through a trying time and facing threats of extinction due to lack of Government patronage (24.30%), shortage of funds (37.13%) and abnormal price hike of yarn (38.57%). The handloom weavers' of the study area reported that the highest proportion had facing shortage of yarn (43.96%) followed by chemicals (29.28%) and dyes (19.32%) (Table 7). Therefore, the most vital problem is the shortage of yarn which is followed by price hike of yarn, shortage of funds, shortage of chemicals, lack of govt. patronage, shortage of dyes and at the last the shortage of dying toolkits. Problems may be solved step by step according to their intensities. A group of weavers reported that unless some positive steps were taken by the authorities to supply adequate quantities of yarn and other materials to the weavers directly, they could not run their business at all. There would therefore be no alternative but to close down their business. The price of yarn, machinery parts and other necessary things have increased manifold. The weavers have urged the authorities concerned to take immediate measures to save the handloom industry and protect weavers' families.

Regression analysis

To test the hypothesis of the study which deal with amount of Microcredit. In this research takes into account the factors which are stated in Table 7 like $x_1 = Age$, $x_2 =$ Level of education,

 $\mathbf{X}_3 = \text{Size of holding}, \ \mathbf{X}_4 = \text{Percent of interest}, \ \mathbf{X}_5 = \text{No. of}$ recovery installment, $\mathbf{X}_6 = \text{Credit}$ used as principal, $\mathbf{X}_7 = \text{Discount interest for you as borrower}, \ \mathbf{X}_8 = \text{Highest amount of}$ previous loans, $\mathbf{X}_9 = \text{Facing any kind of difficulties about payment}}$ of installment, $\mathbf{X}_{10} = \text{Objective of loans}, \ \mathbf{X}_{11} = \text{Number of credit}$ taken, $\mathbf{X}_{12} = \text{Previous financial condition}, \ \mathbf{X}_{13} = \text{Financial}$ condition used after loan, $\mathbf{X}_{14} = \text{Another member of your family}$ lend money, $\mathbf{X}_{15} = \text{Any terms}$ and conditions for Micro-credit holder, $\mathbf{X}_{16} = \text{If condition relax then you will be benefited},$ $<math>\mathbf{X}_{17} = \text{If you are in trouble then you get any help from concern}$ organization, $\mathbf{X}_{18} = \text{Do you think Microcredit is profitable},$ $\mathbf{X}_{19} = \text{No. of looms}, \ \mathbf{X}_{20} = \text{Years of experience with Grameen}$ cheek, $\mathbf{X}_{21} = \text{Credit from GRAMEEN BANK}$ and $\mathbf{X}_{22} = \text{Credit}$ from BRAC.

Parameters	Partial b	t	Sig
Intercept	1095.546	.307	.76
$X_1 = Age$	42.833	2.153	.03
X_2 = Level of education	655.147	2.707	.00
$X_3 =$ Size of holding	-140.450	-1.608	.11
X_4 = Percent of interest	-53.767	418	.67
$X_5 = No. of recovery installment$	-28.192	525	.60
\mathbf{X}_{6} = Credit used as principal	-559.016	-1.640	.10
\mathbf{X}_7 = Discount interest for you as borrower	-1006.298	-1.477	.14
\mathbf{X}_8 = Highest amount of previous loans	.260	3.481	.00
\mathbf{X}_{9} = Facing any kind of difficulties about payment of installment	55.300	.323	.74
\mathbf{X}_{10} = Objective of loans	858.476	3.572	.00
X_{11} = Number of credit taken	687.735	1.890	.06
X_{12} = Previous financial condition	84.775	.338	.73
X_{13} = Financial condition used after loan	349.359	1.586	.11
X_{14} = Another member of your family lend money	454.283	1.544	.12
\boldsymbol{X}_{15} = Any terms and conditions for Microcredit holder	885.703	2.478	.01
X_{16} = If condition relax then you will be benefited	992.438	2.229	.02
\mathbf{X}_{17} = If you are in trouble then you get any help from concern organization	-394.776	-1.455	.14
\mathbf{X}_{18} = Do you think Microcredit is profitable?	348.240	1.121	.26
$X_{19} = No. of looms$	983.220	5.511	.00
\mathbf{X}_{20} =Years of experience with Grameen cheek	29.087	.354	.72
X_{21} = GRAMEEN BANK (Dummy = 1 if credit was taken from Grameen Bank)	-381.893	269	.78
X_{22} = BRAC (Dummy = 1 if credit was taken from BRAC)	-772.456	607	.54
$R^2 = 0.806$ (Adjusted $R^2 = 0.755$) and F = 10.078			

Table 7. Regression line amount of credit on different parameter of the respondents

The factors affecting the amount of Microcredit and the "demographic and socio-economic" factors have been determined by multiple linear regression analysis. The result from the regression of "amount of Microcredit" on several characteristics of the respondents has been presented in Table 7.

Coefficient of determination R^2 value was significant as *F* was significant at the 0.01 Probability level. Thus result revealed that combined effect of different characteristics of respondent's significantly contribute to the variation of "amount of Microcredit" in the manner describe by the multiple linear regression equation. It

has been estimated that 76% (adjusted $R^2 = 0.755$) of the total variation in "amount of Microcredit" is explained by the estimated multiple linear regression equation. Out of 22 variables, 7 variables contributed significantly to the prediction of dependent variable.

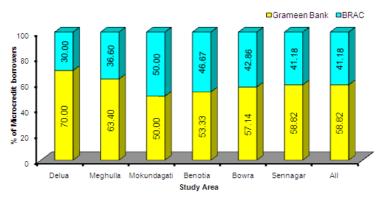
As shown in Table 7, the regression coefficient of the variable "age" the age of the respondents is positive and statistically significant at the 0.034 level. This shows that each year of age increases in the respondent's age the amount of Microcredit increase by Tk. 42.83. The regression coefficient of "level of education" of the respondents of the study is positive and statistically significant at the 0.008 level which means that each year of education affects the amount of Microcredit by Tk. 655.15. The regression coefficient of the variable "highest amount of previous loan" is also positive and statistically significant at the 0.001 level. This shows that being each time of

experienced of previous loans increase the amount of Microcredit by Tk. 260. The regression of the variable "objective of the loans" is positive and statistically significant at the 0.001 level (In this study considered the three objectives of the Microcredit such as "except Grameen-check" coded by 0, "Grameen-check and others" coded by 1 and "Grameen-check" coded by 2). This shows that each unit of objective increase of the amount of Microcredit by Tk. 858.48. The regression coefficient of the variables "any terms and condition for Microcredit holder" is positive and statistically significant at the 0.015 level. The regression variable "No. of looms" is also positive and statistically significant at the .001 level which means that for each number increase of loom there was a corresponding Microcredit increase of Tk. 983.22. In this research, source of credit Grameen Bank and BRAC are considered as dummy variables.

The organizations which provide Microcredit

In our study area there are two types of organizations provide Microcredit. Both the organizations are non governmental organizations (NGO). These organizations play an important role for the economic development of Bangladesh. Grameen bank and Bangladesh rural advancement committee (BRAC) are the important Microcredit providing organizations in Sirajganj district. In our study area 58.82% of borrowers received credit from Grameen Bank and 41.18% of borrowers received from BRAC (Fig. 1).

Fig. 1. Distribution Microcredit holders by Institutions



Source: Compiled from field survey 2009

Conclusion

The conclusion that follows are (i) The repayment behaviour of individuals suggests that the loans were properly used and that investment in handloom activities is profitable in the study area. (ii) It was found that the difference in previous financial conditions and financial conditions used after credit was statistically significant at the 0.001 level. In other words, it is concluded that Microcredit plays a significant role to promote the financial conditions of the Grameen-check producers' of the study area. Microcredit has allowed poor people to become more self-reliant, create employment opportunities and engage in economically productive activities. They seem to have potential to grow as productive micro enterprises. (iii) It was reported that taken credit was not sufficient at all for handloom weavers of the study areas. (iv) It was also observed that among those respondents primary and secondary education may did not complete the levels required. As a consequence, this has lead to higher illiteracy rate among inhabitants/handloom weavers of study area. This implies that they have little opportunities to attend formal education. (v) In our study area has 80.27 percent dependency ratio which is 6.07% higher than the national rural dependency ratio and (vi) Handloom weavers' facing threats of destruction due to lack of Govt. patronage, shortage of funds abnormal price hike of yarn and weavers have urged the authorities concerned to take immediate measures to save the handloom industry and protect weavers families.

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References

Adam, M. N. and Kruppenbach, S. E. (1987) Gender and access in the African school. *International review of education*, 33:437-454.

- BBS (2005) *Report on Bangladesh Handloom Census 2003.* Ministry of Planning, Government of the People's Republic of Bangladesh.
- BBS (2007). *Report of the Household Income and Expenditure Survey 2005.* Ministry of Planning, Government of the People's Republic of Bangladesh.
- Browne, A. W. and Barrett, H. R. (1999) Female education in Sub-Saharan Africa: The key to development. *Comparative education*, 27: 275-285.
- Chowdhury, N. (1989) Intermediate powerloom industry in Bangladesh: Interpretive account of its economic characteristics. Research Report No. 86. Dhaka: BIDS.
- HOLIDAY. Internet edition, 31-10-2003. Handlooms faced with problems.
- *The Bangladesh Observer.* Internet edition, April 02, 2004. Handloom in Trouble.
- Kriefer, N. M. (1985) Evidence on the role of education in labour turnover. *Journal of human resources*, XX: 445-452.
- Latif, M. A. (1988) The role of public policy in the growth of the Bangladesh handloom industry: 1947-87. Research Report No. 82. Dhaka: BIDS.
- MSTAT-C (1989) User's guide to MSTAT-C A microcomputer program for the design, management, and analysis of agronomic research experiments. Michigan State University. East Lansing, MI.
- SPSS (2004) SPSS for Windows, Rel. 12.0.1. 2004. Chicago: SPSS Inc.
- World Bank (1998) *Partnership in Development: The World Bank Assistance to Bangladesh.* Dhaka Office: World Bank.
- Yunus, M. (2006). Grameen Communications; http://www.grameeninfo.org/bank/WhatisMicrocredit.htm.

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