An Assessment of Extension of Palli Daridro Bimochon Foundation (PDBF) Activities for Poverty Alleviation and Self Employment Project in Bangladesh

Md. Monarul Islam
Joint Director, Dept. of Policy and Planning
PDBF, Dhaka, Bangladesh

Mohammad Rafiqul Islam
Sr. Assistant Director, Dept. of Policy and Planning
PDBF, Dhaka, Bangladesh

Abu Sayed Md. Kamruzzaman,
Joint Secretary, General Economics Division
Planning Commission, Bangladesh

Farhana Khandoker
Dy. Manager, Human Resource, INSPACE architects
Dhaka, Bangladesh

Mohshi-U-Nahidy Islam
Assistant Officer, Hop Lun, Apparel Ltd.
Gazipur, Bangladesh

Abstract:- The main purpose of the study was to determine the livelihood improvement of the beneficiaries through Extension of PDBF Activities for Poverty Alleviation & Self Employment project. The study was conducted in Faridpur, Natore and Comilla districts. A total number of 367 beneficiaries were finally selected which constituted the sample of the study by using stratified random sampling technique. Eleven selected characteristics of the beneficiaries were considered as the independent variables and livelihood development of the beneficiaries through project activities was the dependent variable of the study. Up close and personal meeting plan was utilized to gather applicable information from the respondents. Livelihood improvement of the respondent was measured by the addition of the extent of changes occurred in 6 selected dimensions of projects activities. An overwhelming majority (81.47%) of beneficiaries belonged to medium, compared to 16.08% and 2.45% belong to low and high change in livelihood improvement categories respectively. Results of this study indicated that out of 11 variables, the correlation coefficient of 6 independent variables i.e. annual savings, family size, training, income generating activities, duration with project and attitude towards project were found significantly (0.5% and 1% level) related with the dependent variable. A multiple correlation R value is 0.376 and corresponding R2 value is 0.141; which means that all the independent variables jointly explained 14.10% of total variation changes in livelihood improvement of the respondents.

Keywords:- Livelihood; Improvement; Beneficiaries, PDBF.

I. INTRODUCTION

Bangladesh with per capita gross national income (GNI) in 2019 $1,909 is one of the least development countries of the world [1]. Bangladesh is the eighth-most populated country in the world with almost 2.2% of the world's population [2]. The population is estimated by the 2019 revision of the World Population Prospects to have stood at 161,376,708 in 2018 [3]. The economy of Bangladesh is a developing market economy [4]. It's the 35th biggest on the planet in ostensible terms, and 30th biggest by buying power equality; it is arranged among the Next Eleven developing business sector center pay economies and a frontier market. In the first quarter of 2019, Bangladesh's was the world's seventh fastest growing economy with a rate of 1.3% real GDP annual growth [5]. Agriculture is the largest employment sector in Bangladesh, making up 14.2 percent of Bangladesh's GDP in 2017 and employing about 42.7 percent of the workforce [6]. The performance of this sector has an overwhelming impact on major macroeconomic objectives like employment generation, poverty alleviation, human resources development, food security, and other economic and social forces [7]. Bangladesh Government and Non-Government Organization (NGO) always try to alleviate the poverty. Many NGOs are providing microcredit to the poor people and they argued that poverty is alleviating day by day by taking microcredit [8] & [9]. Micro credit is playing a significant role in livelihood development, especially poverty reduction by improving households, economic status, increasing living standards, empowering rural women, creating self-employment and ensuring better education and healthcare [10] & [11]. Khandker (2005) found that microfinance helps to reduce extreme poverty much more than moderate poverty, i.e. 18 rate focuses as contrasted and 8.5 rate focuses more than seven years. Welfare impact is also

positive for all households, including nonparticipants, as there were spillover effects [12]. Mosley (2001), using data from Latin American countries, found a positive growth of income and assets of the borrowers than control group [13].

That is why Bangladesh government took up a project with the help of Palli Daridro Bimochon Foundation (PDBF) for livelihood improvement of rural poor people named "Extension of Palli Daridro Bimochon Foundation (PDBF) Activities for Poverty Alleviation & Self Employment in Bangladesh" from July 2012 to June 2018. The goal of this study is to determine the improvement of livelihood that has come from the establishment of the project.

II. MATERIALS AND METHODS

This study was carried out during the period of 01 July 2020 to 30 September, 2020 in Faridpur, Natore and Comilla districts under the project of "Extension of Palli Daridro Bimochon Foundation (PDBF) Activities for Poverty Alleviation & Self Employment" in Bangladesh. A total of 7800 project respondents were constituted as the population of the study. Online sample size calculator was used to determine the sample size with 95% confidence level and 5% margin of error [14]. Thus the sample size of this study was 367. A hold rundown of 37 (around 10 % of the example) was ready for this examination. Eleven selected characteristics such as age,

education, family size, annual savings, farm size, loan received, training received, income generating activities, cosmo politeness, duration with project and attitude towards project were the independent variables of this study. Where, livelihood improvement was the dependent variable of this study. An interview schedule containing direct questions and some scales was used for data collection from the respondents under the project. Information was gathered from the respondents by up close and personal talking by the undertaking staffs of particular locale. The soft wares such as Excel and Statistical Package for the Social Sciences (SPSS) were used to analyze the data. Inferential (correlation,) and descriptive (e.g. range, observed range, mean, standard deviation and coefficient of variation) statistics were used to find out the research results.

III. RESULTS AND DISCUSSION

Selective characteristics of the project beneficiaries:
Possible range, observed range, mean, standard deviation (SD), co-efficient of variation (CV%) of 11 selected characteristics (age, education, family size, annual savings, farm size, loan received, training received, income generating activities, cosmo politeness, duration with project and attitude towards project of the beneficiaries have been presented in Table 1.

Table 1: Possible range, Observed range, Mean, Standard deviation, Coefficient of variation of the selected characteristics of the respondent beneficiaries

Characteristics	Unit	Possible range	Observed range	Mean	SD*	CV*
Age	No. of years	-	20 -55	36.30	7.95	21.89
Education	Schooling years	-	0.50-10	3.43	3.39	98.87
Family size	No. of person	-	2-7	2.51	0.90	36.02
Annual savings	'000' Taka	-	1-4	4.31	1.16	26.97
Farm size	Decimal	-	5-121	35.60	22.18	62.29
Loan received	'000' Taka	-	20-40	26.44	5.43	20.52
Training	No. of days	-	0-9	3.85	1.96	50.96
Income generating activities	Score	0-33	8-30	11.54	4.45	38.58
Cosmo politeness	Score	0-8	2-8	4.57	1.67	36.44
Duration with project	Score	1-6	1-6	3.55	1.52	42.83
Attitude toward project	Score	0-32	9-30	18.00	5.70	31.65

SD* =Standard deviation, CV*=Co-efficient of variation

Change in livelihood:
Respondent's participation in project has played a vital role in changing their livelihood condition. Salient features

such as possible range and observed range, mean, standard deviation (SD), co- efficient of variation (CV) of the dimensions of the beneficiaries have been presented in Table 2.

Table 2: Possible range, observed range, mean, standard deviation and co-efficient of variation (CV) change in livelihood after involvement with projects

Characteristics	Possible range	Observed range	Categories of characteristics	%	Mean	SD	CV
Change in livelihood	0-18	8-18	No Change (0) Low Change (1-6) Med. Change (7-12) High Change (>12)	0.00 16.08 81.47 2.45	12.21	1.80	14.77

Change in livelihood of the respondent through project activities was found to range from 8 to 18, the average was 12.21 with standard deviation 1.80 and co-efficient of variation 14.77. Data furnished in indicated that an overwhelming majority (83.92%) of the respondents felt under medium and high change in livelihood improvement while 16.08% felt under low change in livelihood. Interestingly, it was found that most of the respondents got opportunity to change their livelihood improvement after involving themselves with different activities of the project.

Data contained in Table 3 indicate that slightly less than half (48.77 percent and 47.96 percent) of the beneficiaries were young and middle aged compared to 3.27 percent being old aged category. Findings indicate that a large proportion (96.73 percent) of the beneficiaries were middle and young aged. These categories of beneficiaries and their families were more interested for participating in project activities.

Table 3: Distribution of the project beneficiaries according to their age

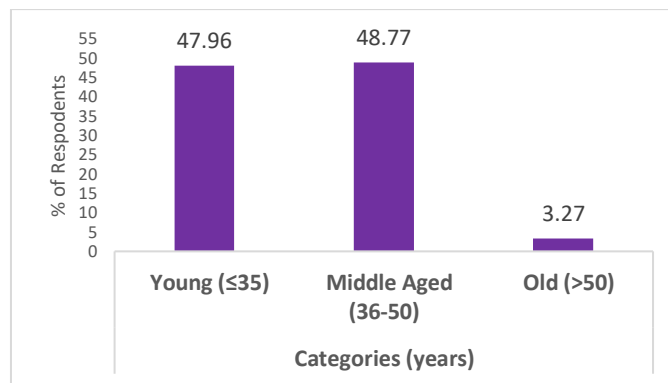| Categories	Respondents		Mean	Standard deviation	CV%
	Frequency	Percent			
Young (≤35)	176	47.96	3630	7.95	21.89
Middle Aged (36-50)	179	48.77			
Old (>50)	12	3.27			
Total	367	100			

Figure 1: Distribution of the project beneficiaries according to their age

According to the level of educational qualification, the categories and distribution of the respondents were shown in Table no 4. Data indicated that slightly less than three fourth (73.84 percent) of the respondent's educational qualification were primary compared to secondary (26.16 percent) and above secondary education level. From this we understand that the education rate in the research area is not worse than other areas of the country. The educational qualification of the beneficiaries was an important factor which determined their livelihood improvement.

Table 4: Distribution of the project beneficiaries according to their educational qualification

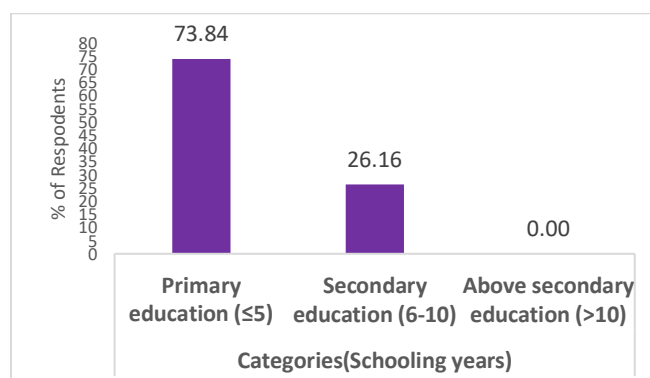| Categories (Schooling years)	Respondents		Mean	Standard deviation	CV%
	Frequency	Percent			
Primary education (≤5)	271	73.84	3.43	3.39	98.87
Secondary education (6-10)	96	26.16			
Above secondary education (>10)	0	0.00			
Total	367	100.00			

Figure 2: Distribution of the project beneficiaries according to their educational qualification

Data presented in the Table 5 showed that majority (59.13 percent) of the project beneficiaries were medium. Whereas slightly less than one fourth (24.25 percent) of the project beneficiaries were small family. Findings indicate that a large proportion (83.38 percent) of the project beneficiaries were small and medium family and small proportions (16.62 percent) of them were found as large family.

Table 5: Distribution of the project beneficiaries according to their family size

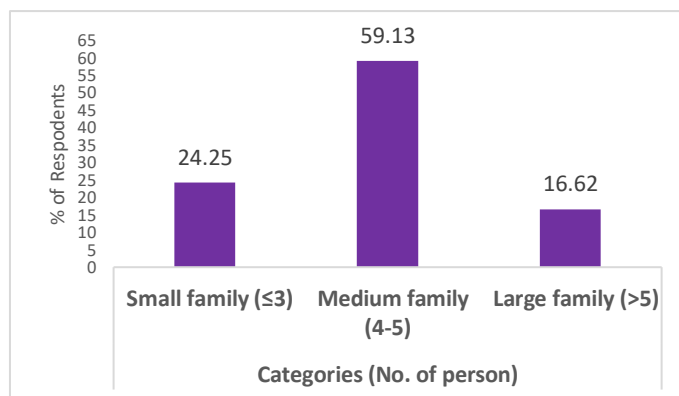| Categories	Respondents		Mean	Standard deviation	CV%
	Frequency	Percent			
Small family (≤3)	89	24.25			
Medium family (4-5)	217	59.13	2.51	0.90	36.02
Large family (>5)	61	16.62			
Total	367	100.00			

Figure 3: Distribution of the project beneficiaries according to their family size

As shown in Table 6 shows that slightly less than three fourth (71.66 percent) of the respondents had medium savings compared to small (12.53 percent) and large (15.80 percent) savings. This is a positive expedition towards improvement.

Table 6: Distribution of the project beneficiaries according to their loan received

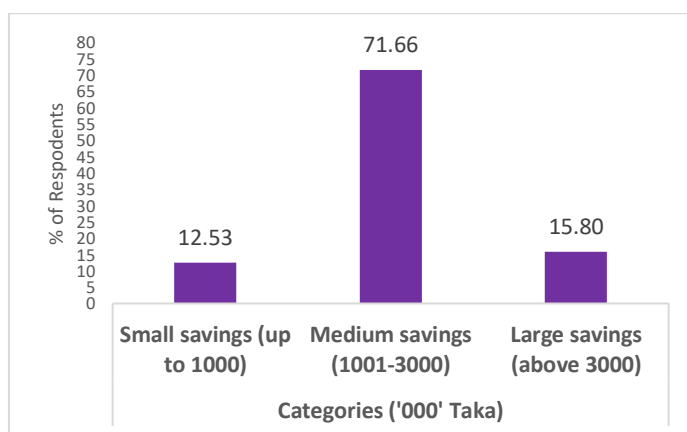| Categories	Respondents		Mean	Standard deviation	CV%
	Frequency	Percent			
Small savings (≤1000)	46	12.53			
Medium savings (1001-3000)	263	71.66	4.31	1.16	26.97
Large savings (> 3000)	58	15.80			
Total	367	100.00			

Figure 4: Distribution of the project beneficiaries according to their loan received

Data presented in the Table 7 showed that slightly less than half (49.05 percent) of the project beneficiaries were marginal where more than one fourth (26.98 percent) of the project beneficiaries were landless. Slightly less than one fourth (22.34 percent) of the project beneficiaries were small and very small proportions (1.63 percent) of them were found as medium category farm size.

Figure 7: Distribution of the project beneficiaries according to their farm size

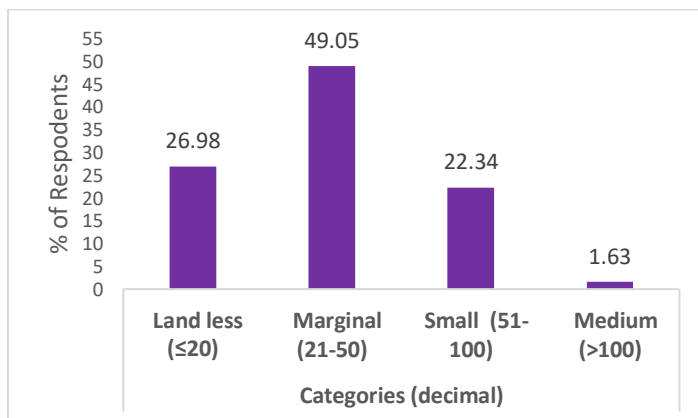| Categories	Respondents		Mean	Standard deviation	CV%
	Frequency	Per cent			
Land less (≤20)	99	26.98			
Marginal (21-50)	180	49.05			
Small (51-100)	82	22.34	35.60	22.18	62.29
Medium (>100)	6	1.63			
Total	367	100			

Figure 5: Distribution of the project beneficiaries according to their farm size

Data furnished in the Table 8 revealed that more than half of the respondents (57.22 percent) were medium credit recipients, whereas slightly less than one third (29.97 percent) of the respondents were small credit recipients and very small proportions (12.81 percent) of them were large credit recipients. It showed that the study group was highly heterogeneous in term of credit received.

Table 8: Distribution of the project beneficiaries according to their loan received

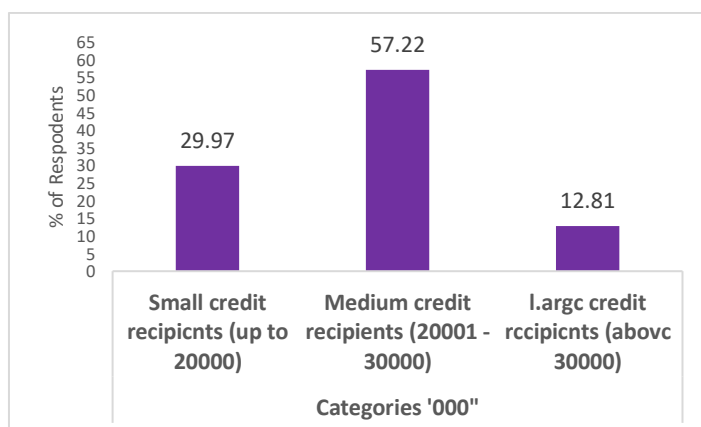| Categories (Thousand tk.)	Respondents		Mean	Standard deviation	CV%
	Frequency	Per cent			
Small credit recipients (≤ 20000)	110	29.97			
Medium credit recipients (20001 - 30000)	210	57.22	26.44	5.43	20.52
large credit recipients (>30000)	47	12.81			
Total	367	100			

Figure 6: Distribution of the project beneficiaries according to their loan received

Data presented in the Table 9 revealed that the highest proportions (88.83 percent) of the respondents received low and medium training whereas 3.54 percent of them received low training and 7.63 percent not received training. The findings revealed that every member of project beneficiaries received training. Besides this, the high standard deviation indicates that the training was not equally distributed among the respondents.

Table 9: Distribution of the project beneficiaries according to their training received

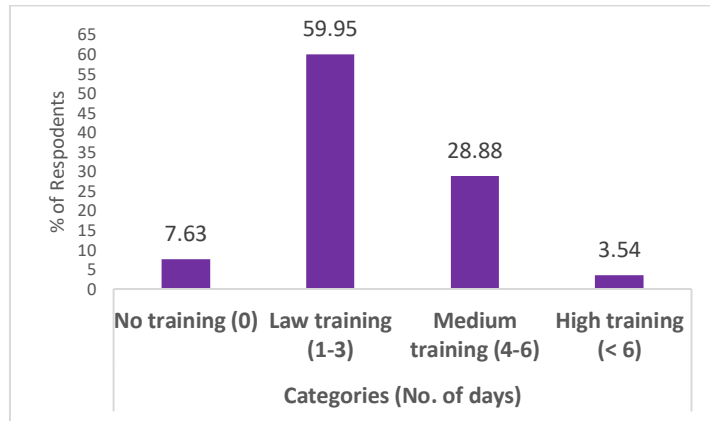| Categories	Respondents		Mean	Standard deviation	CV%
	Frequency	Per cent			
No training received (0)	28	7.63			
Law training received (1-3)	220	59.95			
Medium training received (4-6)	106	28.88	3.85	1.96	50.96
High training received (< 6)	13	3.54			
Total	367	100.00			

Figure 7: Distribution of the project beneficiaries according to their training received

Data presented in the Table 10 revealed that overwhelming majority (95.64 percent) of the respondents were involved with low and medium income generating activities. Besides this, very small proportion (4.36 percent) of the respondents were involved with high income generating activities.

Table 10: Distribution of the project beneficiaries according to their income generating activities (IGA)

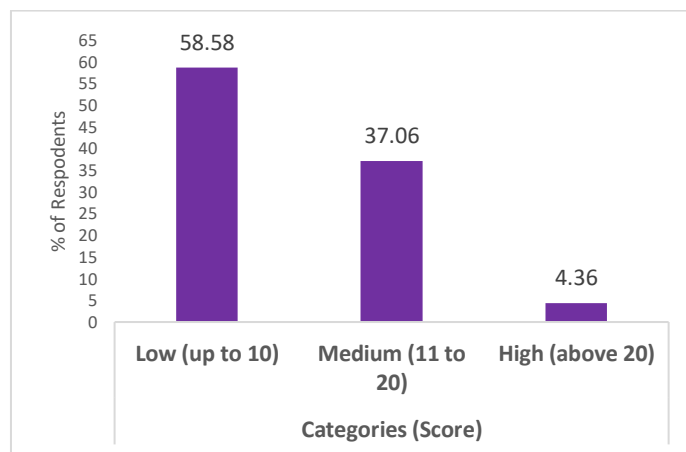| Categories	Respondents		Mean	Standard deviation	CV%
	Frequency	Per cent			
Low IGA (up to 10)	215	58.58			
Medium IGA (11 to 20)	136	37.06	11.54	4.45	38.58
High IGA (< 20)	16	4.36			
Total	367	100.00			

Figure 8: Distribution of the project beneficiaries according to their income generating activities (IGA)

Data presented in Table 11 revealed that more than half (54.77 percent) of the respondents had medium cosmo politeness as less than one third (32.15 percent) low and very few proportions (13.08 percent) having high cosmo politeness.

Table 11: Distribution of the project beneficiaries according to their cosmo politeness

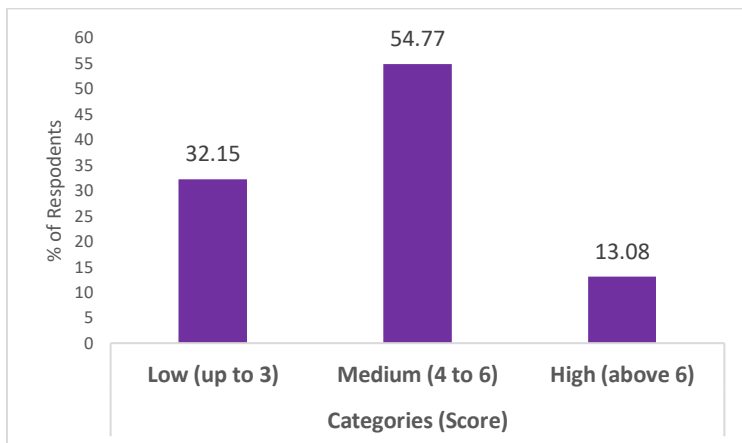| Categories	Respondents		Mean	Standard deviation	CV%
	Frequency	Per cent			
Low (up to 3)	118	32.15	4.57	1.67	36.44
Medium (4 to 6)	201	54.77			
High (< 6)	48	13.08			
Total	367	100.00			

Figure 9: Distribution of the project beneficiaries according to their cosmo politeness

Data furnished in the Table 12 showed that more than two fifth of the respondents (41.42 percent) were involved as medium length duration with the project, whereas more than one third (34.33 per cent) of them were involved as long length duration and slightly less than one fourth (24.25 per cent) were involved as long length duration with the project.

Table 12: Distribution of the project beneficiaries according to involve of their duration with project

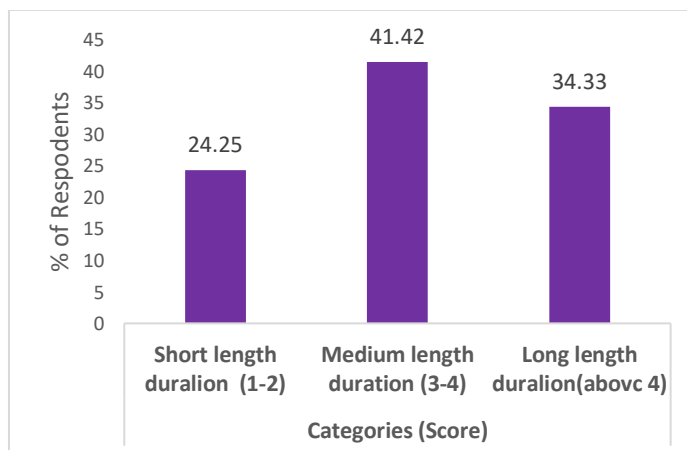| Categories	Respondents		Mean	Standard deviation	CV%
	Frequency	Per cent			
Short length duration (1-2)	89	24.25	3.55	1.52	42.83
Medium length duration (3-4)	152	41.42			
Long length duration (<4)	126	34.33			
Total	367	100.00			

Figure 10: Distribution of the project beneficiaries according to involve of their duration with project

From Table 13 it is clear that overwhelming majority (92.37 per cent) of the respondents had moderately and highly favorable and more than one fourth (26.92 percent) were moderately favorable attitude towards project compared to slightly favorable attitude (7.63 percent). Most of the respondents were satisfy to different project activities.

Table 13: Distribution of the project beneficiaries according to their attitude towards project

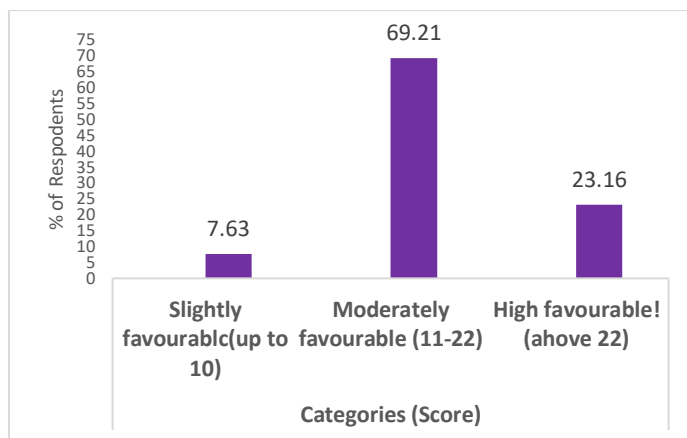| Categories	Respondents		Mean	Standard deviation	CV%
	Frequency	Percent			
Slightly favorable (up to 10)	28	7.63	18.00	5.70	31.65
Moderately favorable (11-22)	254	69.21			
High favorable (< 22)	85	23.16			
Total	367	100.00			

Figure 11: Distribution of the project beneficiaries according to their duration with project

The relationships between the 11 selected characteristics of the beneficiaries and their livelihood improvements were as follows. The 11 characteristics of the respondents were: age, education, family size, annual savings, farm size, loan received, training received, income generating activities, cosmo politeness, duration with project and attitude towards project. Pearson's product moment Co-efficient of Correlation (r) was used to explore the relationship between 11 selected characteristics of the respondents with the livelihood development. One percent (0.01) or five percent (0.05) level of significant was used as the basis for acceptance or rejection of a hypothesis.

Table no 14: Relationship between selected characteristics of the beneficiaries and their livelihood development

Selected characteristics	Correlation co-efficient (r)
Age	-0.071(NS)
Education	0.057(NS)
Family size	0.111*
Annual savings	0.063(NS)
Farm size	0.183**
Loan received	0.024(NS)
Training received	0.180**
Income generating activities	0.121*
Cosmo politeness	-0.050**
Duration with project	0.161(NS)
Attitude toward project	-0.115*

NS= Not significant
* = Significant at 0.05% level
** = Significant at 1% level

In this study, 11 independent variables were run to determine their role. Data presented in the Table 15 indicated that multiple R and R^2 values in full model regression were 0.376 and 0.141 respectively. Above mentioned facts indicated that all the selected independent variables jointly exhibited a multiple correlation R = 0.376 and corresponding R^2 value was 0.141, which meant that all the independent variables jointly explained 14.10% of total variation of the changes in livelihood improvement of the respondents.

Table no 15: Regression analysis showing the standardized regression co-efficient indicating contribution of the respective independent variables on the dependent variable

	Unstandardized Coefficients (B)	Standardized Coefficients (Beta)	t	Sig.
Age	-0.009	-0.039	-0.745	0.457
Education	0.002	0.004	0.075	0.940
Family size	0.358	0.179	3.435	0.001
Annual savings	0.080	0.052	0.949	0.343
Farm size	0.014	0.171	3.277	0.001
Loan received	0.000	0.000	-0.003	0.997
Training	0.166	0.181	3.478	0.001
Income generating activities	0.027	0.066	1.315	0.189
Cosmo politeness	-0.039	-0.036	-0.702	0.483
Duration with project	0.194	0.163	3.163	0.002
Attitude toward project	-0.042	-0.131	-2.522	0.012
R	0.376			
R Square	0.141			
Adjusted R Square	0.115			
Std. Error of the Estimate	1.697			
F Value	5.304			
P	000			

IV. CONCLUSION AND RECOMMENDATION

Rural development plays a key role in poverty alleviation. Sustainable Development Goal (SDG) 1- "ending poverty in all its forms, everywhere" - is said to be the most ambitious goal of the 2030 Agenda. Bangladesh has committed itself to achieve the SDGs and has even integrated the SDGs into its Seventh Five Year Plan (7FYP) (2016-2020). Thus poverty alleviation ("poverty eradication" is far too ambitious and not realistic) is a central focus of development for the government. On the basis of the findings of the study it may be concluded that, an overwhelming majority (83.92%) of the respondents felt under medium and high change in livelihood improvement. That is why; government should take significant effort and target to establish different development projects for upliftment of rural unprivileged people and take rural development policies to make their development strategies effective and successful.

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