

Rural development scheme of Islami Bank Bangladesh Limited - A study on its growth, effectiveness and prospect in Bangladesh

*Schema de dezvoltare rurală a IBBL
- Un studiu asupra creșterii, eficacității și perspectivei sale în Bangladesh*

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Abstract

Most of the people of Bangladesh are living under poverty line. To alleviate poverty, thousands of NGOs and GOs have been working since the inception of the Bangladesh. But the success rate of these programs appears to be insignificant. Rural Development Scheme (RDS) being a shariah and teaching of Islam based technique has been introduced in order to graduate the rural poor from poverty trap by bringing them in the main stream of economy by providing micro-credit and teaching for value creation. The present study has been undertaken aiming at evaluating the effectiveness of the program and its prospect. It has collected both primary and secondary data, and analyzed these with the help of both financial and statistical techniques. The findings of the study are: the growth performance of RDS in important parameters are robust across study period, and RDS influence the income and income generating activities of borrowing members significantly. Finally the study has put forward some logical suggestions for enhancing the sustainability as well as robustness of the program.

Keywords: Rural Development Scheme; investment; income; deposits; members and IBBL

Rezumat

Cea mai mare parte a populației din Bangladesh trăiește sub pragul sărăciei. Pentru a reduce sărăcia, mii de ONG-uri și OG-uri lucrează de la întemeierea statului Bangladesh. Dar, rata de succes a acestor programe pare a fi nesemnificativă. Schema de Dezvoltare Rurală (SDR) fiind o tehnică bazată pe produse bancare islamice sharia a fost introdusă în scopul de a absolvi populația din mediul rural din capcana sărăciei, aducând-o în fluxul principal al economiei prin micro-creditare și instruire pentru crearea de valoare. Studiul de față a fost realizat cu scopul de a evalua eficacitatea programului și perspectiva lui. S-au colectat atât date primare cât și secundare și s-au realizat analize cu tehnici financiare cât și statistice. Concluziile studiului sunt: creșterea performanței SDR în raport cu parametri importanți este robustă în întreaga perioadă de studiu; și SDR

influențează în mod semnificativ veniturile și activitățile generatoare de venituri ale membrilor care au cerut împrumut. În final, studiul prezintă câteva sugestii logice pentru îmbunătățirea durabilității precum și a robusteții programului.

Cuvinte-cheie: *Schema de Dezvoltare Rurală; investiție; venit; depozite; membri și IBBL*

JEL Classification: G21, O18, R18

Statement of the problem

Bangladesh is a developing country with 140 million people. Most of the people are living below poverty line. This situation can be attributed to the different reasons/causes: acute rural-urban economic disparity, illiteracy, lack of proper health & sanitation facilities (RDS Manual, 2008). The economy of Bangladesh is mostly depending on the agriculture; not on industry. Majority of the people in rural area are involved in agriculture which does not ensure them with full employment and continuous earnings for bread and butter across the year. As a result, this results in unemployment and other consequential impact on the society.

In Bangladesh, a very good number of non-government organizations and government organizations have been working hard for socio-economic development of rural poor people with micro-credits, training and education since the inception of Bangladesh. But, despite the vigorous efforts, no significant success in poverty reduction has yet been achieved (Chowdhury, 2005). Research corroborates that in developing countries big farmers could borrow large sum of cheap loan, which was in many instances not repaid owing to weak enforcement of repayment rules primarily due to their political influence (Adam, 1995; Penny 1983; Robinson, 2001; Von Pischke, 1983). Availability of formal rural credit did preclude accessibility to small farmers and non-farmers which comprised sizable population in villages. They borrow from informal sources like creditors (money lenders), friends and relatives to meet investment and consumption needs. The other issues for not being successful are credit to non-targeted people, diversification of credit, multiple participation, low loan size, poor enforcement of monitoring activities, forward lending, exorbitant rate of interest, repayment out of loan capital, vulnerability to natural calamities etc.

IBBL came out with a scientific shariah based program- Rural Development Scheme in 1995 with an objective of graduating rural people from poverty by providing credit for financing their investment in farm and non-farm activities and thereby raising level of income. This program is characterized by different distinctive features, techniques and mechanism. These differentiated features have prompted researcher to undertake a study on the workings of RDS in the alleviation of poverty of rural poor people.

Objective of the study

The principal objective of the study is to evaluate the growth performance and the effectiveness of Rural Development Scheme (RDS) of IBBL. To accomplish this principal objective, following specific objectives have been covered: to identify the differential features of RDS; to evaluate the growth performance of RDS with respect to very striking features- coverage, investment, and savings; to evaluate the effectiveness of RDS; to suggest some important policy measures for the enhancing the efficacy of RDS.

Hypothesis of the study

The following hypotheses have been examined against the objective set forth above:

H_{01} : RDS cannot generate significant difference in income of borrowers before and after taking loan;

H_{a1} : RDS can generate significant difference in income of borrowers before and after taking loan;

H_{02} : RDS is independent of socio-economic condition of the borrowers;

H_{a2} : RDS can exert a significant influence in socio-economic condition of Borrowers.

Scope of the study

The study has covered the modus operandi, activities, and strategies of Rural Development Scheme of IBBL for seven eight years from 2002 to 2009. It has also covered the socio-economic status of 27 sample respondents who are members of RDS under IBBL branch, Hatahazari, Chittagong.

Methodology of the study

The present study has been both empirical and theoretical ones. Both primary and secondary data have been used in this study.

Collection of primary data. The researchers have designed an interview guide for collection of primary data on the basis of expert's opinion, existing literature and publications. Researchers has collected a list of member of RDS and selected forty members of different groups conveniently. Researchers in this case followed indirect approach. Two inter-students have been appointed and sent to the selected samples. They have attempted several times for interviewing them and finally conducted interview of 27 respondents.

Collection of secondary data. The study has used secondary data extensively. It has collected secondary data by consulting (2003-2009) of IBBL, existing publication and literatures, websites etc.

Analysis of Data. The data thus collected have been tabulated first. Then these have been analyzed by employing statistical techniques- mean, standard deviation, correlation, regression, and time series analysis. It has also employed t

test and F test for testing the hypothesis of the Study and drawing inferences from the study. The other methodological parts have been discussed in relevant part of the study.

Findings and their analyses

Rural Development Scheme is a socio-economic venture of IBBL. This program has been introduced for enhancing the socio-economic conditions of poor people living in abject poverty. This also enhances moral, social and ethical values of these poor people of the country. In fact, this program is bringing poor people into the main stream of economy by getting them involved into different farm and non-farm activities in the rural area. These pictures of RDS have been drawn in the following paragraphs:

Analysis of differentiated features of Rural Development Scheme

Rural Development Scheme is based on ideals and teachings of ISLAM which is totally different from traditional micro credit systems of thousands of NGOs and GOs.

Table 1 has described the differentiated features of RDS. That is, RDS can be differentiated from any traditional micro-credit programs with respect to the stated differentiated features as above. There are similarities between RDS and traditional micro-credit programs with respect to group size & formation, frequency of meeting, mode of payment, duration of loan, coverage, single loan exposure etc.

Analysis of growth performance of Rural Development Scheme

Growth is one of the important strategies for enhancing the sustainability of any business model. Growth indicates both past and future performance of the model. This is why the study has examined the growth of some important variables such as coverage-area and members, investment activities, deposit of member participants and recovery rate (Table 2). The study has resorted to geometric mean for determining growth of aforesaid variables over the 7 year periods from 2003 to 2009. Besides, the growth performance has been judged by descriptive statistical measures-mean, standard deviation and limits in order to see whether the growth in respective parameter is accomplished as result of boom period/recession period or efficient performance of RDS on a continuous basis over the study periods.

Showing the differentiated features of micro-credit program- RDS

Table 1

Differentiated Features	Rural Development Scheme	GB/BRAC/ASA/PROSHIKA/CARE/ODEC/ACTIONAID
Target Group	Rural people with 0.50 to 1.50 acres of land. Both men and women are covered. RDS prefers women.	Rural people with 0.50 acres of land. Both men and women are covered.
Program	Basically micro-investment.	Micro Credit, Non-Formal Education and Water & Sanitation.
Criteria Applied for Selection	Land ownership and permanent residence	Land ownership
Sanction of Loan	Two months after the formation of group	One week after formation of group.
Size of Loan	Minimum - Tk. 4,000 Maximum - Tk. 50,000	Minimum - Tk. 3,000 Maximum - Tk. 40,000
Mode of Disbursement	Goods / Assets: Bye Muazzal (Sale on credit)	Cash credit
Profit Rate	10% (Flat Rate); but 2.50% rebate in the case of regular and timely payment; Profit –Sharing basis: risks are shared by IBBL if loss is genuine.	24%- 30%; All risks and rewards are transferred to borrowers.
Repayment-Period Starts	After two weeks of disbursement.	After one week of disbursement.
Sources of Funds	Member Savings; Depositor’s Savings; PKSF.	Member Savings; PKSP; International Donor Agencies.
Activities Financed	Both farm and non-farm activities.	Both farm and non-farm activities; Special emphasis is on non-farm activities.
Savings	Tk. 25 Per week	Tk. 5- Tk.10 per week
Collateral Required	No collateral except personal guarantee and savings.	No collateral except personal guarantee and charge documents.

Note: Data have been compiled by the researchers.

Source: Manuals (2002-2008)/GB/BRAC/ASA/PROSHIKA/CARE/ODEC/ACTIONAID.

The study has also applied time series analytical model based on method of Least Squares as follows:

$$Y = \alpha + \beta_1 X_1$$

This model has been used in order to project the expected variables against the years understudy. The study has also determined the variance between expected quantity of variables and actual quantity of variables. The lower the difference, the

better the performance of RDS; and the higher the difference, the lower the performance of RDS.

Statement showing the growth performance of some important parameters

Table 2

Year	Villages	Members	Investment Outstanding	Cumulative Investment	Deposit	Recovery Rate
2003	3700	130460	570.88	4216.77	228.7	98%
2004	4230	163465	789.97	4216.77	322.5	99%
2005	4560	217445	1106.47	6033.36	459.1	99%
2006	8057	409575	2242.1	9303.12	724.22	99%
2007	10023	516725	2884.66	13969.01	910.15	99%
2008	10676	577740	3011.72	18768.27	1090.26	99.03%
2009	10751	492475	3752.2	24238.69	1295.12	99%
Mean	1125	55036	7827		161.6	
Std.Dev.	1206	84386	3518		69.89	
Growth	10%	17.75%	30.86%		28.15%	
Maximum	3497	192130	12421		268.12	
Minimum	75	- 85256	2865		61.90	

Source: Annual Reports 2003-2009, IBBL

Note: Data have been compiled by the researchers.

Analysis of growth performance in coverage of RDS. RDS is expected to be introduced in the rural areas of the country step by step. It has covered 10751 villages (16% of total villages) till 2009 with a growth of 10% over the last 7 years from 2003 to 2009. The performance of RDS with respect to coverage is most volatile which is reflected through minimum number 75 and maximum number 3497 villages during study period. Besides, the performance of RDS in coverage has also been examined through time series analytical model as follows in Table 3.

Statement showing the variation in actual performance

Table 3

Year	Villages-Actual	Villages-Expected	Variance
2003	825	701	124
2004	530	651	-121
2005	530	602	-272
2006	497	554	-57
2007	966	525	411
2008	653	456	128
2009	75	407	-332

Source: Annual Reports 2003-2009, IBBL

Note: Data have been compiled by the researchers.

From the perusal of Table 3, it has been found that the deviation in actual coverage from the expected coverage reflects the mixed performances-favorable (+ve) and unfavorable (-ve) of RDS. This scenario has been shown through the Figure 1.

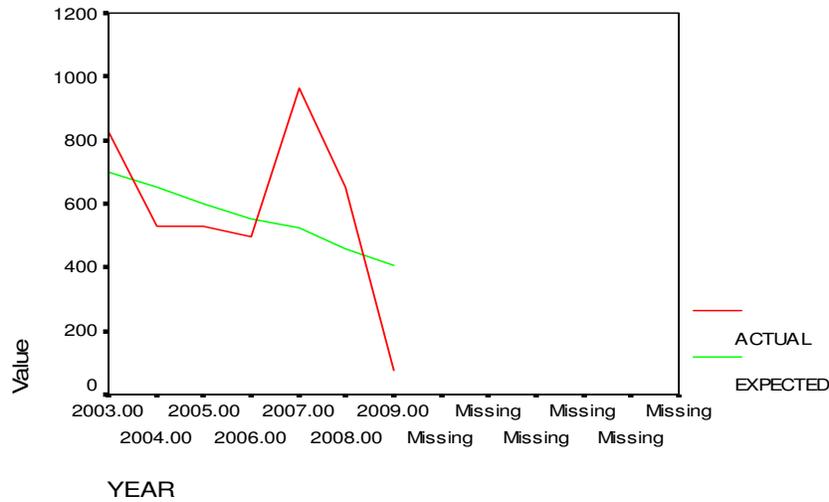


Figure 1 Showing the performance of RDS in coverage

Analysis of growth performance of RDS in number of members. The performance of RDS largely depends on how many members have been brought under the net of the program. Of course, the program has specific criteria of selecting rural people for making member of the group as well as of centre and granting them with micro-credit. RDS has registered growth of 17.75% in number of members over seven years from 2003 to 2009 understudy. Besides, it is experiencing volatility in number in number of members across the year which is reflected through standard deviation, minimum, and maximum number of members. This implies that the performance of RDS with respect to number of members is largely inconsistent. The performance of RDS has also been examined by applying least Square Method as follows in Table 4.

Showing the actual and expected performance in number of members

Table 4

Year	Members-Actual	Members-Expected	Variance
2003	23240	65441	-42201
2004	32996	61973	-28977
2005	53980	58504	4524
2006	192130	55035	137095
2007	107150	51566	55584
2008	61015	48097	12918
2009	-85265	44629	-129894

Source: Annual Reports 2003-2009, IBBL

Note: Data have been compiled by the researchers.

From the analysis of Table 4, that it has been found RDS has been experiencing a phenomenal growth and a positive trend in number of members. It has also experienced a positive trend in four years and a negative trend in 3 years. The positive trend implies that RDS has accomplished high growth in members over the expected number of members and vice versa. This scenario of performance in members has been reflected through Figure 2.

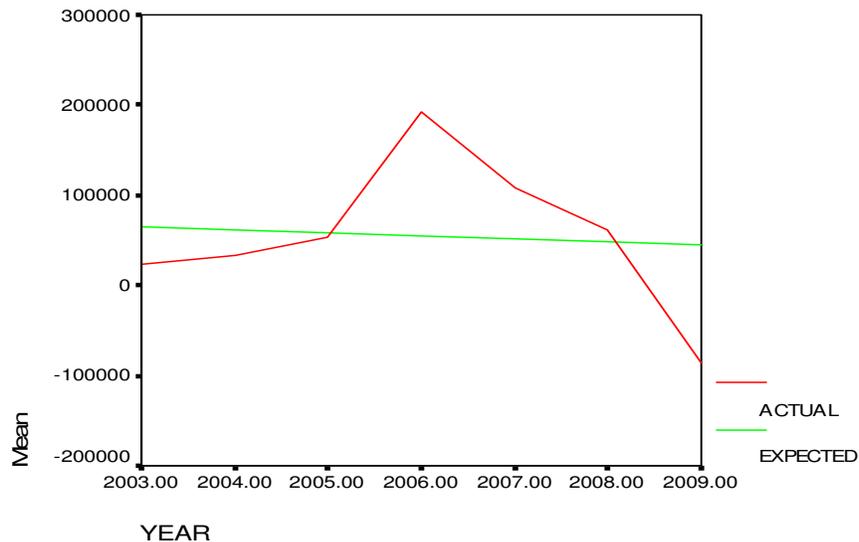


Figure2 Showing the performance of RDS – actual and expected members

Table 4 indicates that RDS performs better during four years from 2005 to 2008, and performs less than expectation in the rest of the years understudy. This under or over performance can be linked to the business cycle of the country.

Analysis of growth performance of RDS in investment. RDS provides credit in the form of assets on profit sharing basis; although it charges lower profit rate of 10% subject to the rebate of 2.50% in the case of current borrower members. Growth in investment is the most important indicator of success of RDS. The positive growth implying upward trend indicates better performance. From the perusal of Table 2, it is found that RDS has registered spectacular growth over the periods under study. This has bounced ups and downs over the period which is reflected through minimum and maximum investment, as well as standard deviation in investment. This bounces have been reflected through least square method of time series analysis as follows in Table 5.

Showing the performance in investment: actual and expected

Table 5

Year	Investment-Actual	Investment-Expected	Variance
2003	2865.11	3084.82	-219.71
2004	4204.03	4665.42	-461.39
2005	5972.95	6246.02	-273.07
2006	9207.04	7826.62	1380.42
2007	10263.4	9407.22	856.18
2008	9852.0	10987.22	-1136.22
2009	12421.8	12568.42	-146.62

Source: Annual Reports 2003-2009, IBBL

Note: Data have been compiled by the researchers.

It has been observed that the investment performance of RDS is most favorable in the year 2006 and 2007; and most unfavorable in the year 2008. The most unfavorable position in the year 2008 can be attributed to the global financial meltdown as well as activities of the program. Investment performance in other years understudy is less or more acceptable. This scenario has been reflected through Figure 3.

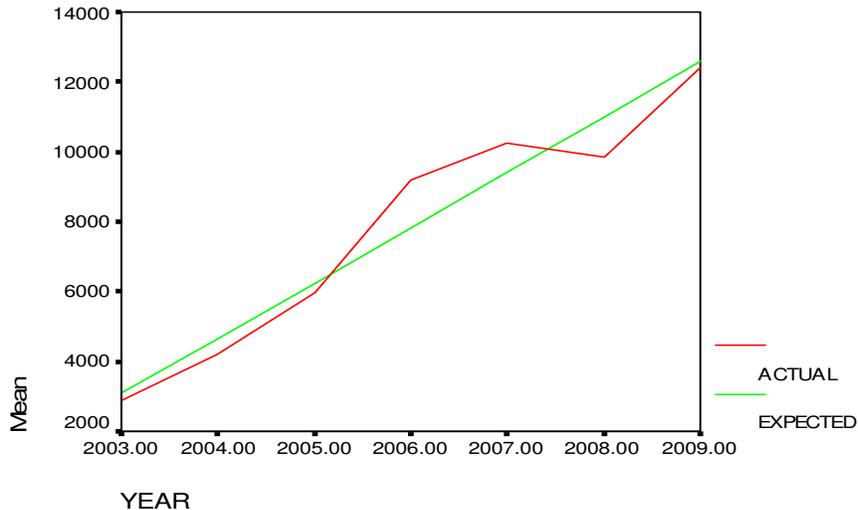


Figure 3 Performance in investments of RDS

Figure 3 is truly reflecting the investment performance of RDS. The RDS is performing according to the expectation keeping it in the right track. As we know, thousands of NGOs and GOs are working in the same area with different features and benefits. This spectacular performance of RDS in investment indicates its acceptability to the rural people who live in poverty for their upliftment.

Analysis of growth performance of RDS in deposits. RDS has a provision of compulsory savings for the borrowing members. They are open Mudaraba Saving Account (RDS) in the name-Individual and Centre. Each member has to deposit minimum Tk. 20 and minimum Tk. 5 to Mudaraba Saving Account – Individual and Maduaraba Saving Account-Centre compulsorily. This provision educates the borrowers to generate a tendency to save as well as gives the Bank a guarantee against default. This is also working as a retention policy of borrowing members. From the perusal of Table 2, it is observed that RDS has accomplished a phenomenal growth in Deposits to the extent of 28.51% over the 7 years understudy. This growth also indicates that RDS is growing in terms of members, investment and sustainability of borrowing members for longer period with the bank. The performance of RDS with respect to variation over the study period has been shown through the application of least square method as follows in Table 6.

Performance of deposits - actual and expected (Tk. in Million)

Table 6

Year	Deposit-Actual	Deposit-Expected	Variance
2003	61.90	91.89	-30
2004	93.8	115.13	-21.33
2005	136.6	138.37	-1.77
2006	268.12	161.61	106.51
2007	185.93	184.85	1.08
2008	180.00	208.09	-28.0
2009	204.8	231.33	-26.53

Source: Annual Reports 2003-2009, IBBL

Note: Data have been compiled by the researchers.

From the examination of Table 6, it has been observed that the performance of RDS in Deposits is the best in the year 2006; and is found more or less acceptable in the rest of the years understudy. The variances between actual and expectation is found minimum which exposes the efficiency and commitment of RDS. This has also been reflected through the Figure 4.

Analysis of performance of RDS in recovery of loan. This indicates two important aspects of sustainability of RDS; efficiency of monitoring & controlling authority of RDS, and the capacity of borrowing members to repay out of earnings generated from farm and non-farm activities. From the perusal of Table 2, it has been found that RDS has been maintaining a visible and robust performance in recovering dues from the borrowing members. The recovery rate has been found 98% to 99.03%, indicating the ability of members as well as strong RDS mechanism in recovery of dues.

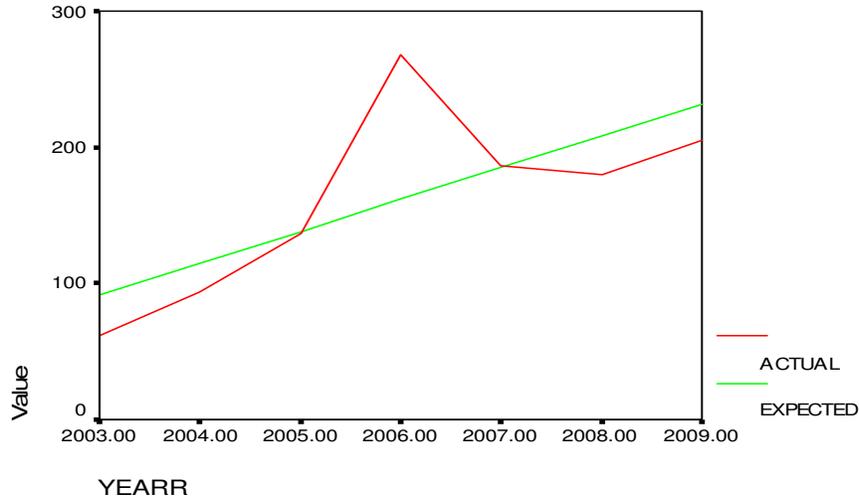


Figure 4 Performance of RDS in deposits

Analysis of impact of micro-credit on the level of income of sample borrowers of RDS

The study has examined the difference in the level of income of sample borrowers before taking loan and after taking loan from RDS. In this case, it has collected the amount of income the sample borrowers have earned before and after taking loan (Appendix). It has collected these data with a hypothesis that the difference in the level of income as a result of availing of micro credit from RDS is insignificant. To test the hypothesis, paired ‘t’ has been used. Table 7 is showing the result of this analysis.

Showing the Descriptive Results and Paired ‘t’ Test Results

Table 7

	Before Loan	After Loan
Mean	1848.15	4267
Standard Deviation	934.1266	1238.49
Coefficient of Correlation	0.897*	

*Significant at 1% level.

Paired Differences					
Mean Differences	Std. Deviation	Std. Error	t	DOF	Significant
2418.52	718.46	138.2674	17.492	26	.01

Note: Data have been compiled by the researchers

From the perusal of Table 7 it has been found that both correlation and paired 't' test results are significant. These indicate that there is a significant relationship between Income before Loan and Income after Loan; and the difference in the level of income as a result of taking loan from RDS is statistically significant. This has led us to reject the null hypothesis that the difference in the level of income as a result of micro-credit from RDS is insignificant.

Analysis of relationship of between Income and RDS & Socio-Economic Factors

The study has examined the relationship between income of borrower and micro-credit and other socio-economic factors on the basis of zero-order correlation as well as multiple linear regressions. Accordingly questionnaire was designed to collect primary data on income, assets, education and family size of households. During the survey, while data on income, family size, education, assets, age, was collected, qualitative information of the location was also gathered.

Income. The income of borrowers, that is, head of household was assessed during the interview by asking occupation and sources of income. Sources of rural income were both farm and non-farm. In a household father and sons lived together and their income was taken together. Annual income without micro credit was used in the analysis.

Family size. The average family size was five members. In regression analysis exact number of family members in each household was used. The family comprises extended family in which parents, single and married brothers and single sisters all lived together. The income in extended family is also shared.

Education. The average education level of head of household was 3.5 years of Schooling; the highest level being 12 years of schooling and lowest being zero years. In the analysis number of years of schooling of head of household was used.

Assets. Assets are categorized as tangible or in tangible. Tangible assets are financial and durable goods. Tangible assets are bonds, stocks, mutual funds, savings, own-home, transport etc. Intangible assets increase access to opportunities and contribute to the ability to earn income and acquire tangible assets. Examples of intangible assets are education, health, work experience and social network. For the purpose of this, study tangible assets consisted from less to more liquid assets. The less liquid assets comprised land, own-house, tractor, car, bicycle etc.

Credit. Low-income households, especially rural low-income household have little formal relationship with banking system; this makes them dependent on informal lending market, who charge predatory price for lending due to their low creditworthiness. Micro credit, therefore, provides opportunity to poor to avail loan despite low creditworthiness. In this study, amount of micro-credit of 27 sample respondents have been taken into consideration.

The model

The following multiple regression model can be presented in order to extract the expected result from the analysis of primary data as discussed in the above paragraphs:

$$y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

where

- y = annual income of household without credit;
- x₁ = micro credit;
- x₂ = assets;
- x₃ = family size;
- x₄ = education.

Results and their analysis

It is about well-being of poor communities living at the periphery of the mainstream development. The well-being is measured from their present income (it is assumed that households will consume leading well-being) and its improvement due to micro loan availability by RDS, assets, family size and education.

From the analysis of correlation matrix (Table 8), it has been seen that gross monthly income of sample borrowers is found positively and significantly correlated with micro-credit, size of assets and family size; while gross monthly income is found negatively and insignificantly correlated with education.

Zero – Order Correlation Matrix

Table 8

	GIBL	Education	Micro Credit	Assets	Family Size
GIBL	1.000				
Education	-0.028	1.000			
Micro Credit	0.588*	0.009	1.00		
Assets	0.335**	-0.439	0.330	1.000	
Family Size	0.351**	-.336	0.317	0.025	1.000

* Significant at 1% level; ** Significant at 5% level .

Note: Data have been compiled by the researchers.

Multiple regression analysis was carried to determine improvement in income of micro borrowers of RDS in selected areas. The results of the multiple regression are given in Table 9. All variables were entered; but three variables- education, size of assets and family size have multicollinearity and therefore excluded from the model. This exclusion of three variables is subject to Durbin-Watson Test. The adjusted R² 0.32 has been obtained. The F-test of the multiple regression was 13.239 (Table 9) which is higher than the table value (2.53) shows the significance of the analysis. It shows that micro credit from RDS improves income.

ANOVA Table

Table 9

Model	Sum of Square	DOF	Mean Square	F Ratio	Significant
Regression	7854604.9	1	7854604.900	13.239	.001
Residual	14832803	25	593312.100		
Total	22687407	26			

Note: Data have been compiled by the researchers.

All variables are not significant in improving well-being of poor communities, especially education and family size. The multiple regression results show that the t-ratio of micro credit is high showing significance of the variables in income improvement (Table 10).

Regression Results

Table 10

Model	Unstandardized Coefficients		Standardized Coefficients	t	Significant
	B	Std. Error	Beta		
Constant	274.796	457.123		0.601	0.553
Micro-Credit	0.182	0.050	0.588	3.638	.001
	R Square = 0.346		Adjusted R Square = 0.320		

Note: Data have been compiled by the researchers.

Summary, policy implications and conclusion

The study has been both theoretical and empirical one. Both primary and secondary data have been used in this study. This study has employed both financial and statistical techniques for analyzing and interpreting data.

Summary of the findings

I. RDS can be differentiated from any traditional micro-credit programs with respect to target group, selection criteria, profit sharing basis, value generation, low charge, monitoring mechanism, mode of investment, size of loan etc.

II. RDS has registered phenomenal growth in investment, coverage, and deposit. This has been found very robust across the years under study.

III. RDS has been found to exert a positive and significant influence in gross monthly income of borrowing members; but the income is found not significantly associated with family size, size of assets, education. This means that RDS cannot influence these socio-economic factors. This may be because of lower size of investment, forward lending, lake of opportunities etc.

Policy implications

Following policy measures have been put forwarded for enhancing the effectiveness as well as sustainability of Rural Development Scheme:

I. The authority of RDS should increase the size of investment in order to cope with the change in value of currency because of inflation and other economic reasons.

II. RDS should project their volume of activities for future; then all parties involving in managing RDS should be assigned and held responsible for the job assigned at the beginning of the year. That is, the performance of RDS should be subject to Balanced Score Card System.

III. RDS with its differentiated features can lock more market share in the country if it comes out with more generous policy like selection of people not on religions basis.

IV. The repayment should be balloon basis. That is, repayment system should start at least after one month of taking loan, and should be based on the nature of cash flow being generated from farm and non-farm activities like seasonal cash flow and regular cash flow.

Conclusions

Rural Development Scheme is a scientific and shariah based micro credit system. The basic objective of the program is to graduate the poor class of the society from the poverty clutch through getting them involved into the different income generating activities by providing loans and teachings of Islam. This program is in line with social and cultural values of muslim ummah of the country. This program is expected to give a breakthrough in the intervention of poverty trap of the country if suggestions put forwarded are implemented.

References

- Adam, Dale W. (1995). "From agriculture credit to rural finance2. *Quarterly Journal of International Agriculture*, Volume 34, No. 2, pp. 109-120
- Annual Reports (2003-2009), Islami Bank Bangladesh Limited (IBBL), Bangladesh.
- Chowdhury, M. A. M. (2005), *The Role of Islamic Financial Institutions in Resource Mobilization and Poverty Alleviation in Bangladesh: An Empirical Study of Rural Development Scheme of IBBL*. Unpublished paper prepared for presentation.
- Donald (eds.), *Rural Financial Markets in Developing Countries: Their Use*. Baltimore: Md. The Johns Hopkins University Press.
- RDS Manual (2008), Islami Bank Bangladesh Limited, Bangladesh.

- Manuals (2002-2008). GB/BRAC/ASA/PROSHIKA/CARE /ODEC/ACTIONAID, Dhaka: Bangladesh.
- Penny, David H. (1983), "Farm Credit Policy in the Early Stages of Agriculture Development". In J. D. Von Pischke, D. W. Adams and G. (eds) *Rural Financial Markets in Developing Countries: Their Use and Abuse*. Baltimore: Johns Hopkins University Press.
- Robinson, Marguerite (2001). *The Microfinance Revolution: Sustainable Finance for the Poor*. The World Bank.
- Von Pischke, John D. et al. (eds.) (1983). *Rural Financial Markets in Developing Countries: Their Use and Abuse*. Baltimore: Johns Hopkins University Press.

Appendix

Statement Showing Gross Monthly Income Before and After Loan

Loanees	Before Loan	After Loan	Change in Level of Income
1	3000	5500	2500
2	2000	6000	4000
3	2200	3700	1500
4	3000	4700	1700
5	2400	5000	2600
6	800	3300	2500
7	1500	4500	3000
8	2400	6000	3600
9	4200	6000	1800
10	1000	3500	2500
11	2500	5500	3000
12	3000	4800	1800
13	1500	3500	2000
14	700	3000	2300
15	3000	6500	3500
16	1200	3200	2000
17	1500	3000	1500
18	1700	4200	2500
19	2000	3500	1500
20	1700	5000	3300
21	500	2000	1500
22	300	2500	2200
23	500	2400	1900
24	2000	5600	3600
25	1500	4000	2500
26	1400	3800	2400
27	2400	4500	2100