

Role of Banks in Funding Agro Based Organization: A Study on Some Selected Commercial Banks in Bangladesh

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Abstract

The rapid advances that are occurring in the areas of information, telecommunication and transportation technologies are further accelerating this phenomenon of globalization. Globalization will also affect national economies, including the Agro based Organization and its various activities. Commercial banks as the most important functionary of the financial system play a dynamic role in the economic development of a nation through mobilization of savings and allocation of credit to productive sectors. This paper examined the role of some selected banks commercial bank in funding Agro-based organization Bangladesh. Data was collected from secondary sources. One sample T-Test, regression, correlation was used for analyzing the data and results discussion. The foremost determinations of this study show that how the output performance of Agro based organization was influenced by four factors namely Commercial banks credit, Interest rate, Inflation rate, Exchange rate. After the regression, the result shows that firstly: commercial bank credit and exchange rate has positive significant effect on output performance of Agro based organization in Bangladesh whereas; interest rate and the level of inflation has negative effect on output performance of Agro based organization, although they are both significant. Some problems were found from the study & some recommendations were catered for future use to any researcher in this hypothetical arena. Commercial banks should increasingly involve themselves in development financing in order to gain long-term viability benefitting themselves as well as the economy, but that should not occur at the cost of viability of the total financial intermediation process. However, Government should take deliberate efforts to increase funding in agriculture to increase Agro based organization funding in the country as well as intervene in the interest rate level in order for it to favour the common man in the country.

Keywords

Globalization, Agribusiness, Commercial Banks Credit, Sustainable Development, Financial Institutions

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1. Introduction

1.1. Background of the Study

Bangladesh is primarily an agricultural based country subjugated by crop production. Bangladesh enjoys by and large a sub-tropical monsoon climate. Bangladesh has been renowned for growing large variety of tropical crops particularly rice, wheat, Tobacco, jute, pulses, oilseeds,

sugarcane etc. Agribusiness includes all business enterprises that buy from or sell to farmers. The transaction may involve a product, a commodity or a service and encompasses items such as Productive resources e.g. feed, seed, fertilizers equipment, energy, machinery etc. Agricultural commodities e.g. food and fiber etc. Facilitative services e.g. credit, insurance marketing, storage, processing, transportation, packing, distribution etc. Agribusiness, “the total sum of all operations involved in the manufacturing of farm supply,

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production, operations on the farm, processing and distribution of farm commodities and items made from them” (David and Goldberg, 1957), is an important sector in the economy of many Asian countries. It contributes substantially to GNP and rural employment. Since most agribusiness activities are in the rural areas, the development can be an effective instrument in slowing down urbanization. Furthermore, the promotion of agribusiness can become a useful means of alleviating poverty and a major source of foreign exchange earnings. In some countries, it is considered to be strategically important to national security. Agribusiness can also be defined as science and practice of activities with backward and forward linkage related to production, processing, marketing and trade, distribution of raw and processed food, feed, fiber including supply of inputs and service for these activities. In a developing country like Bangladesh, agribusiness system with forward and backward linkages consists of following four major sectors such as- Input sector, Commercial farm production sector, Product sector (storage, processing, marketing, wholesaling and retailing), Service sector (education, banking, finance, investment and technical advice).

Bangladesh the home of 160.00 million people is one of the developing countries of the world characterized by high incidence of landlessness and a labour surplus economy. The global economic environment is undergoing drastic changes with the concept of market economics for sustainable development. Under such an environment, production in both the Agribusiness and Industrial sectors are stagnating the aid pipeline, drying up remittances and as a sequence in investment growing shy. Only exports, especially in non-traditional areas, offer the most promising avenue for sustained growth. In this context agro-based business processing industries have enough and fresh opportunities for employment and income generation through increased domestic agricultural production.

1.2. Statement of the Problem

Agribusiness in Bangladesh still remains a largely untapped area for diversification of economic activities. It has not developed properly, considering the country's prospects in this particular field. The economy is yet largely dependent on agriculture, though the sector's share in the country's gross domestic product (GDP) has steadily been on the decline. This is, however, not entirely unexpected for a developing nation. Yet then, over three-fourths of the total population in Bangladesh lives in the rural areas. Most of such rural population is directly or indirectly engaged in a wide range of agricultural activities. Agriculture contributes significantly to the country's GDP. About 57 per cent of the country's labourforce is absorbed in the crop sector alone. The number

of large, medium and small agro-based firms is quite limited in this country of about 160 million. Out of such firms, only a few ones could make headway in agri-business. Two or three such firms are exporting the country's agro-products to the overseas market. On its part, the government has offered some incentives, direct and indirect ones, for growth of agri-business in the country. But no significant amount of investment has so far been made either by the public or the private sector here.

Among four factors of production i.e. land, labour, capital and organization financing the capital input plays the most paramount role in running any business enterprises. Therefore, in the development of agri-business sector in Bangladesh, financing aspects need to be taken into consideration with due importance.

The present Government of Bangladesh has given top priority for development of Agricultural sector especially, agribusiness enterprise. As such several measures have already been taken for example, reduction of rate of interest in agri-sector like crop production, poultry, duckery, fishery horticulture, agro processing, nursery etc including export financing. This research possibly will endow with performance of the commercial banks of Bangladesh in case of providing credit to the agro-based company for their efficient operation and management.

1.3. Objective

1. To determine the impact of commercial bank credit on output performance of Agro based Organization in Bangladesh.
2. To determine the impact of interest rate on output performance of Agro based Organization in Bangladesh.
3. To determine the impact of inflation rate on output performance of Agro based Organization in Bangladesh.
4. To determine the impact of exchange rate on output performance of Agro based Organization in Bangladesh.
5. To identify the problems encountered by Agro based Organization in obtaining finance from Bangladeshi commercial banks as well as to suggest remedial measures for the improvement of Bank's Performance in credit operation.

1.4. Research Hypotheses

To accomplish the objectives of the study, the following hypotheses are developed:

1. H1: Commercial banks credit has no significant impact on output performance of Agro based Organization in Bangladesh.

2. H2: Interest rate on bank credit does not have significant impact on output performance of Agro based Organization in Bangladesh.
3. H3: Inflation rate on bank credit does not have significant impact on output performance of Agro based Organization

- in Bangladesh.
4. H4: Exchange rate on bank credit does not have significant impact on output performance of Agro based Organization in Bangladesh.

1.5. Proposed Theoretical Framework and Hypothesis Proposition

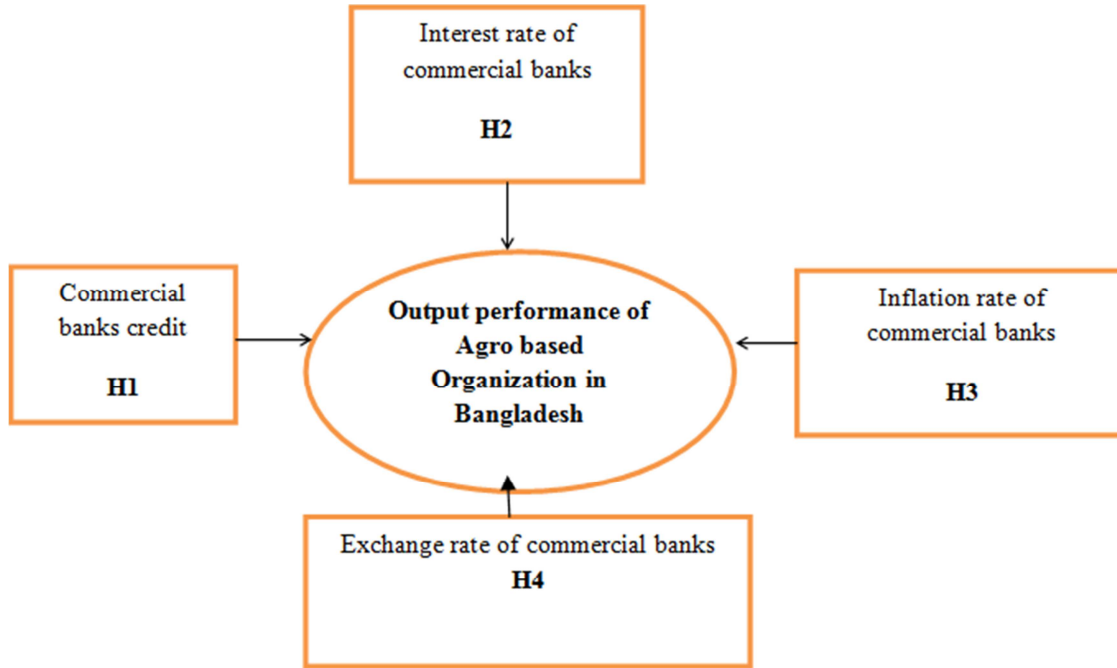


Figure 1. Proposed Research Model.

1.6. Rationale of the Study

Financial institutions are dreadfully to a great extent indispensable for the overall progress of a country. Particularly Banks play a significant role in the sphere of promotion of capital, support of entrepreneurship, creation of employment opportunities etc. Agro-based company is expected to make significant contribution to net foreign exchange earnings and enhance Bangladeshi economic growth. This study sets are to reveal the important problems and prospect of the agricultural financing by commercial banks and economic growth in Bangladeshi. This study therefore is to identify if there is any relationship between productivity of Agro-based organization and financial parameters like, exchange rate, interest rate, inflation rate among others and suggest ways of combating to the identified problems of Agro-based organization to improve their productivity level. Also, it sets out to help proffer solutions to the problems being faced by the sector. This study will serve as a good background for those intending to carry out further research work on related topics.

1.7. Scope of the Study

The banking sector is one of the important sectors of an

economy as it plays a major function of channelling funds from savers to investors. This Agro-based organizations activity includes the activities of agro-processing industries that transforming products originating from agriculture. Agribusiness is numerous in Bangladesh and form a large majority in the domestic markets. Agro-based organizations in Bangladesh covers a widening ranging from petty business to sophisticated agro industrial sector that uses raw materials derived from the agricultural sector. The role of agribusiness as a sector of the economy has multiple dimension to create a greater changes in the course of development by way of promoting agribusiness enterprises to expedite the process of optimum contribution to the economy in the form of employment generation to a large number of unemployed labour force. The consensus that has been gradually forming emphasizes the role of government in creating and enabling environment conducive to private sector investment, providing a macro-economic foundation and removing market distortions through policy reforms. This study is designed to find out the role of commercial banks towards financing the Agro-based organization in Bangladesh.

2. Review of Literature

Assessment of related literatures in any research is necessary in the good judgment that it allows for an extent for reviewing the collection of knowledge & information appropriate to the future research. This knowledge & information give an instruction in designing the potential research problem & validating the new determinations.

Commercial banks constitute the most important functionary in the whole network of the financial system for mobilization of savings, intermediation between savers and investors and allocation of credit to productive sectors and thus play a dynamic role in the economic development of a nation. The emergence of the independent Bangladesh in 1971 witnessed a major shift in the banking system in 1972 in terms of change of ownership i.e., establishment of social control over the banks through nationalization and change in objectives. The objectives were very clear-to expand the branch network in unbanked and under banked rural and semi-urban areas, to step-up monetization activities by having access to untapped savings and extend flow of credit to hitherto neglected agriculture and allied areas and small and cottage industries. As the commercial banks have structural limitations (short-term sources of funds, lack of adequately skilled man-power, etc.) in making an entry into term financing for financing agro-based and industrial projects, specialized financial institutions were created to fill the vacuum for financing agricultural and industrial development. These were also known as Development Financing Institutions (DFIs) e.g., Bangladesh Krishi Bank, Bangladesh Shilpa Bank, Bangladesh ShilpaRinSangstha, etc.

Muftau (2003) on the other hand, defines agricultural credit as credit granted to farm and ranch operators to assist in planting and harvesting crops to support the feeding and care of livestock. Credit to agricultural sector could take the form of an overdraft, short-term, medium-term or long-term depending on the purpose and gestation period of the project. Such credits granted to farmers to purchase inputs are paid directly to the suppliers who must furnish the bank with evidence of delivery. This is done to avert diversion of fund, which is common with Nigeria Farmers (Adekanye, 1986; Nzotta, 1999).

Discussing the importance of credit to agricultural sector, Nzotta (2012) posited that it reactivates, expands or modernizes all types of agricultural enterprise which are considered economically feasible and desirable to the achievement of stated economic goals of self-sufficiency in agricultural production. While Qureshi, (2006) reported that such credit removes financial constraints faced by farmer, as it provides incentives to adopt new technologies that would otherwise be more slowly accepted. Thus, the availability of

credit enables farmers to switch quickly to new technologies which enable the achievement of a rapid productivity and growth.

According to Ijere (1996) - Credit can be considered from its ability to energize or motivate other factors of production. For example, it can make the latent, potential or under-used capacities functional. He further said that credit act as a catalyst that activates the engine of growth enabling it to mobilize its inherent potentials and to advance in the planned or expected direction. It follows, therefore, that the greater the influx of capital, the more the propensity of the economy to move in its given path. As summarized by Fosu (1992) Amin (1996), Umoh (2003) Credit thus constitutes the power or key to unlock latent talents, abilities, vision and opportunities, which in turn act as the mover of economic development. Emmanuel (2008) carried out a study on the impact of macroeconomics environment on agricultural sector growth in Nigeria. The macroeconomic policies included in the model are: credits to the agricultural sector, nominal interest rates on the loan, exchange rate, world prices of agricultural produce, foreign private investment-government expenditure and inflation rate.

Yaron (2013) also argued that directed credit programmes were associated with the adoption of modern technologies such as greenhouses in Morocco and tube wells in North West Bangladesh and these innovations were associated with increase in production gains in the agricultural sector (see also Ijaiya and Abdulraheem 2000). Nwanyanwu (2011) identified bank's traditional roles to include financing of agriculture, manufacturing, and syndicating of credit to productive sectors of the economy. In order to ensure proper distribution of bank credit, the Nigerian economy was divided into two (the priority sectors and non-priority sectors) and a certain percentage of bank credit allocated to these sectors, as directed by the Central Bank of Nigeria (CBN) circular 27 of 1993 (Ekezie, 2006).

Izhar and Tariq (2009) have shown that during the post-reform period in India, institutional credit is not a significant determinant of agricultural production.

Medyawati *et al.* (2011) have shown that, although banking development is highly correlated with agriculture and manufacturing growth, the contribution of these sectors to the economic growth of Indonesia is relatively small. Acha (2012) has found that a significant relationship exists between non-bank financial institutions' (NBFIs) credit and the manufacturing/agricultural GDP in Nigeria.

According to Bashir Ahmad Fida (2008) a successful and growing Economy is a result of active Small and Medium Enterprise (SME) Sector. The employment creation for rural and urban labour force, creating innovation and sustainability

in Economy and Dependability of the large number of people on SME are the major contributions of Small & Medium Enterprise (SME) Sector in a country's development (Fida, 2008).

According to Saqib Omer Saeed (2005) the real potential is the people who are living without the basic benefits and wanted to increase their living standard by their high will of turning their days into shining ones, but the main problem again is the availability of finance and technical assistance. The liquidity of the banks can be utilized by advancing loans to SMEs, which leads to the probability of recovery to increase because lending amount is distributed to many SMEs than few large ones and by utilizing their liquidity banks contribute to the economic growth as well.

Merlinda D. Ingco and John D. Nash (2004) opined that the share of agriculture in output and labour, falls and this has led some development expert to view agriculture as the only ancillary to development. However, the fall in agricultural output and labour can be as a result of biased domestic policies and international trade policies. The agricultural sector must be an engine of economic growth, especially in the very poorest developing countries where agriculture still represent a significance percentage of GDP (Gross Domestic Product) and where the rural population account for a large percentage of the poor.

Dada (2014) noted that the consistently repeated complaint of SMEs about their problem regarding access to finance is highly relevant constraint that endangers the development of the sector in Nigeria and investigating the effect of commercial banks' credit on SMEs development employing Ordinary Least Square (OLS) technique to estimate the multiple regression models. The findings revealed that commercial banks credit to SMEs and the saving and time deposit of commercial banks exert a positive and significant influence on SMEs development proxy by wholesale and retail trade output as a component of GDP, while exchange rate and interest rate exhibit adversative effect on SMEs development.

Afolabi (2013) evaluated the effect of SMEs financing on economic growth in Nigeria between 1980 and 2010 the study employed Ordinary Least Square (OLS) method to estimate the multiple regression models. The estimated model results revealed that SMEs output proxy by wholesale and retail trade output as a component of gross domestic product and commercial banks' credit to SMEs exert positive and significant impact on economic development proxy real gross domestic product while lending rate is found to exert negative effects on economic growth.

Onakoya *et al.* (2013) examined the impact of financing small scale enterprises on economic growth using quarterly time

series data from 1992 to 2009 the study revealed that loan to small scale entrepreneurs have a positive impact on the economic performance and conclude that access to capital or finance is necessary but not a sufficient condition for successful entrepreneurial development.

Imoughele and Ismaila (2013) also investigated the impact of commercial bank credit accessibility and sectoral output performance in Nigerian economy for the period which spanned between 1986 and 2011. An augmented growth model was estimated via the ordinary least square (OLS) techniques. The result found that the various commercial bank credit supplies have a long-run relationship with sectoral output performance in Nigeria.

3. Methodology of the Study

3.1. Research Design

Research design is an outline of carrying out a research study (Kothari, 2008). This study under relational research design. In addition, the study will be carried out over a specific period of time. Levin (2006) opines that cross-sectional studies are carried out a specific time or over a short period of time. This study focused on the role of commercial bank in financing Agro based organization and their productivity at a specific time. That is for a period of ten years from 2008 - 2017.

3.2. Sampling Size

Due to resource and time constraints and availability, a sample size consists of Bangladesh Krishi Bank (BKB), Rajshahi Krishi Unnayan Bank (RAKUB), Four Specialized Commercial Banks (SCBs) and time series data are used in this study.

3.3. Sampling Method

In case of choosing the sampling method here the first priority is given judgmental sampling method and the sample are as follows- Bangladesh Krishi Bank (BKB), Rajshahi Krishi Unnayan Bank (RAKUB), Four Specialized Commercial Banks (SCBs). Judgmental sampling method is a non-probability sampling method and it occurs when elements selected for the sample are chosen by the judgment of the researcher.

3.4. Source of Data

This study exclusively relied on secondary data. The data to be used in carrying out this study would be time series data for the period 2008–2017 obtained mainly from secondary sources. Among these is Bangladesh Bank (BB) annual report (various issues), Bangladesh Bureau of Statistic (BBS),

selected banks annual report, Economic Journals, text book and published article in the subject matter. The others secondary sources include different web sites, books, journals, annual report and published research works etc.

3.5. Collection of Data

To attain accuracy and reliability of data, care and caution were taken in data collection. The researcher's took all possible effort to furnish correct data. Data was collected during the 3 months dissertation period.

3.6. Analytical Techniques

The relationship of the proposed model and the properties of the scale were analyzed using the Statistical Package for Social Sciences (SPSS), MS excel 2007. Usage of the statistical techniques was according to commonly accepted research assumptions where appropriate. Test includes correlation; multiple regression technique is used to trace causal relationships between several factors.

3.7. Regression Analysis

A statistical measure that attempts to determine the strength of the relationship between one dependent variable (usually denoted by Y) and a series of other changing variables (known as independent variables). Regression analysis was used to calculate how much the percent change occurred by the independent variables on the financial performance in the Agribusiness industry.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where, Y = Output performance of Agro based Organization

in Bangladesh

β_0 = Constant or intercept value;

X_1 = Commercial banks credit;

X_2 = Interest rate;

X_3 = Inflation rate;

X_4 = Exchange rate; and

ϵ = Random error.

3.8 Limitations of the study

This study cannot avoid some limitations:

It takes account of only Bangladesh Krishi Bank (BKB), RajshahiKrishiUnnayon Bank (RAKUB), Four Specialized Commercial Banks (SCBs).

Though secondary data were available, but collection of detailed relevant data became almost impossible due to time constraint.

In addition, the study was carried out in Bangladesh hence; the findings are limited within the Bangladeshi context.

4. Data Analysis & Findings

4.1. Interpretation of Result

The result of regression equation is presented in the table below:

Regression result of the relationship between commercial banks credit and Output performance of the Agro based Organization.

Table 1. Model Summary of commercial banks credit and Output performance.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.756 ^a	.572	.518	206.152

a. Predictors: (Constant), Commercial banks credit
Source: Calculated From Secondary Data.

Table 2. ANOVA of commercial banks credit and Output performance.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	453500.076	1	453500.076	10.671	.011 ^b
	Residual	339989.468	8	42498.684		
	Total	793489.544	9			

a. Dependent Variable: Output performance
b. Predictors: (Constant), Commercial banks credit
Source: Calculated From Secondary Data.

Table 3. Coefficients of commercial banks credit and Output performance.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-305.574	400.371		-.763	.467
	Commercial banks credit	16.068	4.919	.756	3.267	.011

a. Dependent Variable: Output performance
Source: Calculated From Secondary Data.

A unit change in the level of commercial banks credit on the average leads to about .572 unit change or 57.2% changes in output performance of the Agro based organization. The estimated coefficient for commercial banks credit is positive. This means that there exist a direct relationship between commercial banks credit and output performance of the Agro

based organization. The adjusted R value of .518 implied that the model is 51.8% goodness fit.

Regression result of the relationship between Interest rate and Output performance of the Agro based Organization.

Table 4. Model Summary of Interest rate and Output performance.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.335 ^a	.112	.001	296.772

a. Predictors: (Constant), Interest rate (IR)
Source: Calculated From Secondary Data.

Table 5. ANOVA of Interest rate and Output performance.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	88899.747	1	88899.747	1.009	.344 ^b
	Residual	704589.797	8	88073.725		
	Total	793489.544	9			

a. Dependent Variable: Output performance (OP)
b. Predictors: (Constant), Interest rate (IR)
Source: Calculated From Secondary Data.

Table 6. Coefficients of Interest rate and Output performance.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1863.222	879.314		2.119	.067
	Interest rate	-73.217	72.876	-.335	-1.005	.344

a. Dependent Variable: Output performance (OP)
Source: Calculated From Secondary Data.

A unit change in the level of Interest rate on the average leads to about .112 unit change or 11.2% changes in output performance of the Agro based organization. The estimated coefficient for interest rate is negative. This means that there exist an indirect relationship between interest rate and Output performance of the Agro based organization. A rise in interest rate will lead to low amount of loan collected for

Agro based organization productivity or purposes and this will lead to low output performance and vice versa. The adjusted R value of .001 implied that the model is .1% goodness fit.

Regression result of the relationship between Inflation rate and Output performance of the Agro based Organization.

Table 7. Model Summary of Inflation rate and Output performance.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.671 ^a	.450	.381	233.650

a. Predictors: (Constant), Inflation rate
Source: Calculated From Secondary Data.

Table 8. ANOVA of Inflation rate and Output performance.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	356750.767	1	356750.767	6.535	.034 ^b
	Residual	436738.777	8	54592.347		
	Total	793489.544	9			

a. Dependent Variable: Output performance
b. Predictors: (Constant), Inflation rate
Source: Calculated From Secondary Data.

Table 9. Coefficients of Inflation rate and Output performance.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1989.315	399.823		4.975	.001
	Inflation rate	-138.548	54.198	-.671	-2.556	.034

a. Dependent Variable: Output performance
Source: Calculated From Secondary Data.

A unit change in the level of inflation rate on the average leads to about .450 unit change or 45% changes in output performance of the Agro based organization. The estimated coefficient for inflation rate is negative. This means that there exist an indirect relationship between inflation rate and Output

performance of the Agro based organization. The adjusted R value of .381 implied that the model is 38.1% goodness fit.

Regression result of the relationship between Exchange rate and Output performance of the Agro based Organization.

Table 10. Model Summary of Exchange rate and Output performance.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.817 ^a	.668	.627	181.417

a. Predictors: (Constant), Exchange rate
Source: Calculated From Secondary Data.

Table 11. ANOVA of Exchange rate and Output performance.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	530192.047	1	530192.047	16.109	.004 ^b
	Residual	263297.497	8	32912.187		
	Total	793489.544	9			

a. Dependent Variable: Output performance
b. Predictors: (Constant), Exchange rate
Source: Calculated From Secondary Data.

Table 12. Coefficients of Exchange rate and Output performance.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2817.160	949.006		-2.969	.018
	Exchange rate	50.695	12.631	.817	4.014	.004

a. Dependent Variable: Output performance
Source: Calculated From Secondary Data

A unit change in the level of Exchange rate on the average leads to about .668 unit change or 66.8% changes in output performance of the Agro based organization. The estimated coefficient for Exchange rate is positive. This means that there exist a direct relationship between Exchange rate and

Output performance of the Agro based organization. The adjusted R value of .627 implied that the model is 62.7% goodness fit.

Multiple Regressions

Table 13. Model Summary of Multiple Regressions.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.902 (a)	.814	.721	156.750

aPredictors: (Constant), Exchange rate, Interest rate, Inflation rate, Commercial banks credit

Table 14. ANOVA (b) of Multiple Regressions.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	646066.325	3	215355.442	8.765	.013 (a)
	Residual	147423.219	6	24570.536		
	Total	793489.544	9			

aPredictors: (Constant), Exchange rate, Inflation rate, Interest rate Commercial banks credit

bDependent Variable: Output performance

Source: Calculated From Secondary Data.

From Table 13 &14 it would be said that, The F-statistics for this study is significant at 1 percent level (Sig. $F < 0.1$), showing the fitness of the model. It can be observed that the R Square is 0.814; representing 81.4 percent of the output performance of Agro based Organization in Bangladesh can be explained by Exchange rate, Interest rate, Inflation rate, Commercial banks credit.

Table 15. Coefficients (a) of Multiple Regressions.

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-1342.588	1168.892		-1.149	.303
Commercial banks credit	2.565	6.479	.121	.396	.708
Interest rate	-51.341	57.104	-.235	-.899	.410
Inflation rate	-41.863	58.057	-.203	-.721	.503
Exchange rate	40.547	20.232	.654	2.004	.101

aDependent Variable: Output performance

Source: Calculated From Secondary Data.

4.2. Regression Line

$$Y = -1342.588 + .121 X_1 + (-.235) X_2 + (-.203) X_3 + .654 X_4$$

From the regression co-efficient, it can be said that Commercial banks credit & Exchange rate has positive impact on output performance of Agro based Organization in Bangladesh. Moreover, Interest rate & Inflation rate has somewhat negative impacts on output performance of Agro based Organization in Bangladesh.

4.3. One-Sample Test & Hypothesis Testing

Table 16. One-Sample Test of Commercial banks credit.

One-Sample Test	Test Value = 0.05					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Output performance	10.488	9	.000	984.790	772.38	1197.20
Commercial banks credit	18.167	9	.000	80.260	70.27	90.25

Source: Calculated From Secondary Data.

Table 16 shows that T value is 10.488 and 18.167 & $\text{Alpha} = 0.05 > 0.000$. The model is statistically significant. So, there is a significant relationship exist. So, hypothesis 1 may be accepted.

Table 17. One-Sample Test of Interest rate.

	Test Value = 0.05					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Output performance	10.488	9	.000	984.790	772.38	1197.20
Interest rate	27.832	9	.000	11.947	10.98	12.92

Source: Calculated From Secondary Data.

Table 17 shows that T value is 10.488 and 27.832 & $\text{Alpha} = 0.05 > 0.000$. The model is statistically significant. So, there is a significant relationship exist. So, hypothesis 2 may be accepted.

Table 18. One-Sample Test of Inflation rate.

One-Sample Test						
Test Value = 0.05						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Output performance	10.488	9	.000	984.790	772.38	1197.20
Inflation rate	15.844	9	.000	7.200	6.17	8.23

Source: Calculated From Secondary Data.

Table 18 shows that T value is 10.488 and 15.844 & Alpha=0.05>0.000. The model is statistically significant. So, there is a significant relationship exist. So, hypothesis 3 may be accepted.

Table 19. One-Sample Test of Exchange rate.

One-Sample Test						
Test Value = 0.05						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Output performance	10.488	9	.000	984.790	772.38	1197.20
Exchange rate	49.503	9	.000	74.947	71.52	78.37

Source: Calculated From Secondary Data.

Table 19 shows that T value is 10.488 and 49.503 & Alpha=0.05>0.000. The model is statistically significant. So, there is a significant relationship exist. So, hypothesis 4 may be accepted.

4.4. Correlation Analysis

Table 20. Correlations.

Correlations	Output performance	Commercial banks credit	Interest rate	Inflation rate	Exchange rate
Output performance	1	.756*	-.335	-.671*	.817**
Commercial banks credit	.756*	1	-.118	-.443	.792**
Interest rate	-.335	-.118	1	.627	.063
Inflation rate	-.671*	-.443	.627	1	-.409
Exchange rate	.817**	.792**	.063	-.409	1

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Calculated From Secondary Data

1. Commercial banks credit has positive correlation with Output performance of Agro based performance. Meanwhile, when Agro based organization gets commercial banks credit, then automatically their Output performance increase.
2. Exchange rate has positive correlation with Output performance of Agro based organization. Macroeconomic policies that enhance favourable exchange rates, make commercial bank credit extensively accessible at low interest rate, reduce the rate of inflation and thus increase the Output performance of Agro based organization.
3. Inflation rate has negative correlation with Output performance of Agro based organization. Inflation is predicted to be a decreasing function of output performance of Agro based organization, since an increase in output eases the demand pressures in the economy.

5. Recommendations

5.1. Problems of Development & Financing of Agro-based Organization

There has been insignificant development of technology for Agro-based organizations activities in Bangladesh. Agribusiness in Bangladesh still practices low grade and traditional methods and use outdated and worn-out tools and equipment resulting production of inferior quality products. There are a number of constraints hindering the development of agri-business which may be identified as follows:

1. Absence of proven entrepreneurs.
2. Lack of improved packaging material & technology
3. Absence of long-term national plan, program, strategy & training facilities.

4. Absence of an organized and viable marketing or processing structure.
5. The lack of adequate marketing infrastructure (storage, handling and transportation facilities) and lack of processing & preservation facilities which affect adversely the farm gate price directly and act as a disincentive to the fruit growers.
6. Shortage of adequate trained well-qualified personnel, particularly researcher in the field of agribusiness research.
7. Lack of sufficient appropriate production and post harvest technology and inadequate expansion and credit support for transfer of available technology.
8. Lack of long term plan of Banks & Financial Institutions in development of promising entrepreneur class.
9. Lack of proper financing plan of Agribusiness sector.

5.2. Recommendations

Based on the findings from the empirical estimation of these models and the review of related literatures, the following policy recommendations are made.

1. Government should take deliberate efforts to increase funding in agribusiness to increase agro based business in the country. Agriculture & Agribusiness related research is one of the inevitable developments in the world today that government can't afford to ignore. Funding Agro-based sector should be prioritized as security. As a country we should drive our own agro-based research agenda.
2. General principles for financing agribusiness should be introduced Bangladesh Bank may act as coordinator for implementation and monitor the programme. All banks (nationalized commercial banks, DFIs and private banks) should participate in the programme and Bangladesh Bank may allocate the lending budget according to the potentiality of the banks.
3. Also, under certain circumstances, the government should intervene in the level of interest rate given to agriculturist or investors from commercial banks in order to encourage them take more loans to foster the growth and development of the agricultural sector.
4. Government should establish a monitoring or regulating body that will supervise loans that are given to investors or agriculturists. The major duty of this body is to ensure loans are made available to the right investors and for the right purposes and time-to-time, examine the progress levels of the investors.
5. A data bank for the financing agriculture sector including agro industrial credit purposes should be developed in the Bangladesh Bank. This data bank will maintain up-to-date data on input and output prices, information on demand supply gaps of primary and finished products as well as raw materials. Besides, the data bank will preserve information regarding existing similar business enterprises, their operational performances etc.
6. A research section should be opened under the Ministry of Industry (MOI) which will launch a series of study on potential agro based industrial sector to be established in different parts of the country based on the local raw materials. The researchers will also prepare the detailed business enterprises profile and that can be bought by potential entrepreneurs on payment.
7. The research section of MOI should arrange a comprehensive training programme for potential entrepreneurs identified on the basis of conducting research regarding potential area of investment. MOI may conduct training programme through BSCIC, Directorate of Youth and BIBM.
8. In selection of entrepreneurs, Banking institutions should give priority to those entrepreneurs who have past business experiences, good family background, educational qualifications, training, managerial and technical competences, capacities to bear the loads of equity and margin and above all past successive records of successes, and leadership qualities and are able to give enough time on business enterprises activities.
9. Tariff structure for import of raw materials, machinery and equipments & other related items need to be rationalized.
10. Rate for electricity, gas, water other public utilities should be reduced as same as residential rate instead of industrial or commercial rates.
11. There is an urgent need to improve internal system for tracking, recording, and disseminating information about public spending in the agro-based sector. Consolidated and up-to-date expenditure data are not available within the Ministry of Agriculture as well as Ministry of Industry, not even for its own use. Without this information, authorities cannot undertake empirically-based policy analysis, program planning, and impact assessment. The lack of reliable data and information prevents Ministry officials from tracking and monitoring spending, increasing the risk of corruption.

5.3. Avenue for Further Studies

The agribusiness sector is one of the largest contributors to income and employment generation and it is a vital element in the country's drive to achieve self-sufficiency in food production, reduce rural poverty and foster sustainable economic development. The government has, therefore,

accorded the highest priority to this sector to enable the country to meet these challenges and make the sector commercially profitable. In a broad sense, agribusiness involves the agricultural input industry, agricultural production and management, the agricultural output industry and related industries. In a research work like this, which is quite broad "Role of Banks in Funding Agro Based Organization: A Study on Some Selected Commercial Banks in Bangladesh", cannot be easily exhausted and that is why the researcher has identified other areas of further research in greater details.

6. Conclusion

"Development of Agro based organization is the development of Bangladesh". "Industrialize or perish" both the sayings are appropriate for Bangladesh in the context of development of industries in general and agribusiness in particular. Without industrialization economic development of the country cannot be accelerated. In the process of industrialization, agribusiness is a necessity and demand of time. The geographic location of Bangladesh is in favour of export earnings and there is an ample scope to commercialize our agriculture for boosting up export earnings. At the macro level, prudent macroeconomic policies should be pursued with regard to the exchange rate, inflation and interest rates. High rates of inflation and interest, as well as overvalued currencies should be avoided. The result will be a healthy agribusiness sector. Higher growth of agro based organization will provide greater employment opportunities in other sectors. In the short term, increasing consumption and government expenditure cannot be expected to be a major source of growth. Exports and foreign direct investment are crucial to fostering agribusiness. Governments must formulate industrial and trade strategies that are favourable to agribusiness. Top priority should be given to providing incentives for agroindustrial development in order to generate added value. In summary, there is tremendous scope for agribusiness to increase both performance and output. What are needed are policies that do not discriminate against agribusiness in trade and industry, together with effective macro policies. If such an approach is followed, Agro based organization will grow and agribusiness will become a leading sector, thus enriching the national economy.

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