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# Performance Evaluation of Agricultural Credit of Banks in Bangladesh

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Received: 12 December 2016 Accepted: 31 December 2016 Published: 15 January 2017

#### 7 Abstract

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The term agriculture is an essential organ of the economy of Bangladesh. In order to ensure

long-term food security, a cost-effective, sustainable and environment-friendly agricultural

10 system is very decisive. Agricultural sector plays an irrefutable role in achieving the overall

growth and development of the economy of Bangladesh. Agricultural credit plays an

inevitable role in agricultural productivity, since it has increased the quantity and quality of

inputs used in production process. Timely and adequate flow of agricultural credit is

14 tremendously important for Agricultural productivity. This paper investigates the

15 performance of overall agricultural credit over time; evaluate the performance of agricultural

16 credit of various types of banks in Bangladesh, Analyze performance of agricultural sub-

sector and reveals status of the beneficiaries of agricultural credit. This study collected time

series data from various source and analyze in a meaningful way to discover the true

performance of agricultural credit of banks in Bangladesh.

Index terms— Bangladesh, agriculture, agricultural credit, scheduled banks.

### 1 Introduction

he term agriculture is an essential organ of the economy of Bangladesh. Agricultural sector plays an irrefutable role in achieving the overall growth and development of the economy of Bangladesh. The agricultural sector contributes 14.79% of the country's Gross Domestic Product and 45% of the total labor force directly involved in this sector. This sector also plays vital role in economic growth by providing inputs to agro based industries, creating employment, attracting foreign direct investment. Besides its economic importance this sector notably contributes to important social issues like food and nutrition, standard of living, poverty alleviation etc. Agriculture is a tremendously important sector when viewed from an environmental angle. Through its effect on land and water as well as on air quality and biodiversity it can have a considerable impact on environmental issue.

Agricultural productivity depends upon many factors like fertility of soil, climate, seed quality, fertilizer, irrigation, household characteristics, rural infrastructure, labor efficiency, managerial capability, use of modern technologies etc. Besides above mentioned factors agricultural credit plays an inevitable role in agricultural productivity, since it has increased the quantity and quality of inputs used in production process. In order to ensure long-term agricultural development, the Govt. is trying to establish a purposive, cost-effective; true-user ensured agricultural credit system. Initially the Govt. supplied subsidized agricultural credit through specialized banks like Bangladesh Krishi Bank and Rajshahi Krishi Unnayan Bank. But unfortunately due to inefficiency, corruption, bureaucratic problem, political interference the outcome was not up to the mark at all. Receptively for the last nine years all scheduled private and foreign commercial banks are incorporated under agricultural credit program as a modification of agricultural credit policy by Bangladesh Bank. Although specialized and commercial govt. bank as well as NGO & MFIs have their decentralized branch network system in remote areas throughout the country but private and foreign commercial bank does not have that network. So, they are

suggested to distribute credit facility with the affiliation of NGO and MFI. As per the policy modification of central bank, for the last nine years agricultural credit has been disbursed at union parishad office rather than bank to ensure that only genuine farmers can get the facilities. a) Objective of the study 1. To evaluate overall performance of agricultural credit of banks in Bangladesh. 2. To explore agricultural credit policy adaption by banks of Bangladesh. 3. To identify problems and challenges regarding agricultural credit of banks in Bangladesh. 4. To recommend some suggestions about problems and challenges of agricultural credit.

### 2 II.

### 51 3 Review of Related Literature

Akther, Younus, Parveen and Chowdhury (2016) in a study found agricultural credit played significant role in reducing rural poverty and thus increased sustainable economic development in Bangladesh. In that study agricultural credit, rural employment, female employment, agricultural production, credit to gross domestic product and per capita income have been used as independent variables to examine the determinants of rural poverty in Bangladesh for the sample period from 1984 to 2014. The empirical estimation suggests that all the explanatory variables in the model are significant and are found to be negatively related to rural poverty.

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IV. Rahman, Luo and Cheng (2011) in a study investigate a strong positive correlation between agricultural credit and agricultural productivity. In that study it is found that the performance of agricultural credit of various lenders improved due policy modification including inclusion of new financial intermediaries and modification in loan disbursement methods by Bangladesh Bank. However both the allocation of credit to agriculture and target attainment had found less satisfactory.

## 5 Analysis and Findings

Alauddin and Biswas (2014) in a study explore that formal sector has flourished in recent years in disbursing agricultural credit where previously informal sector dominated the rural credit market for agriculture. A timely flow of agricultural credit can meet farmers demand to ensure agricultural productivity. Since NGOs have a stronger network throughout the country thus many local and foreign commercial banks are using these channels to provide agricultural credit.

Sharmeen and Chowdhury ( ??013) is a study reveal that in the last several years, the growth in the broad agricultural sectors seems steady as well as upward sloping and their contribution in GDP is quite significant. A positive correlation has been found between available agricultural credit and greater production in the context of Bangladesh, whereas, several empirical evidences have been presented here which provide both positive and weak relationship in between them.

Ariful, Rayhan, Mahmudul and Luthful (2014) in a study found that in Bangladesh mainly NCBs and SBs are burdened with heavy classified agricultural loan. Small credits have proven viable to the poor for rural development. Proper application of rural people's effort, experience and knowledge with the help of timely and adequate flow of agricultural credit can bring prospect to rural areas.

Tanbir Ahmed and Sarahat Salma (2011) in a study state that for efficient performance of agricultural sector, proper credit facilities and adequate support is essential both from government and private sector. It is observed that agricultural banks are able to achieve a steady growth in terms of employees, branches, deposits, loans and advances during the period 2004-2008.

### **6** III.

## 7 Methodology of the Study

This study has been done mainly based on secondary data collected from Bangladesh Bank (BB), Bangladesh Economic Review (BER), and Bangladesh Bureau of Statistics (BBS) publication of various years. Secondary sources of data have been used and analyzed due to availability and accessibility. Besides these data other relevant data have also been collected from Ministry of Finance, Ministry of Agriculture, Ministry of Fisheries, Ministry of Livestock etc. These available sources confirmed data for the year 2001 to 2016. Some cases available data of the year 2017 is also used.

The collected time series data analyzed on the basis of overall agricultural credit performance includes its growth, share to total credit etc. Data also analyzed from the view point of lenders. Agricultural sub-sector also analyzed on the basis of target allocation and attainment. MS Excel software was applied for analyzing and presenting data in a meaningful way.

Source: Bangladesh Bank Annual Report ??2001) ??2002) ??2003) ??2004) ??2005) ??2006) ??2007) ??2008) ??2009) ??2010) ??2011) ??2012) ??2013) ??2014) ??2015) ??2016) Generally performance of agricultural credit has been measured based on credit disbursement achievement, recovery situation and overdue as percent of outstanding overtime. In Table - In the following Table-3, we have found the performance of various types of banks in Bangladesh. Performance is measured by overdue as percentage of outstanding. From the table, we

see the performance of State owned commercial banks (SCBs) was very alarming at the beginning of the period. 15 years average overdue as percentage of outstanding of SCBs is 47.39%. On the other hand 15 years average overdue as percentage of outstanding of State owned specialized banks (SBs) is 28.54%. As a part of policy modification of agricultural credit, Private commercial banks (PCBs) and Foreign commercial banks (FCBs) have been providing agricultural credit since 2008. 9 years average overdue as percentage of outstanding of PCBs is 3.08% which is very much satisfactory. On the other hand 9 years average overdue as percentage of outstanding of FCBs is only 0.02% which shows extraordinary performance of FCBs. 87%. Before policy modification 7 years average share of this sub-sector over total agricultural credit was 4.68% and after policy modification 9 years average share of this sub-sector over total agricultural credit stood 8.57%. Hence, target and actual disbursement of livestock's credit gradually increased overtime. Before policy modification 7 years average target attainment of this sub-sector was 70.49% and after policy modification 9 years average target attainment of this sub-sector stood 92.86%.

Fishery's share of agricultural credit had reached maximum level at 11.25% in 2016 while it dropped to a minimum of 1.71% in 2003. 16 years average share of fishery over total agricultural credit is 5.37%. Before policy modification 7 years average share of this sub-sector over total agricultural credit was 2.97% and after policy modification 9 years average share of this sub-sector over total agricultural credit stood 7.24%. Hence, target and actual disbursement of fishery's credit gradually increased overtime. Before policy modification 7 years average target attainment of this sub-sector was 61.23% and after policy modification 9 years average target attainment of this sub-sector stood 90.31%.

In case of poverty alleviation share of agricultural credit had reached maximum level at 32.33% in 2010 while it dropped to a minimum of 8.83% in 2016. 16 years average share of poverty alleviation over total agricultural credit is 17.18%. Before policy modification 7 years average target attainment of this sub-sector was 78.51% and after policy modification 9 years average target attainment of this sub-sector stood 96.15%.

Other's share of agricultural credit had reached maximum level at 35.57% in 2004 while it dropped to a minimum of 15.83% in 2016. 16 years average share of Purchasing irrigation equipments, marketing agricultural products and other agricultural activities over total agricultural credit is 26.43%. Hence, target and actual disbursement in this sub-sector gradually decreases overtime. Amount of agricultural credit disburse to women is also increases over time. But their share on amount of agricultural credit disbursement is not at a rate of their participation rate. That is in 2017, out of every 100 beneficiaries of agricultural credit 48 are female but out of every 100 taka disbursement they got only 29.71 taka. Same type of situation exists during 2011-16 as well. This situation reveals that there is discrimination in per head credit disbursement between male and female beneficiary.

# 8 V. Major Challenges of Agricultural Credit

# 9 Conclusion and Suggestions

In order to ensure long-term food security, a cost-effective, sustainable and environment-friendly agricultural system is very decisive. Being a developing country Bangladesh has to rely on agricultural sector in every respect of economic activities. This crucial importance of agricultural sector guided us to give appropriate care and concentration towards this sector. Evaluating the performance, trends and patterns of agricultural credit over the time the following suggestions are recommended for further potentiality of agricultural credit:

? Banks and financial institutions should ensure the true user of agricultural credit and make sure they use the credit for true purpose. Close supervision and monitoring of the officials can improve this situation. ? Though Bangladesh Bank time to time make policies and program regarding agricultural credit but the flow of agricultural credit is too small in compare to growing need of this sector. So flow of credit should be increased in a meaningful way that ensures both quality and quantity of agricultural credit. ? Among agricultural sub-sectors, allocation of credit and target attainment should be increased in livestock and fishery. ? Financial institution should ensure timely and adequate flow of agricultural credit. For that calendar of agricultural production process should be follow. Unnecessary terms and conditions, loan processing time and documentation formalities should be reduced as much as possible. ? Financial institutions and financial services should spread at the remote and rural areas. Inclusive financing strategy and agent banking system can be a powerful weapon for that. ? Financial institutions particularly state owned financial institutions should be monitored and regulated strictly. For that accountability and responsibility should be ensure within the stakeholders. ? Financial institutions especially state owned financial institutions should be free from political interference. Zero tolerance policy should be taken for any sort of corruption and irregularities. Honest and efficient person should be place as policy maker. ? Discrimination on credit disbursement between male and female should be reduced. Special importance should be provided to women farmers.

Proper training and awareness program should also be established. ? Group lending, crop diversification, formation of cooperatives should be encouraged to ensure the best outcome of agricultural credit and to ensure the protection of farmers from any unfortunate circumstances. ? The farmers willing for taking agricultural loan from financial institutions must be brought under insurance coverage. For that an effective agricultural insurance

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							(Tk. in Billions)
Year	Disbursem	en <b>D</b> isbursem	$\mathrm{enGap}/$	Recovery	Total Out-	Overdue	Overdue as
	(Target)	(Actual)	Achieve-		standing		percent of
			ment		Loan		outstanding
			(%)				
2001	32.66	30.20	92.47	28.78	111.37	67.59	60.69
2002	33.30	29.60	88.89	32.60	115.00	67.60	58.80
2003	35.61	32.78	92.05	35.16	119.13	65.26	54.78
2004	43.79	40.48	92.44	31.35	127.06	62.65	49.31
2005	55.38	49.57	89.51	31.71	140.40	57.81	41.18
2006	58.92	54.90	93.18	41.64	153.76	66.50	43.27
2007	63.51	52.93	83.34	46.76	145.82	66.35	45.50
2008	69.75	61.67	88.42	43.75	158.49	58.37	36.83
2009	74.66	69.92	93.65	66.14	171.70	60.49	35.23
2010	84.53	82.79	97.94	76.51	199.61	63.66	31.89

Figure 1: Table - 1

system should be developed with the joint collaboration of Bangladesh Bank and Insurance Development and Regulatory Authority.  $^{1}$   $^{2}$ 

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 $<sup>^2(\ )2017 {\</sup>rm CPerformance}$  Evaluation of Agricultural Credit of Banks in Bangladesh

			7
comparative achievement, recovery		1 we see the credit disbursement f Banks Total outstanding, agricultural credit nk credits and Agricultural Credit Growth dur	
			(Tk.
Year	Total Bank Credit Outstanding	Actual Disbursement of Agricultural Credit	lions) % of cultur Credi
			from
			Credi
2001	645.53	30.20	4.68
2002	732.60	29.60	4.04
2003	832.60	32.78	3.94
2004	974.50	40.48	4.15
2005	1197.66	49.57	4.14
2006	1439.56	54.90	3.81
2007	1651.19	52.93	3.21
2008	1966.40	61.67	3.14
2009	2259.34	69.92	3.09
2010	2782.50	82.79	2.98
2011	3476.76	92.10	2.65
2012	4135.30	131.32	3.18
2013	4482.15	146.67	3.27
2014	5047.49	160.37	3.18
2015	7463.01	159.78	2.14
2016	6654.76	176.46	2.65

 $[Note: Source: Bangladesh\ Bank\ Annual\ Report(2001)(2002)(2003)(2004)(2005)(2006)(2007)(2008)(2009)(2010)(2011)(2012)(2012$ 

Figure 2:

	Performance Evaluat	ion of Ag	ricultural	Credit o	f Banks in	n Bangladesh	
2011	89.86	92.10	102.50	89.19	225.99	59.72	26.43
2012	138.00	131.32	95.16	123.59	259.75	60.52	23.30
2013	141.30	146.67	103.80	143.62	310.58	52.09	16.77
2014	145.95	160.37	109.90	170.46	346.84	76.12	21.95
2015	155.50	159.78	102.80	154.07	329.37	67.29	20.43
2016	164.00	176.46	107.60	170.56	344.77	56.78	16.47
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Figure 3: Table - 2

banks during 2002-2016

Year 2002	Outstanding Agric 33.46	cultural Credit SCBs SBs 66.03 -	s PCBs FCF -	Bs SCBs 24.17	Overdue 30.55	SBs PCBs	s FCBs SC
2003 2004 F: 2005	~	gricultural Credit Alloca 1.65 Crops -	tion and Tar -Livestock	_	inment by 26.44 Fis	_	gories (200) -Poverty
2006 Year	49.69 Share	85.37 - Share At- tain- ment	-	28.06 At- tain- ment	25.08 Share	- Attainm	- entShare
2007 2001	(%) 49.11 45.10	(%) 85.89 - 83.87	(%) 2.62 -	(%) 29.32 65.83	(%) 32 2.68	(%) -61.83	(%) - 14.27
2002 2008 2003	43.11 49.57 51.77	68.64 98.92 90.31 16.73	3.72 4.51 3.01	76.92 26.33 79.57	2.27 28.81 1.71	62.62 0.50 47.46	15.67 0.00 8.96
2009 2004 2005	53.19 45.58 108.37	78.31 18.55 42.53 75.61	6.13 5.73 5.75	26.63 89.21 74.22	29.78 2.74 2.70	0.31 63.79 48.38	0 13.69 9.98
2010 2006 2007	60.99 40.10 128.32	77.33 21.08 43.19 75.47	5.02 5.19 5.04	26.46 57.74 50.00	32.93 4.20 4.55	0.38 76.49 68.08	0.00 $27.62$ $23.71$
2011 2008	64.36 39.95 149.37	78.82 26.62	4.80 3.31	$25.83 \\ 54.11$	$29.42 \\ 5.24$	$1.25 \\ 68.14$	$0.00 \\ 27.38$
2009 2012 2010	40.82 67.56 40.09 147.37	91.77 92.50 42.56	4.49 4.93 2.26	50.65 23.99 56.20	4.89 35.22 4.83	70.37 1.31 73.66	30.90 0.00 32.33
2013 2011 2012	73.63 40.04 174.47	98.58 59.78 48.55 94.86	4.64 2.70 5.86	24.57 58.17 75.50	25.26 5.05 5.93	2.26 85.48 76.32	0 17.69 11.80
2014 2013	79.07 43.87 199.42	98.41 64.01 12.29 3.83		25.39 133.06	47.95 9.01	2.78 104.18	0.0004 11.30
2014 2015 2015	44.47 84.04 47.59 177.09	102.7 12.45 100.4 66.11 12.87 2.13		$130.80 \\ 26.21 \\ 123.17$	8.59 38.94 10.35	108.68 2.14 107.62	11.62 0.0036 9.27
2016 2016	87.16 49.27 175.08	107.3 80.24 14.81 2.29		23.02 154.31	32.01 11.25	1.75 $118.30$	0.0030 8.83 Bangladesl

Figure 4: Table - 3

Year No. No. of Female Bene-%Actual % of Amount of Amount Total ficiary Female Disburse Disburse-Agricultural of Benefi-Benefito ment of Credit Disburse ciary ciary Female Agrito Female Beneficultural Beneficiary ciary Credit of out total Agricultural Credit 270040833233412.317.2592.107.872011 2012303614432042810.557.35131.325.602013 331002444454613.43 12.45146.678.492014 3285936 17.95 16.1210.05 589942 160.37 20153194950 2655628.31 9.00159.785.6320163426130 151957844.3544.80176.4625.382017 3856635 184706547.8962.40 209.9829.71

Source: Bangladesh Bank's Agricultural & Rural Credit Policy and Programme (2011-20

Figure 5: Table - 5

Figure 6: Table - 5

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