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Contribution of Banks on Agricultural Development in Bangladesh

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Abstract: Most of the cases, the determinants of agricultural development are crops, purchase and installation of irrigation equipment, livestock, marketing of agricultural goods fisheries, poverty alleviation and income generating activities. Banks also disburse loan on each of these sectors. So banks play an important role on agricultural development in Bangladesh. Timely and adequate flow of agricultural credit can meet farmers demand to enhance agricultural productivity. The aim of this paper is to determine the contribution of banks on agricultural development in Bangladesh. This study collected time series data from various sources and analyze the contribution of agricultural credit of banks in Bangladesh.

Keyword: Agriculture, Agricultural Credit, Agricultural Development, Bangladesh.

Introduction

Bangladesh gained independence in 1971. Since it's independence agriculture has been the core sector of Bangladesh economy. According to the 1981 census, 83 percent of the labour force are employed in rural areas; 61 percent in agricultural activities. Bangladesh is an agrarian country where agricultural sector plays vital role in accelerating the economic growth by providing inputs to agro-based industries, creating employment, attracting foreign direct investment.

Many factors such as soil, climate, seed quality, fertilizer, irrigation, household, characteristics, rural infrastructure, labour efficiency, managerial capability, use of modern technologies etc. influence the productivity of agriculture. In that case timely and adequate flow of agricultural credit can meet farmers demand to ensure

agricultural productivity. It can increase quality and quantity of input used in the production process.

Bangladesh is a developing country where the banking system plays a vital role in the progress of its economic development. As mentioned earlier that Bangladesh is an agrarian country, the economic growth will be slowed down if the finance is not provided to the agricultural sector. Keeping this in mind, for the development of agricultural sector the Government of Bangladesh has established two specialized banks namely; Bangladesh Krishi Bank (BKB) and Rajshahi Krishi Unnayan Bank (RAKUB). These banks are continuously working for the development of agricultural sector; Firstly, they are trying to promote saving among middle and lower middle class of urban and rural areas. Secondly, these banks increase investment in different sectors of agriculture, industry, trade. These banks also provide micro-credit which will help the disadvantaged people to become self sufficient.

Day by day both public, private and foreign commercial banks are incorporated under agricultural credit program. Specialized and commercial government bank as well as NGO& MFIs have their decentralized branch network system in remote areas throughout the country. These formal sectors provide agricultural credit to the poor farmers in the rural areas (small, marginal and landless farmers) so that farmers can purchase agricultural input timely which help to stimulate food production and improve the livelihoods of poor farmers.

Agricultural credit plays an inevitable role in agricultural productivity. The contribution of agriculture sector to the GDP in FY 2019-20 is 13.35 percent (Bangladesh Economic Review 2020). According to the Labour Force Survey 2016-17, 40.62 percent of the total labour force of the country is engaged in agriculture. It also makes a significant contribution to the growth of the service sector. In addition, we cannot deny the role of agriculture in ensuring food security for a growing population from the declining arable land as well as the impact of climate change.

Considering the importance of agri-credit made by banks in Bangladesh, this paper tries to find out the major contributions of banks to this primary sector. The paper proceeds with narrating review of literature in 2nd section, challenges of getting agricultural credit in 3rd section, impact of Covid-19 on agricultural sector in 4th section, methodology in 5th section, analysis and findings in 6th section, and conclusion & policy recommendations in the last section .

Review of Literature

Akther, M., Younus, D.S., Parveen, F. and Chowdhury, M.M.I.(2016) in their study try to examine whether rural financing played any role in reducing rural poverty and thus increased sustainable economic development in Bangladesh. They tried to identify the determinants of rural poverty in Bangladesh using priority sector lending such as agricultural sector credit, rural employment, female employment, agricultural production and credit to gross domestic product and per capita income as independent variables. The empirical estimation for the sample period from 1984 to 2014 suggests that all the explanatory variables in the model are significant and are found to be negatively related to rural poverty. The elasticity of the rural poverty with respect to priority sector lending is -0.27 implying that a one percent increases in priority sector lending will reduce rural poverty by 0.27 percent on average.

Alauddin, Md. and Biswas, Joytirmay (2014) in their study recognize that a timely flow of agricultural credit can meet farmers demand to ensure agricultural productivity. Their study reveals that formal sector has flourished in recent years in disbursing agricultural credit where previously informal sector dominated the rural credit market for agriculture. Many local private commercial banks and foreign banks are using the channels of NGOs to provide agricultural credit as NGOs have a stronger network throughout the country.

Islam, M.A., Islam, M.R. Sddiqui, M.H. and Karim, L. (2014) in their study found that farmers have lack of savings and scarcity of resources. So agricultural credit is a solution for the farmers to start their agro-farms and business. Availability of credit on time is important requirement for the rural people, particularly under conditions of scarcity of resources and uncertainty.

Chowdhury D.T.A and Chowdhury, M.S.S. (2011) in their study analyzed the development of different services and facilities are provided by the specialized agricultural banks in Bangladesh for the overall improvement of agricultural sector. Their study reveals that both agricultural banks are able to achieve a steady growth in terms of employees, branches, deposits, loans and advances.

Patwary, M.S.H. (2017) in a study found that agricultural credit plays an inevitable role in agricultural productivity, since it has increased the quantity and quality of inputs used in production process.

Challenges faced by the farmers in getting agricultural credit

1. Long institutional procedure: The main problems faced by the farmers in getting agricultural credit are the long institutional procedure. It takes too time

and formalities to process agricultural credit. As most of the small and marginal farmers have lack of knowledge about this formal procedure they always feel fear about formalities, documentation of financial institutions. A research work conducted by Ruhul Amin Sarkar (2006) revealed that 90 percent of all size farmers think that long institutional procedure is the major impediment in getting loans from institutional source. This lengthy procedure hampers the productivity of farmers. As farmers incapable to purchase agricultural inputs on time due to lack of cash.

- 2. Urban bias of banking operation: In Bangladesh financial institutions are mostly urban biased. In many rural areas have a few or even no financial institutions. People in such areas have to cross long distance to reach financial institution and after fulfilling the requirement of financial institutions they get agricultural credit. For this reason farmers in rural areas are discouraged to get loan. So balanced sector wise development of financial institutions are needed.
- 3. Lack of Collateral: Formal sector wants collateral as security of the credit that they disburse to the farmers. Formal sector also takes socio-economic status of a credit seeker into consideration when it decides to disburse agricultural credit. These make cheap formal credit accessibility more difficult for the marginal and sub-marginal and small farmers. This forces them to take loan from semi-formal institutional and non-institutional source.
- 4. Higher non- interest cost of institutional credit: Alam (1981) identified four types of non-interest cost of institutional loan such as; (a) application fees, stamp, and documents required in support of loan; (b) from filling and writing, (c) Cost of traveling for loan negotiation; (d) Cost of entertaining people who assisted in loan negotiations. He observed that non-interest cost of borrowing falls as loan size increases. Higher non-interest cost of institutional credit for the small farmers acts as a hindrance to the development of productive force.
- 5. Difficult credit rules: Most of the illiterate and partially educated farmers cannot understand difficult credit rules of banking institutions. For this reason, they try to collect loan from informal sector where there is simple rule for loan. It is also found that agricultural loan are often used for political motives. Farmers need political power to get loan.
- **6.** Weekly basis installment system: Most of the cases farmers who take loan from formal sources have to repay installment on weekly basis. As agricultural

production takes time and income is received only after harvesting. So farmers who have no other sources of income, paying installment weekly becomes difficult for them.

7. Discrimination in disbursing loan between male and female: There is discrimination in the allocation of loan between male and female. Per head disbursement of agricultural credit to male beneficiary is much higher than female beneficiary.

Impact of Covid-19 on agricultural sector: Covid-19 has an impact across all economic sector including the agricultural sector. Because of lockdown, cost of production increases. During lockdown labour cannot move from place to place. As a result there arises labour shortage in agricultural sector. The shortage of labour increases labour wages. As agricultural production is labour intensive, so the rise in labour wages increase the cost of agricultural production. Farmers also face higher cost of transportation during lockdown. So it is easily understand that the cost of all agricultural inputs increases because of lockdown. The Covid-19 crisis will also reduce food demand as a result of declining incomes and lower frequency of visiting markets to maintain social distance. The negative impact is already visible – the daily star reports that despite bumper production of fruits, growers are incurring losses as the price has fallen drastically in the local markets of the districts due to the outbreak. Lockdown strategies entail a number of protective measures to reduce the Covid-19 infection. This includes border closures, travel restrictions, restaurant closures, and trade disruptions etc. There is a deep cut in the price of products because of low demand. As cost of production is high but price of the product is low, so farmers incur loss. A study conducted by BIGD in June 2020 shown that because of the pandemic, Boro farmers lost seven percent of their estimated yield in 2020 which nationally amount to 4.82 crore mounds, equivalent to BDT 3,687 crore. Because of the labour shortage, labour wage went up by 17 percent. The cost of other inputs also increased because of disrupted transportation. As a result Boro farmers faced a 40 percent loss in expected profit.

So due to outbreak of the Novel Corona Virus, it is necessary to provide agricultural loan at low interest rate for continuing food production and food supply at normal level. With this view banks are instructed through the ACD circular -02 dated; 27 April 2020 to provide agricultural loan at 4 percent concessional rate (maximum) for cultivating grain crops, cash crops, vegetables and tuber crops as mentioned in agricultural and rural credit policy program. Against the disbursement of these loans,

banks will be reimbursed at 5.0 percent as interest loss from Bangladesh Bank. These facilities will be continued up to 30 June 2021 effective from 1 April 2020.

Methodology of this Study: This study has been done mainly based on secondary data. The relevant data and information were collected from annual reports of Bangladesh Bank and websites of various banks of Bangladesh, Bangladesh Economic Review (BER) and Bangladesh Bureau of statistics (BBS) publication of various years. In this study we analyze data for the period 2001 to 2020. The data analysis includes the view point of lenders, agricultural sub-sector, overall agricultural credit performance etc. MS excel software was used for analyzing and presenting data in a meaningful way.

Analysis and Finding

Table 1: Comparative analysis of target and actual disbursement; recovery; outstanding; overdue and overdue as percentage of outstanding of agricultural credit during 2001-20

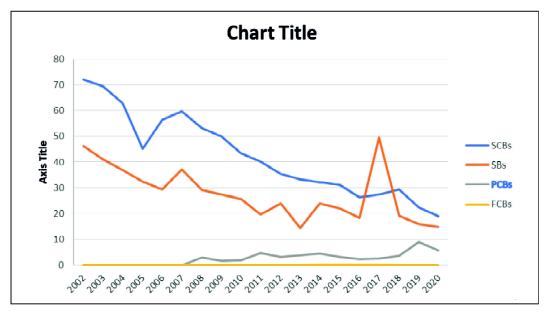
(Tk in Billions)

							(1 K in Dimons)
Year	Disbursement (Target)	Disbursement (Actual)	Gap/ Achievement%	Recovery	Total Outstandingloan	Overdue	Overdue as Percent of 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
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
2017	175.50	209.99	119.65	188.41	390.48	67.08	17.18
2018	204.00	213.93	104.87	215.03	406.01	72.11	17.8
2019	218.00	236.16	108.33	237.34	429.01	69.9	15.6
2020	241.0	227.5	94.32	212.5	455.9	60.6	13.3

Source: Bangladesh Bank Annual Report (2001-2020).

Disbursement of agricultural credit by banks follows an upward tend. In 2001, disbursement of agricultural credit was Tk 30.20 billion. In 2020 it has reached at Tk 227.5 billion. The increase in agricultural credit disbursement has positive impact. It has increased the quality and quantity of input used in the production process of agriculture. Today's agriculture uses sophisticated technologies such as reapers, tractors, axial flow pumps, seeds drills etc. That requires more capital. So the increase in agricultural credit disbursement can help the farmers by providing capital. As a result farmers can use improved technology in the production process that yield bumper production. Here it is necessary to mention that although the disbursement of agricultural credit increases overtime, but due to Covid-19 in 2020 actual disbursement of agricultural credit is less than the disbursement targets of banks. This is because farmers incur loss during pandemic. As a result they lose their interest to take loan and further start agricultural activities. So they need special incentive to start their agri-business. So in that case it is necessary to provide agricultural loan at low interest rate for continuing food production and food supply at normal level. The recovery of agricultural credit in 2001 was Tk 28.78 billion. It has reached Tk 212.5 billion in 2020. This shows that banks perform well in the recovery of the

Chart Figure-1: Performance of various types of banks in Bangladesh. Measured by overdue as percentage of outstanding (plotted in vertical axis) during the year 2002-2020 (plotted in horizontal axis)



agricultural loan. Overdue literally means "past the due date". Bills that aren't paid on time are overdue. Overdue as percent of outstanding is Tk 60.69 billion but it has reached Tk 13.3 billion in 2020. This is because initially agricultural credit disbursed through government banks. But the performance was very poor because of inefficiency and corruption of the employees and bureaucratic problem and political interferences in government institutions. At present this situation is improving day by day after the establishment of good governance in government banks. Besides that participation of private commercial and foreign commercial banks also help to improve credit disbursement.

Table 2: Comparative analysis of overdue as the percentage of the total outstanding agricultural credit by various banks during (2002-2020). (Tk in Billions)

Outstanding agricultural credit					Overdue			Overdue as % ofoutstanding				
Year	SCBs	SBs	PCBs	FCBs	SCBs	SBs	PCBs	FCBs	SCBs	SBs	PCBs	FCBs
2002	33.46	66.03	_	_	24.17	30.55	_	_	72	46.27	_	_
2003	34.80	68.96	_	_	24.19	28.4	_	_	69.51	41.18	_	_
2004	37.5	73.2	_	_	23.6	27.1	_	_	62.9	37.02	_	_
2005	40.89	81.65	_	_	18.45	26.44	_	_	45.12	32.38	_	_
2006	49.69	85.37	_	_	28.06	25.08	_	_	56.47	29.38	_	_
2007	49.11	85.89	_	_	29.32	32	_	_	59.70	37.26	_	_
2008	49.11	98.92	16.73	3.01	26.33	28.81	0.50	0.00	53.12	29.12	2.99	0.00
2009	53.19	108.37	18.55	5.73	26.33	29.78	0.31	0	50.06	27.48	1.67	0
2010	60.99	128.32	21.08	5.19	26.46	32.93	0.38	0.00	43.38	25.66	1.80	0.00
2011	64.36	149.37	26.62	3.31	25.83	29.42	1.25	0.00	40.13	19.70	4.70	0.00
2012	67.56	147.37	42.56	2.26	23.99	35.22	1.31	0.00	35.51	23.90	3.08	0.00
2013	73.63	174.47	59.78	2.70	24.57	25.26	2.26	0	33.37	14.48	3.78	0
2014	79.07	199.42	64.01	3.83	25.39	47.95	2.78	0.0004	32.11	24.04	4.34	0.01
2015	84.04	177.09	66.11	2.13	26.21	38.94	2.14	0.0036	31.19	21.99	3.24	0.17
2016	87.16	175.08	80.24	2.29	23.02	32.01	1.75	0.0030	26.41	18.28	2.18	0.13
2017	94.60	188.11	104.22	3.55	25.64	38.88	2.56	0.003	27.10	49.46	2.46	0.08
2018	103.05	198.4	101.41	3.14	30.35	38.17	3.59	0.00	29.45	19.24	3.54	0.00
2019	107.19	209.83	108.51	4.22	23.98	33.26	9.68	0.00	22.37	15.85	8.92	0.00
2020	110.73	220.35	119.57	5.28	20.93	32.67	6.98	0.00	18.90	14.83	5.84	0.00

Source: Bangladesh Bank Annual Report (2002-2020).

Table 3: Agricultural Credit Allocation by Sub Categories (2001-2020)

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Year	Crops Share (%)	Livestock Share (%)	Fisheries Share (%)	Poverty Allocation Share (%)	Others Share (%)	
2001	45.10	2.62	2.68	14.27	35.33	
2002	43.11	3.72	2.27	15.67	35.24	
2003	51.77	4.51	1.71	8.96	32.94	
2004	45.58	6.13	2.74	9.98	35.57	
2005	42.53	5.75	2.70	13.69	35.32	
2006	40.10	5.02	4.20	27.62	23.05	
2007	43.19	5.04	4.55	23.71	23.50	
2008	39.95	4.80	5.24	27.38	22.62	
2009	40.82	4.49	4.89	30.90	18.88	
2010	40.09	4.93	4.83	32.33	17.82	
2011	40.04	4.64	5.05	17.69	32.58	
2012	48.55	5.86	5.93	11.80	27.87	
2013	43.87	12.29	9.01	11.30	23.53	
2014	44.47	12.45	8.59	11.62	22.87	
2015	47.59	12.87	10.53	9.27	19	
2016	49.27	14.81	11.25	8.83	15.83	
2017	47.9	14.6	11.5	9.0	17	
2018	48	14	12	10	16	
2019	50.30	13.74	11.34	8.24	16.38	
2020	50	14	11	9	16	

Source: Bangladesh Bank Annual Report (2001-2020)

From the above table-3 we see that crops share of agricultural credit was 45.10% in 2001. It has reached 50% in 2020. Similarly livestock, fisheries, poverty alleviation and others share of agricultural credit follows an upward trend. Definitely it has positive impact on the productivity of agriculture.

The agricultural sector can be broken down into five main components: crops, livestock, fisheries, poverty alleviation and others. Bangladesh poses development in each of these subcategories. According to the combine estimate of BBS, Ministry of Agriculture and Department of Agriculture Extension (DAE). In FY 2019-20 total food grains production target is 454.04 lakh MT. If the growth of fish production

continues, the fish production in the country is expected to be 45-52 lakh MT(Department of Fisheries, Ministry of Fisheries and Livestock).

In the same manner livestock, poverty, alleviation and others contribution to the agriculture and to the economy increases day by day.

Table 4: Comparative Statement of no of total beneficiary of agricultural credit, female beneficiary, % of female beneficiary, amount of agricultural credit disburse to female beneficiary and % of amount disburse to female beneficiary out of total disbursement of agricultural credit during 2011-17. (Tk in Billions)

Year	No of total beneficiary	No of female heneficiary	% of female beneficiary	Amount disburse to female beneficiary	Actual disbursement of agricultural credit	% of amount of agricultural credit disburse to female beneficiary out of total agricultural credit
2011	2700408	332334	12.31	7.25	92.10	7.87
2012	3036144	320428	10.55	7.35	131.32	5.60
2013	3310024	444546	13.43	12.45	146.67	8.49
2014	3285936	589942	17.95	16.12	160.37	10.05
2015	3194950	265562	8.31	9.00	159.78	5.63
2016	3426130	1519578	44.35	44.80	176.46	25.38
2017	3856635	1847065	47.89	62.40	209.98	29.71

Source: Bangladesh Bank's Agricultural and Rural Credit Policy and Programme (2011-2017)

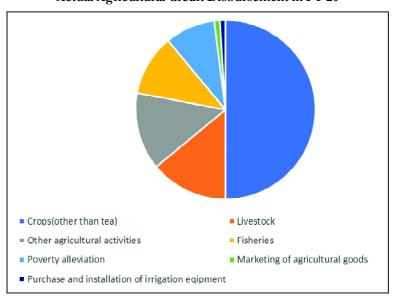
Women participation in agricultural credit is increasing day by day. It helps women to become self-sufficient. Nowadays women engage in Agro-farming instead of being unemployed which help them to contribute for the family and the nation. From the above table we see that in 2017 percentage of female beneficiary was 47.89. That means out of every 100 beneficiaries of agricultural credit 48 are female. But % of amount of agricultural credit disburse to female beneficiary out of total agricultural credit had reached 29.71 in 2017. That indicates out of every 100 taka disbursement women got only 29.71 taka. The situation also reveal that women also face discrimination in per head credit disbursement. Proper credit disbursement between male and female can reduce this discrimination.

Crops (other than tea)
Fisheries
Livestock
Poverty alleviation
Marketing of Agricultural goods

Graphical Analysis
Target of Agricultural Credit Disbursement in FY20

Source: ACD,BB

In FY 20, 55 percent of the total agricultural credit targeted to disburse to the crop sub-sector followed by live-stock and poultry (10%), other agricultural activities (11%), fisheries (10%), poverty alleviation (7%), purchase and installation of irrigation equipment (5%), marketing of agricultural goods (2%)



Actual Agricultural Credit Disbursement in FY 20

Source: ACD,BB

In FY20, 50 percent of the total agricultural credit distributed to the crops subsectors followed by live-stock and poultry (14), other agricultural activities (14%), Fisheries (11%) poverty alleviation (9%), purchase and installation of irrigation equipment (1%), marketing of agricultural goods (1%).

From this analysis, we find that agricultural credit distributed to the sub categories has increased and it has crossed the targeted disbursement.

Conclusion

As a developing country, Bangladesh has to rely on agricultural sector in every respect of economic activities. There is a huge importance of the agricultural sector in order to generate employment and fulfilling the increasing food demand for a rapidly growing population. From the analysis, it is reflected that agricultural credit can be played a significant role in promoting the development of the agricultural sector.

The comprehensive policy initiatives of Bangladesh Bank have fostered the agricultural credit access for the poor farmers. Now a days, the integrated efforts of commercial banks including NGO- MFIs also help to expand the access to agricultural credit. Agricultural credit to poor farmers help to increase agricultural production and their household income. The proper policy support for credit program plays a vital role in credit financing to the agricultural households. It will help to ensure sustainable agricultural production growth.

So to increase the access to agricultural credit banks should reduce the formal procedure. Minimum formalities with flexibilities can encourage farmers to find loan from formal sector. Banks can arrange seminar to discuss about the formalities of the loan so that farmers can easily understand how to do formalities to get loan

As farmers have lack of resources so in that case collateral acts as a hindrance to get agricultural credit. So formal sector should disburse agricultural credit with less amount of collateral which farmers can bear easily. Political interference in the agricultural sector must be removed.

Financial institutions and financial services should spread at the remote and rural areas. It will help easy access to financial services for the people of such areas.

Due to Covid-19 pandemic farmers incur loss in many ways, so banks should provide agriculture credit at low interest rate.

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