ROLE OF BANKING-SECTOR TO INCLUSIVE GROWTH THROUGH INCLUSIVE FINANCE IN BANGLADESH

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Abstract:

The study attempts to identify the relationship between the banking sector's financing in agriculture and total agricultural output at national level. To assist the study, a simple linear regression model has been developed. The results suggest that there is a strong correlation between banking sectors' financing in agriculture and agriculture output in Bangladesh. It is also evident that banking sector's credits are significantly facilitating financial inclusion in Bangladesh. The model can be instrumental for developing countries that are seeking ways of inclusive growth. In addition; the study recommends some policy measures to overcome the challenges of financial inclusion with regards to the banking sector's initiatives in financing agriculture in Bangladesh.

Key words: *banking, inclusive finance, growth, Bangladesh*

1. Introduction. Background of the Study

Financial inclusion has emerged as a tool to achieve inclusive growth for poverty reduction since 2005, a year that the UN has declared International Microcredit Year. Current development theories also suggest that greater financial inclusion can have a positive impact on the lives of the poor. According to United Nations (2006), financial inclusion can be defined as access to the range of financial services at a reasonable cost for the bankable people and farms. An inclusive financial system thus has to provide access to an extended range of services to the poor. (Rahman, 2009) defines financial inclusion in Bangladesh as access to financial services from officially

regulated and supervised entities in which banks and financial institutions are licensed by the Bangladesh Bank, MFIs by the Microcredit Regulatory Authority (MRA), registered cooperatives by the Department of Cooperatives; and official entities themselves including post offices and National Savings Directorate. Agriculture is one of the principal sectors of Bangladesh's economy. According to Bangladesh bureau of statistics (BBS) agriculture sector contributes 13.09% of total GDP in the fiscal year 2012-13 where the base year was 2005-06. At the same time nearly 47.5% of total manpower in Bangladesh are engaged in agricultural activities in Bangladesh (MES, 2010, BBS). According to (Rahman & Parvin, 2009) agriculture sector contributes significantly in attaining food sufficiency and creating employment opportunities as well. Agricultural credit has been considered one of the crucial factors toward sustainable development of agricultural sector mainly to increase agricultural production. Bangladesh Bank is also working to bring financial services for the unbanked people i.e., to accelerate financial inclusion activities by ensuring sufficient and visible credit facility to agricultural, SME, environment friendly and productive sectors of the economy. Loan facility has been increased significantly in agriculture and SME sectors. Agriculture as a sector depends more on credit than any other sector because of seasonal variations in farmers' returns and a changing trend from subsistence to commercial farming. At present fifty six (56) commercial banks are operating in Bangladesh. Banking sector in Bangladesh is contributing significantly towards agricultural productivity. From the fiscal year 2000-01 to 2012-13 banking sector's financing towards agriculture has been increased by 65.28%. At the same time financial inclusion has direct relationship with access to finance.

The central bank of Bangladesh very recently announced the agricultural and rural credit policy aimed at expanding agricultural credit and financial inclusions. The target for disbursement of agricultural credit for 2014-15 fiscal year has been set at Tk 15550 cr. BDT. Studies suggest that access to financial services allows the poor to save money safely outside their homes, prevents the concentration of economic power with a few individuals and helps to mitigate the risks that the poor face as a result of economic shocks or natural calamities (Mehrotra et. al., 2009). Today Bangladesh govt. is searching for variety ways of financial inclusion. The role of agriculture is vital to meet the country's challenge to achieve self-sufficiency in food production and to ensure food security, reduce rural poverty and foster sustainable economic development. The Government has therefore accorded highest priority to agriculture sector to enable the country to meet this challenge. Agricultural credit policy and programme has also been formulated accordingly. This policy support is expected to stimulate the agricultural production and reduce dependency on import and alleviate rural poverty through increased flow of funds in rural areas. The study is therefore conducted to identify the relationship between agriculture credit disbursement by the banking sector in Bangladesh and agricultural output from a time series data. From the analysis it can be identified whether agriculture credit in Bangladesh provided by the banking sector is facilitating financial inclusion or not. The findings can be a role model

for developing countries towards financial inclusion via banking sector's financing in the agriculture.

2. Objectives of the Study

The objective of this study is to identify whether banking sector of Bangladesh contribute to inclusive finance through financing in agriculture or not. In addition to this, the study has also attempted to find out the role of central bank in Bangladesh given the importance of banking sector's financing in agriculture that facilitates financial inclusion.

3. Methodology of the Study

The study is based on secondary data. Data on yearly credit disbursement of commercial banks from 1981 to 2013 has been collected from schedule bank's statistics of Bangladesh bank. On the other hand, agricultural aggregated output data from 1981 to 2013 has been collected by retrieving the website of the Ministry of Agriculture, Bangladesh. The linear regression model has been used to interpret the relationship. Based on the outcome, conclusion has been drawn whether commercial bank's agricultural credit accelerates agricultural output and therefore contributes to financial inclusion or not in Bangladesh perspective.

4. Review of the Literature

Bank credit can be defined as the borrowing capacity advanced by a bank to an individual, firm, or organization, in the form of cash loans. According to (Maftau, 2003) bank credit helps in expanding and reforming all types of agricultural enterprise, that are considered economically achievable and desirable to the achievement of stated economic goals of self-sufficiency in agricultural production. Credit to agricultural sector can be variety of forms e.g. overdraft, short, medium, or long-term credit, depending on the purpose and development period of the project (Muftau, 2003). (Nwanyanwu, 2011) identified banks' traditional roles include financing of agriculture, manufacturing, and syndicating of credit to productive sectors of the economy. (Toby et al., 2014) worked on Role of Banks in Financing the Agriculture and Manufacturing Sectors in Nigeria and found that Nigeria's commercial and merchant banks lagged behind in financing agriculture when compared to manufacturing. In addition to this results also show a significantly weak correlation between commercial bank lending and the contribution of agriculture to GDP. (Bashir et al., 2010) found that agricultural credit plays an important role in facilitating the transformation of agriculture and raising the participation of farmers in production process. (Obilor, 2013) discovered that agricultural credit guarantee scheme fund and government fund allocation to agriculture produced a significant positive effect on agricultural productivity, while the other variables produced a significant negative effect. (Zuberi,

1989) stressed the need of modern agriculture for economic development. Employing modern agriculture is possible when farmers are provided credit for purchasing modern inputs. (Johnson & Cownie, 1969) identified that developing countries can improve their agricultural output by introducing modern agricultural technology such as chemical fertilizers, recommended seeds, tractors and modern irrigation facilities but this requires an increase demand for credit. (Shah et al., 2008) worked on impact on agricultural credit on firm's productivity and found positive relationship between farm productivity and agricultural credit. They also found that quick and availability of credit from commercial banks facilitates this positive relationship. (Dantwala, 1989) estimated demand and supply of credit and its role in poverty alleviation in India. He also emphasized on supply of credit and to increase technical assistance to farmers to increase agricultural productivity. (Omobolanle, 2010) proved in his research article on the topic Micro credits and Agricultural Productivity in Ogun State, Nigeria that micro credit enabled farmers to buy the inputs they needed to increase their agricultural productivity. (Muhammad et al., 2004) stated that flow of credit to farmers had increased demand for inputs to increase crop production. According to (Shrestha, 1992) credit had been only a mild cause of agriculture sector growth in Nepal. (Qureshi & Shah, 1992) observed that the institutional credit affects agricultural output also through financing of capital investment. They found that the responsiveness of agriculture output is larger to institutional credit than that of output to fertilizer. (Iqbal et al., 2003) used regression analysis approach with Cobb-Douglas production function to estimate the impact of institutional credit on agriculture production in Pakistan. The study suggested the growth of institutional credit and this credit especially should be provided to small farmers.

5. Results and Discussions

The study used a simple linear regression model to test whether the banking sector of Bangladesh tends to inclusive banking through disburse credit to the agro-sector. To prove this hypothesis, the model runs a regression model between agricultural credit and GDP in agro-sector.

Based on the study, we have developed the following hypothesis.

H₀: There is no relationship between commercial bank's agricultural financing and agricultural output in Bangladesh.

H₁: There is a relationship between commercial bank's agricultural financing and agricultural output in Bangladesh.

Table-1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.927 ^a	.860	.855	7.55714	1.821

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a. Predictors: (Constant), Agriculture credit					
b. Dependent Variable: Agriculture GDP					
Source: Authors' Estimation					

Reviewing the model summary in the above table-1, the value of R-square shows how much of the variation in the value of the dependent variable is explained by this regression model. The R value represents the simple correlation and is 0.927 (the "R" Column), which indicates a high degree of correlation between agriculture credit and agriculture GDP. The R Square value (the "R Square" column) indicates how much of the total variation in the dependent variable can be explained by the independent variable. In this case, 86% can be explained, which is very large.

Table 2: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.26	2.01		21.16	.00		
	Agricultural credit	7.88	.57	.92	13.78	.00	1.00	1.00
a. Dependent Variable: Agricultural GDP						Source: Authors' Estimation		

The table-2 summarizes the results of regression equation. The Column B in the table gives the values of the regression coefficients and the constant, which is the expected value of the dependent variable when the values of the independent variables equal zero. The value of the independent variable in the coefficients table represents the extent to which the value of that independent variable contributes to the value of the dependent variable. Here, the t-values in the coefficients table indicate the variable's statistical significance. In general, a t-value of 2 or higher indicates statistical significance. Therefore, here we can conclude that there is a positive significant relationship between agricultural credit provided by banks and national growth as it facilitates and accelerates output in agro-sector.

Agricultural Loan Disbursements by Bangladesh Banking Sector:

The Figure-1 (Table 1 in appendix) shows the flow of agricultural credit by banking sector and agricultural output from 1981-82 to 2012-13. Banking sector's agriculture credit has been increased by 51.82% from 2007-08 to 2012-13. At the

same time agricultural output has been increased significantly over the 26 years. In the last ten years from 2002-03 to 2012-13 agricultural output has been increased by 49.29%.

Figure 1: Flow of Agriculture Credit by Banking Sector and GDP in Agriculture Sector

Source: Bangladesh Bank, Scheduled Bank Statistics, Various Issues.

Table-3 shows an overall scenario of Bangladesh agriculture. It shows that nearly 28695763 households are actively engaged in agricultural activities in Bangladesh. Agriculture contributes 19.29% of our total output. In addition to this, 47.50% of our total manpower is involved in agriculture sector.

Table 3: Bangladesh Agriculture at a Glance

Total family	2,86,95,763
Total farm holding	1,51,83,183
Total area	14.86 million hectare
Forest	2.599 million hectare
Cultivable land	8.52 million hectare
Cultivable waste	0.268 million hectare
Current fellow	0.469 million hectare
Cropping intensity	191%
Single cropped area	2.236 million hectare
Double cropped area	4.107 million hectare
Triple cropped area	1.485 million hectare
Net cropped area	7.837 million hectare
Total cropped area	14.943 million hectare
Contribution of agriculture sector to GDP	19.29%

Source: DAE/AIS 2013, BBS 2006 & 2012

Figure-2 (Table 4 in Appendix) shows agricultural credit statistics of all banks in Bangladesh. Statistics indicates that specialized banks contribute most in financing agriculture sector in Bangladesh followed by private commercial banks and state owned banks. Besides there are some other financial institutions as well as some foreign banks who are also financing in the agriculture sector in Bangladesh. The table also indicates that in the last 10 years specialized bank's financing in agriculture sector

has been increased by 163.90%, while in case of state owned banks the rate is 252.62%. Above all the statistics indicates that banking sector's financing in agriculture is increasing. In FY13, BKB alone disbursed 31.26 percent of the total disbursement, followed by PCBs' (39.39%) and the SCBs (16.36%). The SCB's overdue loan as percentage of their outstanding loan stood at 33.37% in the end of FY13, while the overdue of RAKUB and BKB were recorded to be 37.30% and 7.91% respectively of their outstanding loan for the year. On the other hand, the role of private sector domestic and foreign banks in agricultural lending is increasing remarkably, as they contributed Taka 63.48 billion, which was 43.28% of the total agricultural loan disbursed in FY13.

Figure 2: Agricultural Credit Statistics of All Banks in Bangladesh

Source: Bangladesh Bank, Scheduled Bank Statistics, Various Issues.

Figure-3 (table 3 in appendix) shows the share of advances in different sectors by economic purposes during 2006-2013. The share of agriculture credit declined in between 2009 to 2012 study period. The share of advances in the industry sector hovered around 20% in the reporting period. Trade occupies the highest share in advance with 39.35%. However in 2013 share of agriculture shows an increasing trend.

Figure 3: Share of Advances by Economic Purpose (in percentage)

Source: Bangladesh Bank, Scheduled Bank Statistics, Various Issues.

Figure-4 (table 2 in appendix) shows the composition of urban and rural bank branches in our banking sector. It is found that number of both the urban and rural bank branches showed increasing trend over time. Traditionally, share of rural branch is higher than urban branch in our country. It is a positive sign for financial inclusion without any doubt. But, we observe a slightly declining trend in the share of rural branch during the last 10 years.

Figure 4: Urban and Rural Branches of Commercial Banks

Source: Bangladesh Bank, Scheduled Bank Statistics, Various Issues.

Table 4: Status of Financial Inclusion of Bangladesh

Year	Adult Population (millions)	Total population (millions)	Population per bank branch (in number)	Number of bank deposit A/Cs (millions)	Deposit A/Cs as % of adult population	Number of members in MFIs (millions)	MFI members as % of adult population	Number of members in cooperatives (millions)	Cooperative members as % of adult population	Financial inclusion as % of adult Population	Financial inclusion as % of total Population
1999	73.16	111.46	18669	27.30	37.32						
2000	75.16	111.46	18347	28.40	37.79						
2001	77.18	123.15	19886	30.10	39.00			7.65	9.91		
2002	79.59	129.25	20753	30.90	38.82			7.67	9.64		
2003	80.80	133.40	21406	31.30	38.73	14.63	18.11	7.57	9.37	66.21	40.10
2004	82.25	135.20	21443	31.60	38.42	14.40	17.51	7.76	9.43	65.36	39.76
2005	83.80	137.00	21420	33.10	39.50	18.82	22.46	7.92	9.45	71.41	43.68
2006	84.60	138.80	21171	34.50	40.78	22.89	26.95	8.03	9.45	77.33	47.13
2007	87.08	140.60	20320	35.70	42.02	20.83	24.52	8.22	9.68	74.36	46.05
2008	89.62	142.40	20566	37.60	43.83	23.53	24.36	8.44	9.84	77.63	48.86
2009	92.24	144.20	19681	38.97	42.25	24.90	26.99	8.64	9.37	78.61	50.28
2010	94.50	146.10	18947	48.68	51.51	24.94	26.39	8.81	9.32	87.23	56.42

Source: Bangladesh Bank, Scheduled Bank Statistics, Various Issues.

From table-4, it is observed that financial inclusion as percentage of total population increased from 39.76 percent in 2004 to 56.42 percent in 2010. In terms of adult population, it increased from 65.33 percent in 2004 to 87.23 percent in 2010 due to opening a significant number of 10 Taka account in the last two years.

Initiatives of Bangladesh Banks and Bangladesh Government:

Given the importance of banking sector's financing in agriculture in facilitating inclusive growth in Bangladesh, the central bank of Bangladesh (Bangladesh Bank) have taken some initiatives to promote commercial bank's agriculture financing. Already Bangladesh bank has set the target of agriculture credit disbursement of BDT 15550 crore for the fiscal year 2014-15. As of July, 2014, BDT 11503.99 crore agriculture credit has already been distributed by the commercial banks. In the fiscal year 2013-14, 3285936 persons were given agriculture and rural credit and 1612.21 crore credit came from commercial bank's financing. Nearly 9700000 accounts have been opened by depositing taka 10 from nationalized commercial banks by the farmers. Recently Bangladesh Bank have published Agricultural & Rural Credit Policy and Programme for the FY 2014-2015 for stimulating financial inclusion, given priority to marginal farmers and area approach method for farming. The goal of that program is to increase the scope of agricultural credit and financial inclusion by expanding banking services to rural areas by using information technology. This policy support is expected to stimulate the agricultural production and reduce dependency on import and alleviate rural poverty through increased flow of funds in rural areas. Some of its initiatives include:

- All the private and foreign banks must disburse at least 2 percent of their total loan and advance as agricultural loan to achieve their yearly target.
- Simplifying the agriculture loan application and make it readily available to potential and eligible farmers.
- Ensuring timely and hassle free disbursement of necessary loans to real farmers and to achieve the targeted agricultural credit. A hot line number 16236 has been introduced for resolving any complains.
- Customers' Interests Protection Center (CIPC) has been established to ensure hassle free services and resolving of complain to the credit holders.
- Area based approach has been emphasized in distributing agriculture credit.
- Use of IT and mobile phone has been encouraged to ensure 100 percent achievement in agricultural credit disbursement and recovery.
- Achievement of the agricultural and rural credit target of banks will be considered to determine CAMELS rating.
- Creating scope for the farmers to open a bank account with taka 10 only as a part of financial inclusion. To increase the transaction of those accounts, 1%-2% more interest will be considered by the commercial banks. Bangladesh Bank has advised commercial banks to disburse agricultural loan, to deposit and withdraw farmer's savings and to deposit remittances through these accounts in addition to disburse the agricultural input assistance by the Government.
- Women borrowers have been given priority in disbursing agricultural/rural credit.
- High value crops have been given priority in extending credit facility.
- Achievement of agricultural and rural credit target of banks will be considered as the success of the management of the concerned banks. It will also be considered as a

positive parameter for the approval of opening new branches, authorized dealer branches, exchange houses and to determine CAMELS rating.

- Banks have put in place an effective monitoring system to ensure timely and hassle free disbursement of necessary credit to real farmer and to achieve the target of agricultural credit. A comprehensive monitoring strategy for agricultural credit system is being devised by simultaneous monitoring of agricultural credit system at bank level and formation of “Agricultural Credit Monitoring System” in Bangladesh Bank.
- In issuing new branch licenses to banks, Bangladesh Bank has been following a policy of requiring at least one in every five new branches to be in rural locations; with a view to pushing banking services physically closer to the rural population.
- Considering contribution of the farmers to the economic activities, especially in agricultural activities, it has been decided that a farmers can open deposit account at any state-owned commercial and specialized bank against national ID card/birth registration card and agricultural equipment assistance card issued by the Department of Agricultural Extension. There will be no bindings for maintaining minimum balance on the said account and banks shall not impose any charges/fees on these accounts.

From the above mentioned initiatives taken by the central bank of Bangladesh it is clear that government of Bangladesh is trying to increase the flow of agricultural credit for inclusive growth. Statistics also shows that agricultural credit is a positive sign for financial inclusion in Bangladesh. Therefore it can be a benchmark for the developing countries that are seeking ways for inclusive finance.

6. Concluding Remarks and Policy Recommendations

About three decades ago, Muhammad Yunus, the 2006 Nobel Laureate, established the Grameen Bank in Bangladesh. However, microfinance alone cannot expand financial access for the poor as most financially excluded people still lack access to finance. Building an inclusive financial system is a more comprehensive effort. It emphasizes that formal financial institutions such as banks have the most important role to play in expanding financial access to the poor. It also stresses the importance of governments' role in creating a proper environment to facilitate increased financial access. Financial development and economic growth are intimately related with each other (Ghosh & Mitra, 2014). Building an inclusive financial sector is one of the strong and effective mechanisms for broad-based participatory growth of an economy. Financial inclusion creates an environment in which larger section of the society get the opportunity of access to financial services. However, the banking sector of Bangladesh has shown considerable progress over the last forty years in terms of deposit mobilization, growth of asset and expansion of coverage of services. However, a large section of the society still remains excluded from our banking sector. To ensure a reasonable degree of inclusiveness in the growth process, the banking sector needs to move to rural and more intensive agriculture banking for better integration of the economy. Agriculture banking i.e. inclusive banking is important because it can affect

the pace as well as pattern of the growth process. Financial inclusion has thus become a major policy issue in recent times for country like Bangladesh. It is hoped that ongoing effort by the banking sector to bring all the people under the umbrella of banking services will be strengthened in near future to attain the macro objectives of the country.

7. References

- Agricultural & Rural Credit Policy and Programme for the FY 2014-2015, Agricultural Credit & Financial Inclusion Department, Bangladesh bank.
- Bangladesh Bank, Scheduled Bank Statistics. Various Issues, Dhaka: Bangladesh Bank.
- Bashir, K., M., Mehmood, Y. and Hassan, S. (2010). Impact of Agricultural Credit on Productivity of Wheat Crop: Evidence from Lahore, Punjab, Pakistan. *Pakistan Journal of Agricultural Sciences*, 47 (4), 405-409.
- BBS (2010). Bangladesh Bureau of Statistics, Statistical Year Pocket Book of Bangladesh, Bangladesh Bureau of Statistics, Statistics Division, Ministry of planning, Government of People's Republic of Bangladesh, Dhaka.
- BER (2014). Bangladesh Economic Review (BER), Finance Division, Ministry of Finance, Government of Bangladesh, Dhaka, Bangladesh, 2014.
- Dantwala, M., L. (1989). Estimates of Demand for Credit and Its Role in Poverty Alleviation. *Indian Journal of Agricultural Economics*, 44, 416-422
- Ghosh, S. K., and Mitra, M. (2014). Relationship between Inclusive Banking and Growth: Bangladesh Perspective. *Prajnan*, NIBM: India. An accepted paper to be published on October-December, 2014 issue.
- Iqbal, M., Ahmed M., & Abbas. (2003). Impact of Institutional Credit on Agricultural Production of Pakistan. *The Pakistan Development Review*, 42(4-II), 469-485.
- Johnson, B. F., and Cownie, J. (1969). The Seed- Fertilizer Revolution and Labor Force Absorption. *American Economic Review*, 59 (4), 569-582.
- Mehrotra, N., Puhashendhi, V., Nair, G., and Sahoo, B. B. (2009). Financial inclusion - An Overview. Occasional Paper-48. Department of Economic Analysis and Research, National Bank for Agriculture and Rural Development, Mumbai
- Muftau, A. I. (2003). Commercial Bank Credit to the Agricultural Sector and the Nigerian Economy: An Analysis of the Future Trend. *Advances in Management*, 3 (1), 86-94.
- Muhammad, S., Wasif, Mazhar-ul-Haq, Kishwar, M. W. and Baluch, N. (2004). Institutional credit: A policy tool for enhancement of agricultural income of Pakistan, *International Research Journal of Arts & Humanities (IRJAH)*, 37 (37), 157-174.
- Nwanyanwu, O., J. (2011). An Analysis of Banks' Credit on the Nigerian Economic Growth (1992-2008). *Jos Journal of Economics*, 4 (1), 43-58.
- Obilor, I. S (2013). The Impact of Commercial Banks' Credit to Agriculture on Agricultural Development in Nigeria: An Econometric Analysis. *International Journal of Business, Humanities and Technology*, 3 (1), 85-94.
- Omobolanle, M., N. (2010). Micro Credits and Agricultural Productivity in Ogun State, Nigeria. *World Journal of Agricultural Sciences*, 6 (3), 290-296.
- Qureshi, S.K. and Akhtiar, H.S. (1992). A Critical Review of Rural Credit Policy in Pakistan. *The Pakistan Development Review*, 31 (4), 781-801.
- Rahman, A. (2009b). Financial inclusion as tools for combating poverty; Joesph Mubiru Lecture. *Bangladesh Bank Quarterly*, 7 (2), 01-08.

- Rahman, M., W. & Parvin, L. (2009). Ground Water Irrigation and Food Security in Bangladesh. *Journal of Water Resource*, 1 (3), 216-225.
- Shah, K. M., Khan, H., Jehanzeb. & Khan, Z. (2008). Impact of Agricultural Credit on Farm Productivity and Income of Farmers in Mountainous Agriculture in Northern Pakistan: A Case Study of Selected Villages in District Chitral. *Sarhad Journal of Agriculture*, 24 (4), 713-718.
- Shrestha, M. (1992). Institutional Credit as a Catalyst for Agricultural Sector Growth: Evidence from Nepal. *Journal of Economic Development*, 17 (2), 137-144.
- Toby, J. A., & Peterside, B. D. (2014). Analysis of the Role of Banks in Financing the Agriculture and Manufacturing Sectors in Nigeria. *International Journal of Research in Business Management*, 2 (2), 9-22.
- UN: United Nations (2006), Building inclusive financial sectors for development. New York: The United Nations Department of Public Information.
- Zuberi, H.A (1989). Production Function, Institutional Credit and Agriculture Development in Pakistan. *The Pakistan Development Review*, 28 (1), 43-56.

Appendix:

Table-1: Data on Agricultural Credit Disbursement and Agricultural Output

Year	GDP in Agriculture Sector (In BDT)	Credit Disbursement by Banking Sector (In (BDT)
1980-81	397607952773.77	3737200000
1981-82	414228255032.52	4238400000
1982-83	414878522368.05	6786000000
1983-84	432454319487.74	10053000000
1984-85	448055427229.61	11528000000
1985-86	451126281543.07	6317200000
1986-87	465933797721.18	6672800000
1987-88	467794358546.15	6563000000
1988-89	464213906972.83	8076000000
1989-90	459266566919.95	6867800000
1990-91	505228523839.39	5956000000
1991-92	513368809216.28	7945900000
1992-93	524625069497.42	8418500000
1993-94	537898158575.94	11007900000
1994-95	542447221799.45	14903800000
1995-96	540806620649.43	14816300000
1996-97	557589453482.95	15173000000
1997-98	591017722205.63	16428400000
1998-99	609902320195.42	30059200000
1999-00	638838661056.67	28512900000
2000-01	685991660302.20	30196700000
2001-02	707520809400.34	29549100000
2002-03	707561620374.20	32783700000
2003-04	729332914584.63	40484100000
2004-05	759158934677.21	49567800000
2005-06	775907758366.00	57897100000
2006-07	814222461030.46	36329200000
2007-08	886936756719.93	57282900000
2008-09	915362000078.42	59629100000
2009-10	953043588888.56	72716900000
2010-11	1002195483926.39	30654300000
2011-12	1033006091236.04	71961700000
2012-13	1056308311635.78	86966080000

Source: Bangladesh Bank and Ministry of Agriculture Bangladesh.

Table-2: Urban and Rural Bank Branches

Year	Urban	Rural	Total
2000	2460(40.20%)	3659(59.80%)	6119(100%)
2001	2502(40.47%)	3680(59.53%)	6182(100%)
2002	2538 (40.73%)	3693 (59.27%)	6231(100%)
2003	2526 (40.61%)	3694 (59.39%)	6220(100%)
2004	2579 (40.92%)	3724 (59.08%)	6303(100%)
2005	2638 (41.21%)	3764 (58.79%)	6402(100%)
2006	2728 (41.57%)	3834 (58.43%)	6562 (100%)
2007	2823 (42.03%)	3894 (57.97%)	6717(100%)
2008	2905 (42.19%)	3981 (57.81%)	6886(100%)
2009	3051 (42.45%)	4136 (57.55%)	7187 (100%)
2010	3265 (42.64%)	4393 (57.36%)	7658 (100%)
2011	3410 (42.83%)	4551 (57.17%)	7961 (100%)
2012	3562 (42.80%)	4760 (57.20%)	8322 (100%)
2013	3723 (42.86)	4962 (57.14%)	8685 (100%)

Source: Bangladesh Bank, Scheduled Bank Statistics, Various Issues.

Table-3: Share of Advances by Economic Purpose (In Percentage)

Year	Agriculture	Industry (excluding working capital)	Working capital Financing	Construction	Transport and Communication	Trade	Others
2006	8.40	19.86	19.33	6.88	1.40	34.11	10.02
2007	7.34	21.44	17.99	6.51	1.85	34.27	10.60
2008	6.87	21.30	16.65	6.50	1.68	35.26	11.74
2009	6.15	21.63	15.80	6.85	1.47	36.79	11.31
2010	5.69	20.65	15.08	7.00	1.45	38.13	12.00
2011	5.59	20.86	14.13	8.14	2.05	37.32	11.91
2012	4.85	22.13	13.37	9.12	1.40	37.77	11.35
2013	5.59	17.22	16.42	8.94	1.15	39.35	11.43

Source: Agricultural Credit and Financial Inclusion Department, Bangladesh Bank.

Table-4: Agriculture Credit Statistics (Disbursement) all Banks (In Crore BDT)

Year	State-owned Banks	Specialized banks	Private commercial banks	Foreign Banks	Other FI
2000-01	577.98	2189.88	610.59	-	251.81
2001-02	598.96	2042.25	196.42	-	313.70
2002-03	680.39	2243.10	147.68	-	354.88
2003-04	905.06	2640.87	177.74	-	502.48
2004-05	1142.14	3149.32	301.41	-	665.32

2005-06	1192.43	3551.66	334.02	-	752.12
2006-07	1027.80	3482.02	N.A	-	782.69
2007-08	1365.50	4061.12	2413.68	-	740.36
2008-09	1588.89	4703.69	2292.89	-	698.99
2009-10	1981.56	5627.29	2837.80	-	670.24
2010-11	2213.73	6243.91	2974.31	-	752.39
2011-12	2433.47	5883.81	4333.31	481.56	570.27
2012-13	2399.19	5919.61	5777.92	570.77	598.75

Source: Agricultural Credit and Financial Inclusion Department, Bangladesh Bank.

Table 5: Banks advances, agricultural credit disbursement and percentages of agricultural credit from total bank credits (Tk. in billion).

Year	Total Bank credit	Agricultural credit	% of agricultural of credit from total bank credit
1997	417.65	15.17	3.63
1998	479.90	16.42	3.42
1999	539.84	30.05	5.57
2000	593.62	28.51	4.80
2001	687.78	30.20	4.39
2002	767.72	29.54	3.85
2003	847.34	32.78	3.87
2004	951.30	40.48	4.26
2005	1117.32	49.57	4.44
2006	1291.65	54.96	4.26
2007	1465.73	61.67	4.21
2008	1815.53	61.67	3.40
2009	2090.40	92.84	4.44
2010	2574.43	111.17	4.32
March 2011	-	91.54	-

Source: BB annual report (2001-2010); BER (2011), and BBS (2008).