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Impact of Bank Credit on Agricultural Production in Bangladesh: An Empirical Analysis

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Abstract

Sustainable agricultural productivity must be ensured for the rural development and the overall development of Bangladesh. This study is aimed to assess the impact of the banking sector's agricultural credit on agricultural productivity in Bangladesh. Secondary data from 1981-2020 has been collected from Bangladesh Bank, World Bank, Bangladesh Bureau of Statistics and Ministry of Finance. In this study, ADF Unit Root Test and Johansen Co-integration Test have been performed and further analyzed with VAR and OLS estimation. ADF test revealed that the variables are integrated at their first difference, and Johansen Co-integration Test indicated that no co-integration equation exists among the variables. VAR estimation confirms that short-run causality runs from some independent variables to the dependent variable. Finally, OLS estimation suggests that bank credit's impact on agricultural production is strong, positive and significant. Thus, Bangladesh Bank is advised to promote more agricultural financing to the agricultural sector.

Keywords: Agricultural Productivity, Bank Credit, Agricultural Credit, Bangladesh.

Introduction

The economic development of any developing country largely depends on the growth of the agricultural sector. The agricultural sector has always been regarded as the prime sector of our economy since the industry sector takes its root from the agriculture and service sector passively boot up. As a significant financial intermediary, the banking sector can play a crucial role in this development process to stimulate the country's economic development. The banking sector thus can contribute by ensuring an adequate amount of agricultural credit. Proper disbursement of agricultural credit accelerates the farmer's financial inclusion. Most of the farmers in Bangladesh are small scale and suffer from low-income levels. Hence additional investment in improved inputs and modern technology requires bank financing.

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According to Labor Force Survey conducted by BBS, it is observed that employment in the agricultural sector is facing a decreasing trend. In the 1990's it was more than 50%. In 2013,it was 45.1 %, and currently, it is 40.36%.Now farmers are getting more wages from service sectors, changing their profession. This result seems to pose a threat to the overall agricultural sector. Other significant challenges of the agricultural sector of Bangladesh include maintaining high demand of food grain production within a declining agricultural land, cope up with natural calamities, unplanned uses of water resources that cause a shortage of irrigation area in the dry season, imbalanced use of fertilizer and degradation of the agricultural land quality.

Besides those challenges, this sector has economic contribution (i.e., supplying necessary raw materials to industry, earning foreign currency in export earnings, direct and indirect employment creation).Furthermore, the social and environmental role of the agricultural sector is also equally important in the development process. Thus, this study tries to find out the role of the banking sector on agricultural development, focusing on agricultural bank credit and agricultural production.

Objectives of the Study

The broad objective of this study is to find out the impact of banks' credit on agricultural production in Bangladesh.

To achieve this principal objective, the following specific objectives have been outlined:

- Identifying the impact of agricultural bank credit on agricultural GDP in Bangladesh
- Examining the impact of other factors on agricultural output in Bangladesh
- Finding whether there is any long-run or short-run relationship exist among the factors contributing to agricultural productivity
- Recommending some necessary guidelines based on the findings of the study

Research Hypothesis

The following hypothesis has been developed in this study:

Hypothesis 1:

Null Hypothesis (H0): There is no significant relationship between scheduled banks' agricultural credit and agricultural productivity in Bangladesh.

Alternative Hypothesis (HA): There is a significant relationship between scheduled banks' agricultural credit and agricultural productivity in Bangladesh.

Hypothesis 2:

Null Hypothesis (H0): There is no significant relationship between agricultural land and agricultural productivity in Bangladesh.

Alternative Hypothesis (HA): There is a significant relationship between agricultural land and agricultural productivity in Bangladesh.

Hypothesis 3:

Null Hypothesis (H0): There is no significant relationship between chemical fertilizer and agricultural productivity in Bangladesh

Alternative Hypothesis (HA): There is a significant relationship between chemical fertilizer and agricultural productivity in Bangladesh

Hypothesis 4:

Null Hypothesis (H0): There is no significant relationship between area under irrigation and agricultural productivity in Bangladesh

Alternative Hypothesis (HA): There is a significant relationship between area under irrigation and agricultural productivity in Bangladesh

Literature Review

As an agro-based economy, Bangladesh is more concerned about the growth of the agricultural sector to accelerate the country's overall economic growth. To ensure adequate development in this sector, smooth availability of agricultural input and proper guidance and government contribution is essential. Finding out the contribution of the banking sector to agricultural productivity is the primary purpose of this study, and considering this, a good number of studies have been evaluated. The following section is summarized with the main findings of some selected studies related to this particular research area.

Impact of Agricultural Credit on Agricultural GDP

A strong positive correlation between agricultural output and agricultural credit is found in many studies. Financing in the agricultural sector improves Bangladesh's financial inclusion (Sandip et al., 2015). In another study, authors have used both linear and exponential models and found a strong positive correlation between credit and productivity at a 1% level of significance (Rahman et al., 2011). According to a study conducted by (Sharmeen & Chowdhury, 2013), there was an upward trend of agricultural credit distribution to productivity. Studies conducted outside the country also found a positive relationship. A study found an increase in agricultural productivity in India due to a gradual increase of institutional credit in the agricultural sector because farmers can avail themselves of essential elements for production. Many other studies find a significant positive relationship between these two variables, including (Rehman et al., 2017); (Kareem et al., 2013); (Agunuwa, 2015), on the other hand (Obilor, 2013) in Nigeria found negative and (Sial et al., 2011) in Pakistan found the

insignificant relationship between agricultural productivity and agricultural credit distribution.

Impact of Other Factors Affecting Agricultural Productivity

There are some other factors except agricultural credit, including micro and macro-economic factors that impact agricultural productivity. Studies have found variables such as; cropped area, fertilizer consumption, seed distribution, agricultural credit guarantee scheme, interest rate on loans, agricultural labor, area under irrigation, inflation growth rate and import of pesticides. Among these variables, study conducted in Pakistan found that cropped area, fertilizer use, and seed distribution significantly impact agricultural GDP. The study also runs ADF to find out the stationarity of the data. The Johansen co-integration test states a long-run relationship among the observed variables (Rehman et al., 2017). The independent variable agricultural land shows a significant threat to agricultural productivity due to its loss due to urbanization, river erosion, and industrialization (Rahman, 2017) and thus has a negative effect on agricultural growth (Udah & Nwachukwu, 2015). Another study conducted in Pakistan found that cropped area has a significant impact on agricultural production where a 1% increase in the cropped area results in a 0.47% increase in AGDP (Awan & Mustafa, 2013). The variable, use of fertilizer, has been considered in many studies, where (Ahmed, 2011) found that agricultural credit plays as an indirect input and helps farmers acquire fertilizers along with expensive machineries. Again, fertilizer is seemed to provide a significant positive impact on agricultural output (Chandio et al., 2016), (Rehman et al., 2017). Irrigation, however, has a positive impact (Awan & Mustafa, 2013), whereas (Sial et al., 2011) found it has an insignificant effect in Pakistan. Among the other significant factors, government spending on the agricultural sector is mentioned in many studies. (Agunuwa, 2015)

Impact of Agricultural Credit on Poverty Reduction and Economic Development

Agricultural development is vital in the sense that it contributes to the overall economic development of the country, which is the findings of another study conducted by (Rahman & Hossain, 2014) where they explore using the VAR approach that there is a significant positive relationship between agricultural GDP and overall national GDP, measured as a proxy of economic growth of Bangladesh. To maintain sustainable economic development, the role of rural financing inagricultural credit is essential. A study by (Akther et al., 2016) identifies a significant negative impact of agricultural credit disbursement to rural poverty, suggesting that rural poverty decreases with an increase of agricultural credit disbursement. Thus, agricultural credit contributes to the economic development of our country. Similar findings were observed in a study (Islam et al., 2014) where the authors find that credit is a crying need for poor entrepreneurs; thus, regular flow of agricultural credit is essential for rural development.

Importance of Agricultural Credit and Contribution of Banking Sectors

Continuous delivery of agricultural credit increases the quality of inputs thus plays a vital role in improving agricultural productivity. A study conducted by (Patwary, 2017) found a large credit disbursement gap before 2008, but the credit disbursement ratio increased after that. Due to policy modifications, foreign and private banks also contribute to the agricultural sector by providing credit, resulting in greater targeted credit disbursement. (Alauddin & Biswas, 2014) found that although the informal agricultural credit sector dominates the agricultural market, the formal sectors are also booming in recent years. The performance of Agricultural banks also affects the performance of the agricultural sector. Agricultural banks provide employment opportunities and grant credit to poor farmers with easy terms and conditions (Chowdhury & Chowdhury, 2011).

Recommendation of Different Studies towards the Development of Agricultural Productivity

Most of the studies recommended providing incentives to intermediaries involved in agricultural financing and also government subsidy to agricultural inputs and interest rate subsidies to farmers (Rahman et al., 2011), (Kareem et al., 2013), (Rahman and Hussain, 2014) and (Agunuwa, 2015). Other recommendations include expanding banking services to rural areas, improved irrigation system, quick recovery and proper disbursement of outstanding agricultural credit, agricultural land preservation, and increased expenditure on agricultural research.

The studies mentioned above mainly focus on the impact of agricultural inputs, including agricultural credit, on agricultural productivity in different countries and for different periods. In Bangladesh, the study was relatively small on the effect of different inputs such as agricultural land, credit, employment, irrigation, and fertilizer use on agricultural productivity. Utmost effort to fill the literature gap has been employed in this study to make it a meaningful one.

Methodology

Research Type

The study is analytical. It reveals the impact of bank financing in the form of agricultural credit on agricultural productivity in Bangladesh. The impact of some other factors on agricultural productivity has also been evaluated in this study applying inferential statistics.

Data Type and Sources

A considerable frequency of data has been used from secondary sources for conducting the study. The variables of this study used the data from 1981 to 2020. However, the sources of data include;

- Annual Reports of Bangladesh Bank
- Agricultural and Rural Credit Policy & Program of Bangladesh Bank

- Yearbook of Agricultural Statistics of Bangladesh Bureau of Statistics
- Bangladesh Economic Review of Ministry of Finance
- World Development Indicators of World Bank

Relevant data on agricultural credit disbursement by scheduled banks in Bangladesh from 1981 to 2020 has been collected from the Annual Report of Bangladesh Bank. The dependent variable, Agricultural output (AGDP), has been collected from World Bank's World Development Indicators Metadata. Data of other variables and related topics have been collected from different websites, the annual and quarterly reports provided by Bangladesh Bank, Bangladesh Bureau of Statistics, and Bangladesh Economic Review etc.

Data Processing and Presentation

Microsoft Excel 2016 and data analyzing statistical software Eviews11 have been used for data tabulation and processing. After collecting the relevant data, the following statistical data analysis techniques have been carried out.

Data Analysis Techniques

Unit Root Test

ADF (Augmented Dickey-Fuller) unit root test has been carried out to find the stationarity of time series data from the observation. The unit root can create uncertainty of predicted results of a study using time series data. To avoid unpredictable results, the study conducted this test using the natural logarithm of the variables. The general decision rule for stationarity is that if the t-statistic value in an absolute form is greater than the absolute critical value, the time series of that variable is stationary. Again, the time series is non-stationary if the t-statistic value in an absolute is smaller than the absolute critical value.

There are three models of Augmented Dickey-Fuller test (ADF);

- Only Intercept
- Trend & Intercept
- No trend, No Intercept

A variable will be said to be stationary if its absolute value of t-statistic is greater than absolute critical value in any of the three models. In this study, the model has been gradually used to find out at which level and into which model the time series data becomes fit for stationarity.

The hypothesis for the ADF test is;

Hypothesis

Null Hypothesis (H0): All the variables are not stationary or got unit root

Alternative Hypothesis (HA): All the variables are stationary

Co-integration Test

To find out whether there is any long-run association among the variables that exist or not in the model, a statistical measure called co-integration test, in particular the Johansen Test of Co-integration has been carried out. To test this, the time series variables must be non-stationary at the level form but must be stationary when converted into first differences. The general rule is that when the trace or max statistics is greater than 5% critical value, we will reject the null hypothesis and when the trace or max statistics is lower than 5% critical value, we will be failed to reject the null hypothesis.

The hypothesis for Co-integration would be;

Hypothesis

Null Hypothesis (H0): There is no co-integration among variables

Alternative Hypothesis (HA): There is co-integration among variables.

3.4.3 VAR(Vector Auto Regression) Estimation

The choice of the VAR and VECM model depends on the co-integration equation among the variables. If there is no co-integration equation found among the variables, then the Vector Auto Regression (VAR) model is suitable for identifying the nature of association among the variables. If at least one co-integration equation is found, then the ECM or VECM model will be suitable. In our study, we will deploy the VAR model to detect the relationship among variables.

Multiple Regression Analysis

In this study, to show how significantly agricultural productivity is affected by several variables, a statistical measure called multiple regression analysis has also been carried out using the data from the year 1981 to 2020. The analysis will show the impact of some independent variables upon a dependent variable. The result shows some variables employ a significant relationship where other variables are insignificant for the change of dependent variable.

The list of the selected variables for regression analysis is given below

Table 1: List of the selected variables for analysis

Variables	**Description of Variables**
Dependent Variable	
AGDP	Agricultural Production measured in terms of Agriculture GDP in BDT Billion
Independent Variables	
AGC	Agricultural Credit of ScheduledBanks in BDT Billion

AGL	Agricultural Land in Square Kilometers
CF	Use of Chemical Fertilizer in Thousand Metric Tons
IRRA	Area Under Irrigation in Lakh Hectors

The regression model would be;

$$Y= \beta o+\beta 1X1+\beta 2X2+\beta 3X3+\beta 4X4+\mu \quad \textbf{Eq.1}$$

In this time series observation, some data of variables provides a large value, whereas other variables provide a small value for other periods. While using those data in a regression model will no longer be a linear regression equation model. This situation can cause the problem of outliers. So, to avoid such a problem and eliminate the effect of outliers and problem of heteroscedasticity, the study considers taking the natural logarithm of the variables to normalize the model and make it a linear one. After taking the natural logarithm, the equation becomes;

$$\ln AGDP= \beta o+\beta 1\ln AGC+\beta 2\ln AGL+\beta 3\ln CF+\beta 4\ln IRRA+\mu \quad \textbf{Eq.2}$$

The OLS estimation runs a multiple regression model among the dependent variable log of agricultural GDP with the independent variables log of; agricultural credit, agricultural land, chemical fertilizer, and area under irrigation to prove the hypotheses.

Justification of Variables Used

The study includes the dependent variable agricultural GDP and four independent variables: agricultural credit, agricultural land, use of chemical fertilizer, and area under irrigation.

Agricultural GDP: To find out the contribution of the banking sector of Bangladesh to agricultural productivity a variable called agricultural GDP has been used. Agricultural GDP is the value-added from the agricultural sector to the country's total GDP. While reviewing other literature, it is found that AGDP has been used as a proxy of dependent variable to represent agricultural productivity in most of the studies. So, in this study, AGDP in local currency has been used as the dependent variable.

Agricultural Credit: Agricultural credit disbursement by the banking sector of Bangladesh helps the farmers to finance their agricultural activities. Thus, AGC has been used as an independent variable to identify the contribution of the banking sector to agricultural productivity.

Agricultural Land: Agricultural Land is another independent variable that impacts agricultural productivity. Agricultural credit may indirectly help the farmers to purchase or borrow agricultural lands. They can even lease or get finance for the improvement of agricultural land. Again, the decreasing trend of agricultural land in recent years due to urbanization, river erosion is also expected to affect productivity. Thus,AGL has been

selected as an independent variable in this study to review the importance of agricultural land on agricultural output.

Use of Chemical Fertilizers: To increase agricultural production, the fertility of agricultural land must be ensured. Here comes the importance of using a balanced amount of chemical fertilizer to protect the agricultural land from degradation and increase agricultural yield. Farmers are expected to have enough funds to get an adequate amount of chemical fertilizer for production. Thus, this element has been selected as one of the dependent variables in this study.

Area under Irrigation: Properly irrigated area is expected to impact crop production, hence overall productivity of the agricultural sector. Thus, this variable has been used in this study.

Analysis& Findings

Unit Root Test

ADF (Augmented Dickey-Fuller) unit root test is conducted to check the stationary of the time series data used in this study. Unit root can create uncertainty of predicted results of a study using time series data. The ADF test output in table 2 provides the following findings;

Table 2: ADF Test Output (Trend & Intercept)

Variables	At Level		First Difference	
	t-Statistics	Critical Value	t-Statistics	Critical Value
Ln(agdp)	-2.506 (0.3235)	-4.226 (1%)	-3.696** (0.0351)	-4.226 (1%)
		-3.536 (5%)		-3.536 (5%)
		-3.200 (10%)		-3.200 (10%)
Ln(agc)	-2.355 (0.3959)	-4.211 (1%)	-5.668*** (0.0002)	-4.219 (1%)
		-3.529 (5%)		-3.533 (5%)
		-3.196 (10%)		-3.198 (10%)
Ln(agl)	-1.763 (0.7029)	-4.211 (1%)	-6.102*** (0.0001)	-4.309 (1%)
		-3.529 (5%)		-3.574 (5%)
		-3.196 (10%)		-3.221 (10%)
Ln(cf)	-2.111 (0.5236)	-4.211 (1%)	-7.255*** (0.0000)	-4.219 (1%)
		-3.529 (5%)		-3.533 (5%)
		-3.196 (10%)		-3.198 (10%)
Ln(irra)	-0.754	-4.211 (1%)	-	-4.219 (1%)

		(0.9613)	-3.529 (5%) -3.196 (10%)		6.567*** (0.0000)	-3.533 (5%) -3.198 (10%)

Source: Author's Calculations Using EViews 11

Note: ****, ** and *indicate null hypothesis of unit root will be rejected at 1%, 5% and 10% significance levels, respectively*

ADF test shows that the intercept with trend model provides a result where all the time series variables are originally non-stationary at level forms because the absolute t-statistics of the ADF test are smaller than the absolute critical values. This implies that all the variables have a unit root at level form. So, it implies that variables are not stable in level form.

The next step is to consider the first differentials. After considering the first differentials, all the variables become stationary, moving from their originally non-stationary level. In the trend and intercept model, only Lnagdp is stationary at first differences at 5% significance level, rest of the variables are stationary at 1% significance level. So, from the above calculation, we can conclude by rejecting the null hypothesis and accepting the alternative hypothesis. That means all the variables are stationary at the first differentials method or do not have a unit root problem.

Co-Integration Test

The co-integration test has been carried out to find out whether there is any long-run relationship among the variables that exist or not. There are several co-integration tests out of which the study considers choosing the popular Johansen Co-integration test. The output of the test is given below;

Table 3: Maximum Eigen Value Statistics of Co-integration Test

Maximum Rank	**Eigen Value**	**Max-Eigen Statistic**	**5% Critical Value**	**Prob.****
0	0.569290	32.00819	33.87687	0.0822
1	0.399753	19.39571	27.58434	0.3845
2	0.307113	13.94174	21.13162	0.3698
3	0.209655	8.940863	14.26460	0.2911
4	0.036226	1.402132	3.841465	0.2364

Source: Author's Calculations Using EViews 11

Maximum eigenvalue statistics shows that there is no co-integration among the variables. Max statistics 32.00819 is lower than critical value 33.87687 at a 5% significance level. So, here we cannot reject the null hypothesis. Instead, we must accept the null hypothesis that there is no co-integration among the variables. That means the variables do not move together in the long run.

VAR Estimation

In VAR estimation, we consider lag as one provided by VAR lag order selection criteria. From the calculation of EViews 11, we have found the following system equation while considering only the LnAGDP equation.

LNAGDP = C(1)*LNAGDP(-1) + C(2)*LNAGC(-1) + C(3)*LNAGL(-1) + C(4)*LNCF(-1) + C(5)*LNIRRA(-1) + C(6) **Eq.3**

Table 4: VAR Estimation Output

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.941181	0.041400	22.73404	0.0000
C(2)	0.066833	0.023345	2.862785	0.0047
C(3)	0.206048	0.291868	0.705964	0.4812
C(4)	-0.102727	0.055913	-1.837271	0.0680
C(5)	0.065056	0.062189	1.046109	0.2970
C(6)	-1.544275	3.445257	-0.448232	0.6546

From table 4, we have C(2) coefficient is significant at 1% level, meaning that agricultural credit has short term association with agricultural GDP considering one year lagged value. Again, the C(4) coefficient is significant at the 10% level, meaning that chemical fertilizer also has a short-term association with agricultural GDP considering one year lagged value.

Regression Analysis

In table 5, we have **R**square is 0.9781, which means these four independent variables jointly explain about 97.81% of the dependent variable of agricultural GDP. The probability of F value indicates that all the independent variables have a combined significant effect on agricultural productivity at a 1% level.

The table also shows that all the independent variables individually have a significant impact on dependent variables except the variable lnIRRA, which is insignificant. lnAGC and lnCF are positively significant at 1% level where for each 1% increase in agricultural credit and chemical fertilizer, the dependent variable agricultural GDP will be increased by 0.51% and 0.82%, respectively. The variable lnAGL is positively significant at the 5% level, where at every 1% increase will cause the lnAGDP to change about 2.94%. So, the regression output states that we can reject the

first three null hypotheses as lnAGC, lnAGL,and lnCF has a significant impact on lnAGDP, and should accept the last null hypothesis lnIRRA has no significant impact on the dependent variable.

Table 5: Regression Output

	Coefficients	**Standard Error**	**t Stat**	**P-value**
Intercept	-35.39595	13.06215	-2.709811	0.0104
Ln(agc)	0.514826	0.042792	12.03091	0.0000
Ln(agl)	2.941437	1.110866	2.647877	0.0121
Ln(cf)	0.820084	0.187121	4.382641	0.0001
Ln(irra)	-0.021377	0.252247	-0.084747	0.9329
R^2 0.978111	Adjusted R^2 0.975609	F-stat. 390.9931	(F-stat.) Prob. 0.0000	DW Stat. 0.822276

Source: *Author's Own Calculations Using EViews 11*

Conclusion & Recommendations

Sustainable economic development heavily depends on sustainable agricultural development as well. Thus, the banking sector must ensure adequate and proper agricultural credit disbursement so that poor and disadvantaged people can easily access it. This study found that agricultural credit and some other agricultural inputs significantly affect agricultural productivity. Hence, Bangladesh Bank is advised to promote more agricultural credit to the farmers to ensure additional agricultural production. The study finds some other problems associated with the agricultural credit and agricultural sector in our country, and hence some suggestions are outlined below:

The banking sector should solve the problem associated with them and ensure a continuous flow of agricultural credit for the farmers. The fund must be available to the bank when any agricultural credit request is made and should disburse the credit as early as possible. Any delay can cause problems for the farmers. Again, if banks provide credit in a hurry, there is a chance of adverse selection. So, the bank should properly scrutinize the loan application to identify the actual beneficiary and try to disburse the loan early without hampering the loan examination process.

Although the disbursement of agricultural credits seems to have an increasing trend compared to that of a decade ago, there is still a lack of adequate monitoring and supervision. BB and other banks, especially SBs and SOCBs, should strengthen their monitoring system to ensure that genuine farmers get agricultural credit facilities. The credit distribution procedure can be done in front of some representatives from the community. Again, Banks must be aware of whether farmers are using the fund for agricultural purposes or personal uses.

Proper incentives should be provided to the intermediaries involved in agricultural credit disbursement. Group lending of agricultural credit is performing quite well in our country, so banks should also maintain this while providing agricultural credit. Government should provide subsidies to agricultural inputs for facilitating their easy access to farmers. They also need to ensure long term investment in the agricultural sector.

Banks should provide agricultural loans in advance as farmers need raw materials, including seeds, fertilizers, and machinery, before cropping. Again, the loan disbursement procedure should be timely as agriculture is affected by the seasonal trend; any delay may cause farmers problems. The interest rate on agricultural loans should be maintained at an acceptable level.

The agricultural sector of our country faces a massive challenge during natural calamities, and thus government should ensure that farmers are getting proper insurance facilities to minimize any risk that may cause damage to agricultural production.

Adequate training must be provided to the farmers and educate them about the banking services, how to get a loan or repay the loan on time. Most of the farmers in our country are illiterate, and the formal procedures of taking the loan and regular repayment of loans may seem difficult to them. Thus, many farmers become unwilling to take the loan or repay it within time. Proper knowledge should be provided to them at the beginning of the loan disbursement without hassle.

The declining agricultural land could be a threat to our agricultural sector. With a growing number of populations, the need for food and housing is also increasing. Thus, the government should preserve more fertile agricultural land and use less fertile land for housing to maintain both.

To increase the agricultural output, the irrigation system must be well developed, and agricultural policy must take the necessary step to sensible use of water for this purpose.

BB must ensure proper implementation of programs for the recovery of outstanding agricultural loans as the regulator of the baking industry. There are still a large number of agricultural loans in outstanding balances. Recovery of loans thus helps the banks to be in a better financial condition to extend more agricultural credit to farmers.

The sustainable use of resources must be ensured as the natural resources used in agricultural production decrease day by day; the only alternative could be sensible use of such scarce resources and intensive technical use. Proper use of technologies should be ensured in such cases.

Research in the agricultural sector must be increased to find out the true condition and current problems associated with the country’s agricultural sector. In this case, the government should provide sufficient funds for research in the agricultural sector.

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