

# Upshot of Exchange Rate on Export and Import of Agricultural Production in Bangladesh

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## ABSTRACT

An important factor in trade is the currency's exchange rate and fluctuation of exchange rate is very concerning issue in current period over the world. Bangladesh, a developing economy, depends mostly on agriculture sector, recent period's fluctuation of exchange rates of the country influences its export and import of the agricultural production. This research examines how the real exchange rate affects agricultural production's import and export between 1977 and 2015 in Bangladesh. Variables like Total Agricultural Production, Real Gross Domestic Product, Exchange rates, and Exports and Imports of Agricultural Product have been taken for this study. Ordinary Least Square Method (OLS) and other related econometrical techniques are applied to find the association among indicators. The research indicates that the exchange rate shows no discernible effect on the import and export of agricultural production in Bangladesh. However, Real Gross Domestic Product (GDP) of the country portrays no significant influence on agricultural exports while portrays positive significant influence on agricultural imports. This research contributes to appropriate policies and actions that must be implemented at an equitable level.

Keywords:

Exchange rate, Real Agricultural Production, Developing Economy, Bangladesh.

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## 1. Introduction

For several decades, both domestically and internationally, the Bangladeshi Taka (BDT) revaluation has been a major concern, thus policymakers have to monitor exchange rate risk (Choi et al., 2019a; Goswami et al., 2022). Bangladesh began a controlled floating exchange rate regime in 2003, after many exchange rate reforms (Rahman et al., 2020). The BDT was consistently depreciated in the initial stages, but it has been trending upward since 1995. The BDT has been under persistent pressure to appreciate (Rahman et al., 2019). This has a significant effect on Bangladesh's trade and economy. The concept of economics states that a country's international trade is impacted by a nation's appreciation of its currency, which helps to increase imports but negatively impacts

exports (Li et al., 2020). Nevertheless, as every nation has a unique economic environment, the impact of a currency's appreciation on its import and export commerce may vary. Bangladesh's trade has consistently shown a floating harmony, with deficits growing in the majority of instances, but since economic liberalization and opening up, the country's real economy has changed, leading to a progression in the value of BDT from devaluation to appreciation.

The investigations utilized a variety of empirical techniques and exchange rate factors, but they all came to the same conclusion; exchange rate changes have severely hampered agricultural trade flows (Sun et al., 2022; Thuy & Thuy, 2019), and the adverse consequences are more pronounced than in other industries. A few empirical studies contrasted the various ways that fluctuations in exchange rates affected the agriculture industry with those of other industries. Fluctuations in exchange rates had varying effects on various industries (Feng et al., 2021; Singhal et al., 2019) and were mostly detrimental to the agricultural trade. The various effects of exchange rate fluctuations on equipment, substances, and various industries as well as agriculture (de Soyres et al., 2021). The negative effects on commerce in agriculture are much more pronounced than they are on trade in general or another particular industry that has been researched. Some publications, exclusively examined the influence of volatile exchange rate on trade in the agricultural industry. This research came to the same results, which were that shifts in exchange rates generally had a detrimental effect on trade in agricultural products. The more care must be used when interpreting these data and interpretations (Islam, 2020). The amount of global commerce drives Bangladesh's export growth over the long term (Md Reza et al., 2019; Park-Poaps et al., 2021), and the volatility of Bangladeshi currency rates has an inelastically negative relationship with it (Khatoon et al., 2022). Furthermore, a few academics concluded that there is no meaningful correlation between international commerce and currency rates.

There is a more critical relationship between Bangladesh's agricultural commodity trade and currency rates (Amin et al., 2021; Choi et al., 2019b; Goswami et al., 2022). Furthermore, there is no precise study in the literature. This work fills this research gap by using both theoretical and empirical analysis to examine the impact of exchange rates on the import and export of agricultural goods in Bangladesh between 1977 and 2015. Moreover, Bangladesh's economy and its standard of living have been developing gradually over the years. Low prices of production inputs, good government policies, high consumer demand and low inflation, low unemployment, and better education quality have a positive impact on increasing real GDP and standard of living. After establishing a democratic election system in the country, domestic policies have played an important role in the development of the country's economy which also represents the positive aim of the various leaders.

Therefore, the main objectives of the paper are:

1. To study the overall performance of agricultural production in the economic growth of Bangladesh.
2. To investigate the contribution of agricultural production to the total country's exports and imports.
3. To identify the influence of the exchange rate on the export and import of agricultural production in Bangladesh.

The structure of this document is as follows. The Data utilized in this paper are presented in Section 2. A model for analyzing currency rates and agricultural imports and exports is built in Section 3. A sectional estimate is made empirically. The OLS model is designed to quantify exchange rate risk. The model shows that agricultural trade is not much impacted by currency rates. Additional examination of the data reveals that there is no net impact of currency rates on Bangladesh's agricultural exports. Last section explains the policy implications and provides a summary of the key findings.

## **2. Methods**

### **2.1 Data**

Four models are used to find the relationships among the indicators in this study. In the first two models, Real Agriculture Production (RAGP) in constant US dollar is used as the explained variable whereas in one model Export of Total Agricultural Production (TAEx) in constant US dollar is used as an explanatory indicator, and in another model, Import of Total Agricultural Production (TAIm) in constant US dollar is used as an explanatory variable. These two models try to prove the importance of export and import of agricultural production in increasing the total agricultural production of the country. Then, to evaluate the main relationship of the research, Export of Total Agricultural Production (TAEx) is used as an explained indicator in model 3, and Import of Total Agricultural Production (TAIm) is used as an explained indicator in model 4. In both of these models, explanatory variables are real GDP (RGDP) in constant US dollar and Real Exchange Rate (RExch). Except for the Real Exchange Rate (RExch), all other variables are taken in logarithmic form.

**2.2 Source of Data**

The data for the variables are collected from the World Bank Development Indicators (2021) which holds large aggregates of data for most countries and dependencies in the world. Data from 1977 to 2015 are collected.

**2.3 Descriptive Statistics of Variables**

Figure 1 shows that the GDP of Bangladesh has increased over the years. The GDP is increasing day by day at an increasing rate.

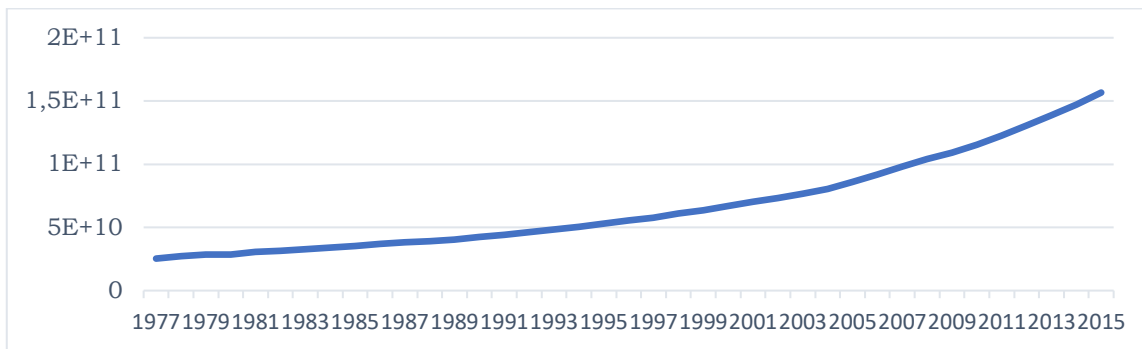


Fig 1: GDP of Bangladesh from 1977 to 2015 (constant 2010 US\$)  
 Source: World Bank (2021)

Figure 2 shows the comparison between the % of agriculture export of agricultural GDP and % of agricultural imports of agricultural GDP over the year 1977-78 to 2015-16. In the beginning, agricultural exports of Bangladesh were higher than the imports. But it starts declining year by year. After 1987-88 the import becomes permanently higher than the export. We can see a large difference between them in the figure after the including period.

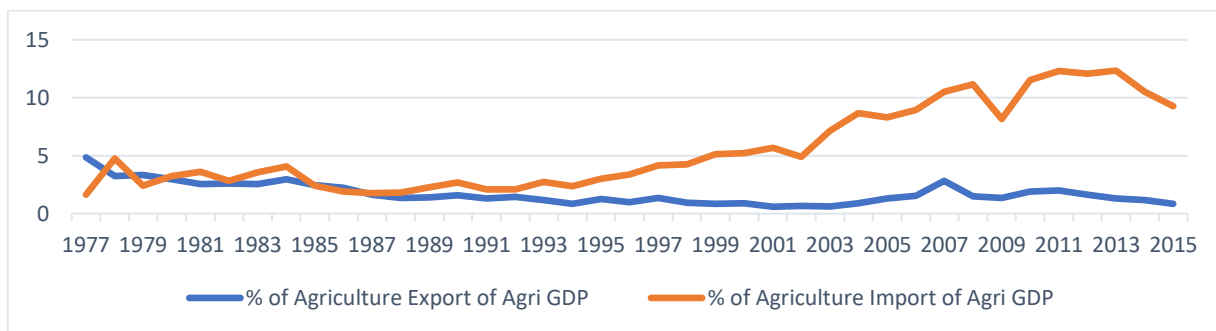


Figure 2: % of Export and Import of Agricultural Products to Agricultural GDP from 1977 to 2015  
 Source: World Bank (2021)

Figure 3 shows the comparison between the % of agriculture export of total export and % of agriculture import of total import over the years of 1978-79 to 2015-16. In the beginning, agricultural exports of Bangladesh were higher than the imports. But it starts declining year by year. After 1992-93 the import cross over the export.

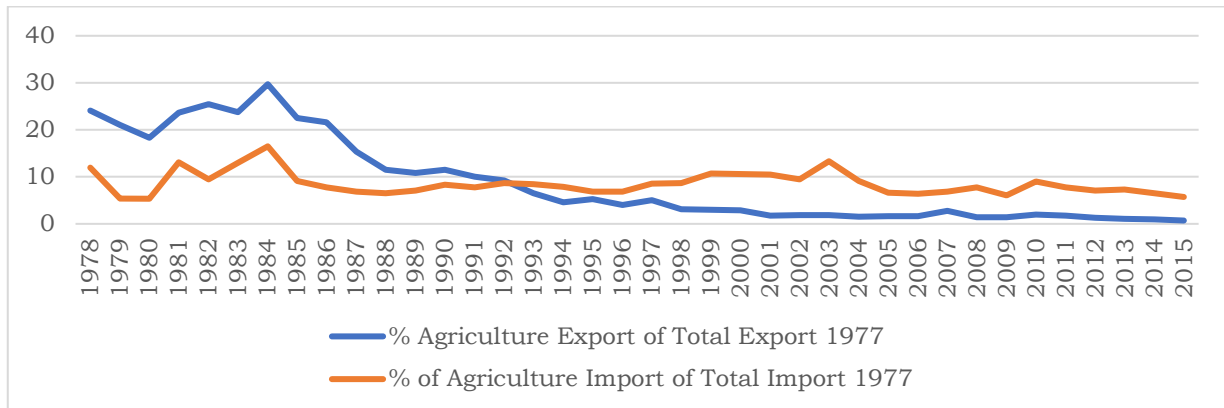


Figure 3: % Export and Import of Agricultural Products of Total Export and Import of Bangladesh from 1978 to 2015  
 Source: World Bank (2021)

Figure 4 shows that the agriculture value added per worker increasing at an increasing rate which means the productivity of workers is increasing day by day. From 1991 to 1999 it was the same as shown by the horizontal line and after that, it started to increase at an increasing rate.

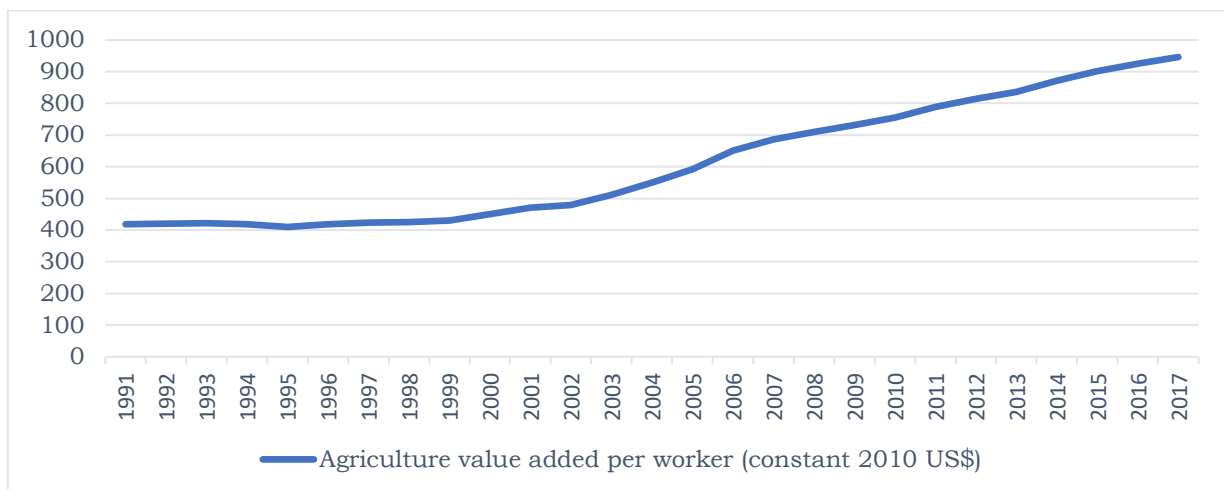


Figure 4: Agriculture Value Added Per Worker of Bangladesh from 1991 to 2017 (Constant 2010 USD)  
 Source: World Bank (2021)

Here Figure 5 shows that the percentage of Primary Products in the export earnings is very low, only 4%. On the other hand, the participation rate of industrial products is very high, that is 96%. It says that our country is exporting industrial products much more than the agricultural product. Figure 6 shows the export percentage rate of different agricultural products. We can see that among the agricultural products, our country exports Frozen Foods much more than others.

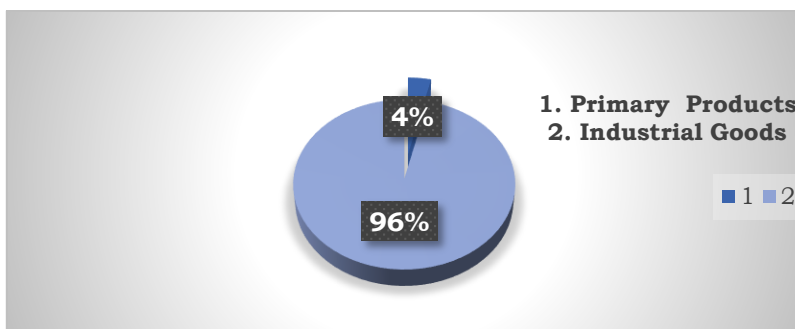


Figure 5: Sector-wise Export Earnings of Bangladesh from 2017 to 18  
 Source: Bangladesh Economic Review (2021)

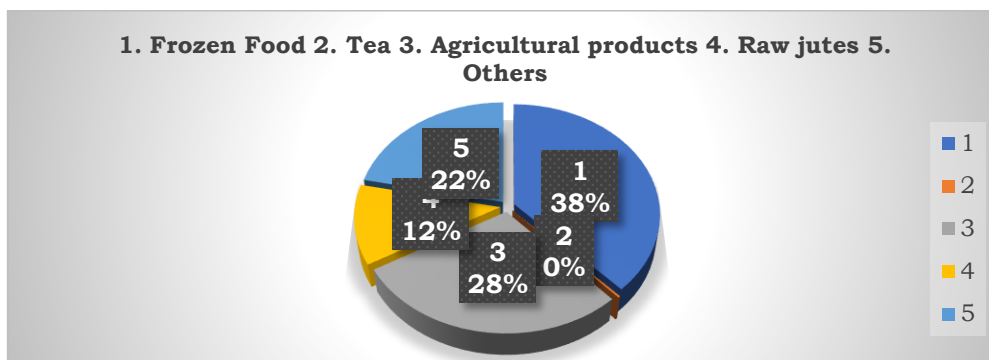


Figure 6: Percentage of Primary Products of Bangladesh  
 Source: Bangladesh Economic Review (2021)

Figure 7 shows import payments of four categories. Of these dollar earnings from other categories are the highest. Figure 8 shows the percentage rate of earnings from the Major Primary Commodities. It shows that earnings from Cotton are the highest.

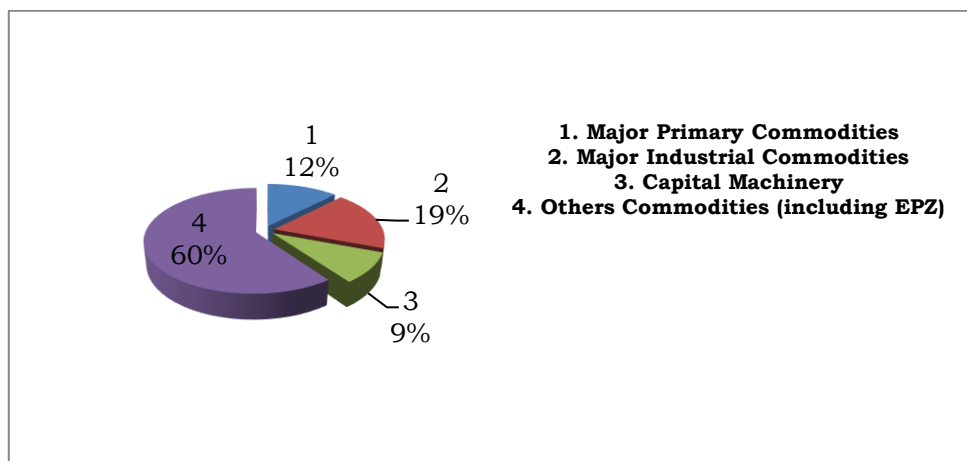


Figure 7: Commodity-wise Import Payments of Bangladesh in 2017-18  
 Source: Bangladesh Economic Review (2021)

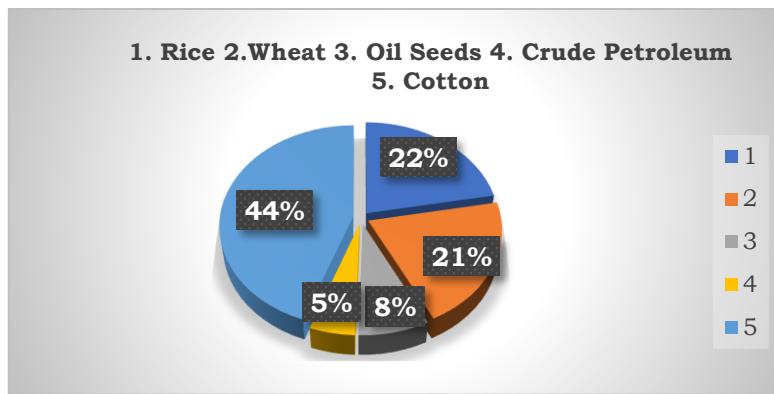


Figure 8: Percentage of Major Primary Commodities of Bangladesh in 2017-18  
 Source: Bangladesh Economic Review (2021)

And at last figure 9 shows the weighted exchange rate (WAER) trend of Bangladesh.

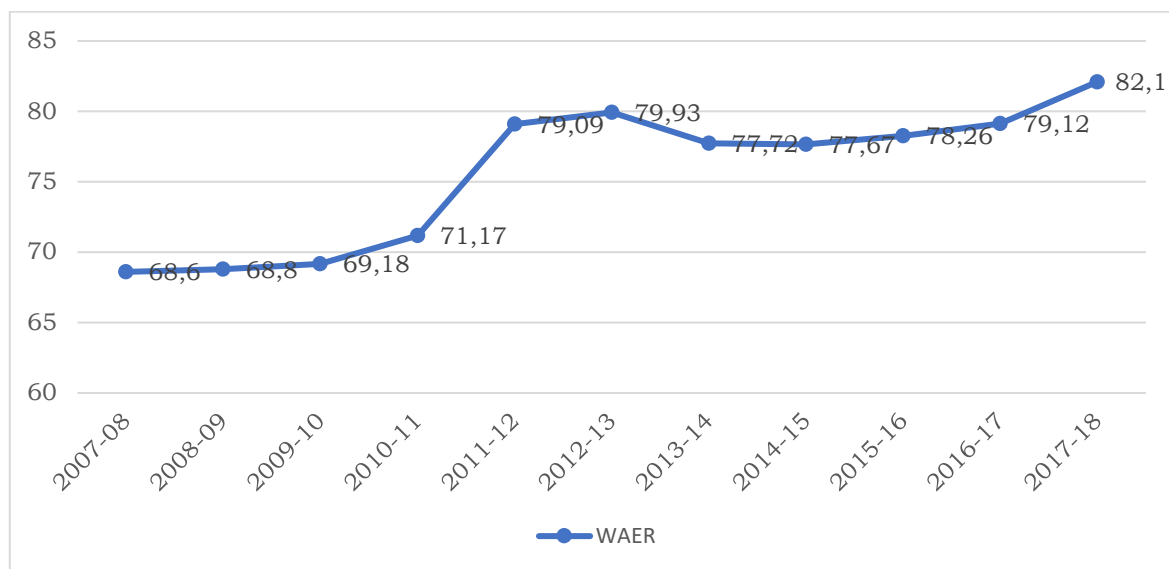


Figure 9: Yearly Weighted Average Exchange Rate of Bangladesh from 2007-08 to 2017-18  
 Source: Bangladesh Economic Review (2021)

Now a short descriptive analysis is given about the variables in Table 1.

**Table 1: Descriptive information of the variables**

Variable	Mean	Standard Dev.	Minimum	Maximum
Export of Total Agricultural Production (TAEx) (Constant USD)	199033426.1	96643977.28	78207396.86	478473236.7
Import of Total Agricultural Production (TAIm) (Constant USD)	852554836.8	830438663.4	116498195	2665573905

Real Agricultural Production (RAgP) (Constant USD)	1267739309 2	4816954220	7170664790	23304514945
Real Exchange Rate (RExch)	46.136	20.7194	15.016117	81.862658
Real GDP (RGDP) (Constant USD)	6709835995 3	36694692264	2530347115 2	156629549345.307

Source: World Bank (2018), calculated by Stata 14.

After collecting the data above, we take a look at the correlation between the variables. Here table 2 and figure 10 show the correlation matrix of the data. All data are in logarithmic form except the Real Exchange Rate Data. Correlation coefficients show that lnTAEx is positively correlated with the real GDP, real exchange rate, and real agricultural production respectively. Here, correlations are not so strong. Again, lnTAIm is also positively correlated with the real GDP, real exchange rate, and real agricultural production respectively. And here correlations are strong as all correlation coefficients are above the 0.80 level. As Bangladesh is a vastly developing country and industrial production and service sectors are growing rapidly than agricultural production these sectors are now dominating in the contribution to the total real GDP and as a result, agricultural products have been being imported markedly passing the years.

**Table 2: Correlation Matrix of the Variables**

	<b>lnTAEx</b>	<b>lnTAIm</b>	<b>lnRGDP</b>	<b>RExch</b>	<b>lnRAgP</b>
<b>lnTAEx</b>	1.0000				
<b>lnTAIm</b>	0.3638	1.0000			
<b>lnRGDP</b>	0.1940	0.9377	1.0000		
<b>RExch</b>	0.1824	0.9287	0.9933	1.0000	
<b>lnRAgP</b>	0.2689	0.9525	0.9953	0.9357	1.0000

Source: Calculated using STATA 14

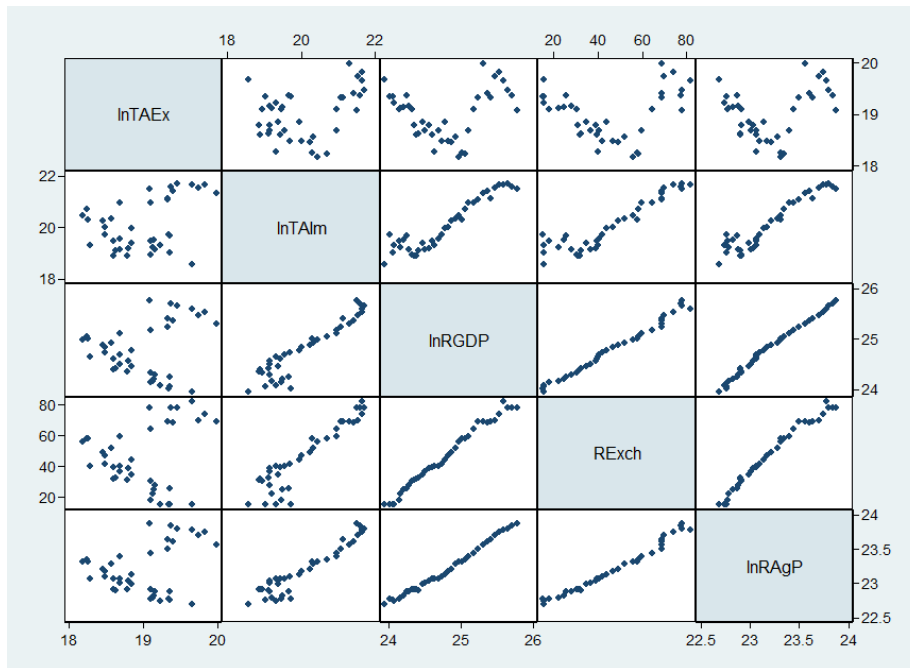


Figure 10: Correlation Matrix of the Variables  
 Source: Calculated using STATA 14

The theoretical model is constructed in this paper using the theories of Baek and Xu (2021), Aftab et al. (2017), and Jiang (2014) regarding exchange rates and international trade. The relations among the variables are as follows.

$$\text{Trade} = f(\text{RGDP}, \text{RExch}) \quad (1)$$

$$\text{RAgP} = f(\text{Import}, \text{Export}) \quad (2)$$

Here, RGDP means real gross domestic product, RExch means real exchange rate, and RAgP means real agricultural production. Extending these two functions following four models are constructed.

$$\text{Model 1: RAgPt} = \alpha_0 + \alpha_1 \text{TAEExt} + u_t \quad (3)$$

$$\text{Model 2: RAgPt} = \beta_0 + \beta_1 \text{TAImt} + v_t \quad (4)$$

$$\text{Model 3: TAEExt} = \gamma_0 + \gamma_1 \text{RGDP} + \gamma_2 \text{RExch} + m_t \quad (5)$$

$$\text{Model 4: TAImt} = \theta_0 + \theta_1 \text{RGDP} + \theta_2 \text{RExch} + n_t \quad (6)$$

Here, TAEEx denotes total aggregate export and TAIm denotes total aggregate import.  $\alpha_0$ ,  $\beta_0$ ,  $\gamma_0$ , and  $\theta_0$  are intercept coefficients and  $\alpha_1$ ,  $\beta_1$ ,  $\gamma_1$ , and  $\theta_1$  are slope coefficients. Subscript t denotes time series data and u, v, m, and n are stochastic error terms of the models. Now, taking the logarithm of RAgP, TAEEx, TAIm, and RGDP the following models are created. As exchange rate data are already in percentage form and the data are small, the logarithm is avoided for this variable. Therefore, Models 1 and 2 become a double-log model, and Models 3 and 4 become semi-log models.

$$\text{Model 1: lnRAgPt} = \alpha_0 + \alpha_1 \ln\text{TAEExt} + u_t \quad (7)$$

$$\text{Model 2: lnRAgPt} = \beta_0 + \beta_1 \ln\text{TAImt} + v_t \quad (8)$$

$$\text{Model 3: lnTAEExt} = \gamma_0 + \gamma_1 \ln\text{RGDP} + \gamma_2 \text{RExch} + m_t \quad (9)$$

$$\text{Model 4: lnTAImt} = \theta_0 + \theta_1 \ln\text{RGDP} + \theta_2 \text{RExch} + n_t \quad (10)$$

The ordinary least square method (Gujarati et al. 2016) is utilized to calculate intercept and slope coefficients. Formulas for the coefficients are given as follows.

$$\text{Slope Coefficient} = \frac{n \sum \ln Y_t \ln X_t - \sum \ln Y_t \sum \ln X_t}{n \sum X_t^2 - (\sum \ln X_t)^2} \quad (11)$$

$$\text{Intercept Coefficient} = \frac{\sum X_t^2 \sum \ln Y_t - \sum \ln X_t \sum \ln Y_t \ln X_t}{n \sum \ln X_t^2 - (\sum \ln X_t)^2} \quad (12)$$

$$\text{Standard Error of Slope} = \frac{\sigma}{\sqrt{\sum (\ln X_t)^2}} \quad (13)$$

$$\text{Standard Error of Intercept} = \sqrt{\frac{\sum \ln X_t^2}{n \sum (\ln X_t)^2}} \sigma \quad (14)$$

$$\text{Where, } \widehat{\sigma^2} = \frac{\sum \widehat{u}_t^2}{n-2} \quad (15)$$

### 3. Results

#### 3.1 Model 1

Here, as the slope coefficient is positive, Real Agricultural Production is positively related to Export of Total Agricultural production. That means if the Export of Total Agricultural production increases by 1%, on average, Real Agricultural Production increases by .2025%. As the p-value of the intercept coefficient 0.000 is less than 0.05 of the level of significance, at a 5% level of significance null hypothesis of  $\alpha_0 = 0$  is rejected and thus intercept coefficient is significant. As the p-value of the slope coefficient 0.098 is less than 0.10 of the level of significance, at a 10% level of significant null hypothesis of  $\alpha_1 = 0$  is rejected, and thus slope coefficient is significant. For two regression models, we use  $r^2$  as the coefficient of determination. Here,  $r^2 = 0.0723$  means that a 7.23% variation in the Real Agricultural Production can be explained by the variation in the Export of Total Agricultural production. And data is weakly fitted to the regression line.

$$\ln \widehat{RAgP} = 19.3503 + 0.2025 \ln TAE_x \quad (16)$$

$\ln \widehat{RAgP}$	19.3503	0.2025 $\ln TAE_x$
<i>se</i>	2.266792	0.1192732
<i>t</i>	8.54	1.70
<i>p</i>	0.000***	0.098*
$r^2 = 0.0723$		

\*\*\*Significant in 1%, \*\*Significant in 5%, \*Significant in 10%;

Source: World Bank (2017), calculated by Stata/SE 12.0 for windows (64-bit x86-64)

#### 3.2 Model 2

Here, as the slope coefficient is positive, Real Agricultural Production is positively related to Import of Total Agricultural Production. That means if the Import of Total Agricultural Production increases by 1%, on average, Real Agricultural Production increases by 2.62%. As the p-value of the intercept coefficient 0.000 is less than 0.01 in level of significance, at 1% level of significance null hypothesis of  $\beta_0 = 0$  is rejected and thus intercept coefficient is significant. As the p-value of slope coefficient 0.000 is less than 0.01 of the level of significance, at a 1% level of significant null hypothesis of  $\beta_1 = 0$  is rejected, and thus slope coefficient is significant. For two regression models, we use  $r^2$  as the coefficient of determination. Here,  $r^2 = 0.9073$  means that 90.73% variation in the Real Agricultural Production can be explained by the variation of the Import of Total Agricultural Production. And data is strongly fitted to the regression line.

$$\ln \widehat{RAgP} = 16.2434 + 0.3461 \ln TAI_m \quad (17)$$

$\ln \widehat{RAgP}$	16.2434	0.3461 $\ln TAI_m$
<i>se</i>	0.365983	0.018192
<i>t</i>	44.38	19.03
<i>p</i>	0.000***	0.000***
$r^2 = 0.9073$		

\*\*\*Significant in 1%, \*\*Significant in 5%, \*Significant in 10%;

Source: World Bank (2017), calculated by Stata/SE 12.0 for windows (64-bit x86-64)

#### 3.3 Model 3

Here, as the partial slope coefficient along with the Real Gross Domestic Product is positive and the partial slope coefficient along with the Real Exchange Rate is negative, the Export of Total Agricultural Production is positively related to the Real Gross Domestic Product and negatively related to the Real Exchange Rate. That means if the Real Gross Domestic Product increases by 1%, on average, the Export of Total Agricultural Production increases by 0.84698% when the Real Exchange Rate remains constant. And if the Real Exchange Rate increases by 1 unit, on average, the Export of Total Agricultural Production decreases by 1.754 %, when the Real Gross Domestic Product remains constant.

As the p-value of the intercept coefficient 0.968 is greater than 0.05 of the level of significance, at a 5% level of significance null hypothesis of  $\gamma_0 = 0$  cannot be rejected and thus intercept coefficient is insignificant. As the p-value of the partial slope coefficient along with Real Gross Domestic Product 0.501 is greater than 0.05 of the level of significance, at a 5% level of significant

null hypothesis of  $\gamma_1 = 0$  cannot be rejected and thus that partial slope coefficient is insignificant. As the p-value of the partial slope coefficient along with Real Exchange Rate 0.589 is greater than 0.05 of level of significance, at a 5% level of significance null hypothesis of  $\gamma_2 = 0$  cannot be rejected and thus that partial slope coefficient is insignificant. Therefore, there is no significant impact of RGDP and exchange rate on the export of agricultural products.

R<sup>2</sup> is used as the coefficient of determination for the multiple regression model. Here, R<sup>2</sup> = 0.0455 means that only a 4.55% variation in the Export of Total Agricultural Production can be explained by the variation of the Real Gross Domestic Product and Real Exchange Rate. As R<sup>2</sup> is close to zero, so the data is not fitted to the regression line.

$$\ln\widehat{TAE}x = -1.1863 + 0.84698 \ln RGDP - 0.01754 RExch \quad (18)$$

$\ln\widehat{TAE}x$	-1.1863	0.84698 lnRGDP	0.01754 RExch
<i>se</i>	29.42148	1.2464	0.0321843
<i>t</i>	-0.04	0.68	-0.55
<i>p</i>	0.968	0.501	0.589
R <sup>2</sup> = 0.0455			

\*\*\*Significant in 1%, \*\*Significant in 5%, \*Significant in 10%;

Source: World Bank (2017), calculated by Stata/SE 12.0 for windows (64-bit x86-64)

### 3.4 Model 4

Here, as the partial slope coefficient along with the Real Gross Domestic Product is positive and the partial slope coefficient along with the Real Exchange Rate is negative, the Import of Total Agricultural Production is positively related to the Real Gross Domestic Product and negatively related to the Real Exchange Rate. That means if the Real Gross Domestic Product increases by 1%, on average, the Import of Total Agricultural Production increases by 2.0954 % when the Real Exchange Rate remains constant. Moreover, if the Real Exchange Rate increases by 1 unit, on average, the Import of Total Agricultural Production decreases by 0.961 %, when the Real Gross Domestic Product remains constant.

As the p-value of intercept coefficient 0.155 is greater than 0.05 of the level of significance, at a 5% level of significance null hypothesis of  $\theta_0 = 0$  cannot be rejected and thus intercept coefficient is insignificant. As the p-value of the partial slope coefficient along with Real Gross Domestic Product 0.028 is less than 0.05 of the level of significance, at a 5% level of significant null hypothesis of  $\theta_1 = 0$  can be rejected, and thus that partial slope coefficient is significant. As the p-value of the partial slope coefficient along with Real Exchange Rate 0.687 is greater than 0.05 of level of significance, at a 5% level of significance null hypothesis of  $\theta_2 = 0$  cannot be rejected and thus that partial slope coefficient is insignificant. Therefore, RGDP has a significant positive influence on agricultural imports and the exchange rate has no significant influence on agricultural imports.

R<sup>2</sup> is used as the coefficient of determination for the multiple regression model. Here, R<sup>2</sup> = 0.8799 means that only 87.99% variation in the Import of Total Agricultural Production can be explained by the variation of the Real Gross Domestic Product and Real Exchange Rate. As R<sup>2</sup> is close to zero, so the data is fitted to the regression line.

$$\ln\widehat{TAI}m = -31.4036 + 2.0954 \ln RGDP - 0.00961 RExch \quad (19)$$

$\ln\widehat{TAI}m$	-31.4036	2.0954 lnRGDP	0.00961 RExch
<i>se</i>	21.63454	0.9165169	0.0236661
<i>t</i>	-1.45	2.29	-0.41
<i>p</i>	0.155	0.028 **	0.687
R <sup>2</sup> = 0.8799			

\*\*\*Significant in 1%, \*\*Significant in 5%, \*Significant in 10%;

Source: World Bank (2017), calculated by Stata/SE 12.0 for windows (64-bit x86-64)

## 4. Discussion

The research found that RGDP upsurges the agricultural exports. This is because, when RGDP increases, national products become higher than its aggregate demand and thus country can export its surplus production. It also states that if Exchange rate changes upward, the agricultural production changes downward. Bangladesh imports most of its raw materials to produce

commodities. Therefore, increasing the exchange rate decreases raw material imports as foreign currency becomes more costly. As a result, production decreases and export also decline. This is supported by (Abdlaziz et al., 2022; Ali, 2023; Iyer, 2020; Mughal et al., 2023). However, the actual relation of the independent variables depends on their significant coefficient. Therefore, it is very important to judge whether coefficients are significant or not. Here, partial coefficient of RGDP and Exchange rate found insignificant. This matches the theory which states that there is little relation between domestic RGDP and domestic export. This result is supported by the short-run result of (Baek & Xu, 2022) and the long-run result of (Dada, 2022; Lawal et al., 2022; Ogunmola et al., 2023).

Moreover, the research found that RGDP upsurges and exchange rate declines the agricultural imports. RGDP increment means national income increment of the nation which leads to more import. This is supported by (Bosupeng et al., 2024; Dąbrowski et al., 2024; Doojav et al., 2024; Luo et al., 2024). On the other side, when the exchange rate increases, cost of foreign currency increases and thus import becomes more expensive. As a result, imports decline. This is supported by (Eshetu & Goshu, 2021; Mao et al., 2021; Shane et al., 2008; Zhang & Ntom Udemba, 2023). Now it is important to justify whether variables are significant or not. However, partial coefficients of RGDP found significant and partial slope of Exchange rate found insignificant. This result is supported by the short-run result of (Baek & Xu, 2022) and the long-run result of (Lawal et al., 2022).

## 5. Conclusion

This study aims to examine the impact of the exchange rate on the Export and Import of Agricultural Production. It also examines the effect of the Export and Import of Agricultural Production on Real agricultural Production during the period from 1977 to 2015. We use the OLS model for measuring the relationship between the Export of Agricultural production and the Exchange rate as well as the relationship between the Import of Agricultural production and the Exchange rate. Here in these two models, we use the Real GDP of Bangladesh as a controlled variable. This study also applies the OLS model for determining the relationship between Real Agricultural Production and Export of Agricultural production as well as the relationship between Real Agricultural Production and Import of Agricultural production. It is found that the positive linear relationship between Real Agricultural Production and Export of Agricultural production as well as a positive linear relationship between Real Agricultural Production and Import of Agricultural Production. It is also found that the positive linear relationship between Import of Agricultural production and Real GDP. Further, we found no linear relationship between the Export of Agricultural production and the Real Exchange rate as well as no linear relationship between the Import of Agricultural production and the Real Exchange rate which supports the result of (Alegwu et al., 2018). These findings have some important policy implications. Firstly, the central bank of Bangladesh should try to focus on other trade policies rather than Exchange Rate related policies as our study found an insignificant relationship between the Export and Import of Total Agricultural Production and the Real exchange Rate. Secondly, besides considering the exchange rate policy, the government needs to adapt synchronous implementation solutions to overcome the tailbacks in Bangladesh's exports and Imports. Production cost, brand value, product quality, and technology content are key factors that threaten to decrease export and import competitiveness. Finally, in the context of Bangladesh, as the foreign currency derivatives market has not fully developed and there are potential risks in international business, enterprises need a proper international trade strategy, including a long-term vision for risk analysis and forecasting, combined with the flexible use of risk hedging tools such as futures, options, swap contracts. In addition, exporters and importers wishing to promote their international trade should not rely solely on the exchange rate, but on the long-term strategy in building their brand, defining their comparative advantages, and increasing market access.

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