

IMPACT OF GROSS DOMESTIC PRODUCT, DOMESTIC PRICE AND EXCHANGE RATES ON INDONESIA'S MANGOSTEEN EXPORTS TO UNITED ARAB EMIRATES

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Abstract

Indonesia exports more mangosteen than any other fruit. Five countries are its export destinations, including the United Arab Emirates. According to data from UN Comtrade, the export volume of Indonesian mangosteen fluctuated from 2019 to 2023. According to experts and previous studies, this fluctuation is due to several factors. Therefore, this quantitative study will analyze the influence of the United Arab Emirates' gross domestic product (GDP), the domestic price of Indonesian mangosteen, and the dollar-to-rupiah exchange rate on Indonesia's mangosteen exports to the United Arab Emirates from 2003 to 2023. Additionally, we aims to analyze whether gross domestic product, Indonesian domestic mangosteen prices, and the dollar-to-rupiah exchange rate jointly influenced Indonesian mangosteen imports to the United Arab Emirates during the same period. The research location was deliberately chosen in Indonesia, and secondary sources were used to collect time series data from 2003 to 2023. Quantitative data analysis was conducted using SPSS 25 and quantitative methods. The study's findings suggest that the United Arab Emirates' gross domestic product, the domestic price of Indonesian mangoes, and the dollar-to-rupiah exchange rates at the same time affect to quantity of mangosteen exported to the United Arab Emirates. Based on a partial test, the United Arab Emirates' gross domestic product had a significantly positive effect on Indonesian mangosteen exports to the United Arab Emirates, with a regression coefficient of 3.398E-6. This indicates that if the United Arab Emirates' gross domestic product increases one US dollar, Indonesian mangosteen exports to the United Arab Emirates will increase to 3.398E-6 kilograms. The domestic price of Indonesian mangosteen had a significantly negative effect on the volume of exports, with a regression coefficient of -398. This indicates that if the domestic price of mangosteen in the UAE increases by Rp 1,000/kg, exports to the UAE decrease by 398,755 kg. The dollar-to-rupiah exchange rate also negatively affects the Indonesian mangosteen export volume to the United Arab Emirates. With a regression coefficient of -95.267, an increase in the dollar exchange rate of 1 US\$/Rp results in decline has been observed in the export volume of Indonesian mangosteen. to the United Arab Emirates of 95.267 kg.

Keywords: *Export Volume, Gross Domestic Product, Domestic Prices, Exchange Rate*

INTRODUCTION

The agricultural segment plays a significant role in Indonesia's and its regions' economic development. Mangosteen (*Garcinia mangostana* Linn), which belongs to the Guttiferae family, is a premium agricultural product often referred to as "the queen of fruits." It has numerous health benefits and is one of the most exotic fruits, with a high export value and demand. According to the Indonesian Ministry of Agriculture (2019), Indonesia is one of the top five mangosteen-exporting countries worldwide. Indonesia has a great opportunity to export mangosteens to various countries because fresh fruit exports are not subject to quotas. This enables Indonesia to significantly increase its foreign exchange earnings through mangosteen exports. Improving the quality of its agricultural products would allow Indonesia to enter the competitive global market (Yudha et al., 2022). According to Kementrian Pertanian (2024), Indonesia exports mangosteen to five countries, including the United Arab Emirates. UN Comtrade data indicates that the total volume of mangosteen exports from Indonesia from 2019 to 2023 was 3,089 tons, suggesting fluctuations in exports to the United Arab Emirates.

Table 1. Exports of Indonesian Mangosteen to the United Arab Emirates

Country	Export Volume (Kg)				
	2019	2020	2021	2022	2023
United Arab Emirate	769.819,3	453.833,4	366.073,5	528.445,7	971.775,1

As shown in Table 1, the exports of Indonesian mangosteen to the United Arab Emirates (UAE) tend to fluctuate. In 2019, exports amounted to 769. 819.3 kg. There was a 41.05% decrease in 2020 and a 19.33% decrease in 2021 compared to 2019. In 2022, exports increased by 44.35%, and in 2023, they increased by 83.89%. This fluctuation is thought to be influenced by several factors. Azizah (2018) states that domestic prices, exchange rates, commodity production, and government policies simultaneously affect the exports of a commodity and that domestic prices and exchange rates significantly affect export volumes. Amala (2019) states that Gross Domestic Product (GDP), exchange rates, international commodity prices, and inflation simultaneously influence export volume, and GDP significantly affects export volume. Faisal et al. (2021) state that local prices, export prices, demand, and exchange rates simultaneously influence export volume, and local or domestic prices partially influence export volume. The researchers conducted a study analyzing the impact of the destination country's GDP, domestic prices, and exchange rates on exports to that country. These three factors significantly influence export volume to the destination country. The study is titled "The Effects of Gross Domestic Product (GDP), Domestic Prices of Indonesian Mangosteen, and Exchange Rates on the Export Volume of Indonesian Mangosteen to the United Arab Emirates in 2003-2023."

LITERATURE REVIEW

Demand

According to Rahardja and Manurung (2015), demand is defined as consumers' desire to purchase goods at various prices within a specific timeframe. Every human being has needs. Because of these needs, there is demand for goods that fulfill them. However, from an economic perspective, consumer demand is defined as a function that indicates the schedule of planned purchases. In simple terms, demand only occurs when consumers have a need for a particular good and have the purchasing power to obtain it. Effective demand is demand supported by purchasing power, while potential demand is demand based solely on needs. Consumer ability to purchase is influenced two fundamental factors: income and the price of the desired product.

According to Laili and Prityadi (2013), emand is further influenced by the following factors::

1. The product's price
2. The price of closely related products
3. The households' and society's income level
4. The distribution pattern of income in society
5. The tastes of society
6. Forecasts of future conditions

Supply

According to Sukirno (2015), a supplier's curve shows the quantity of goods that producers can offer at each price level during a specific time period. Supply is measured as the quantity of goods or services that suppliers offer at different prices. The Supply Law states, "The higher the price of a good, the greater the quantity that will be offered by sellers." Conversely, the lesser the price, the lower the quantity offered.

According to Laily and Pristyadi (2013), supply is influenced by several factors, namely:

1. Number of traders
2. Price of production factors
3. Price of alternative goods
4. Traders' expectations regarding future prices of goods
5. Technological changes

International Trade

According to Rahayu and Pohan (2015), international trade is trade that occurs between the residents of one country and the residents of another country through a mutual agreement. International trade is carried out because

the people in one country need commodities from other countries where those commodities are available. The occurrence of international trade leads to increased prosperity for the countries involved, where the exporting country will increase its foreign exchange earnings, while the importing country will be able to meet the needs of its people for imported commodities. International trade involves the shipment and receipt of goods from one country to another. The causes of trade between countries (foreign trade) are:

1. Obtaining goods that are not produced domestically
 - a. Because no country can produce all the goods and services it needs.
 - b. Countries need each other.
 - c. Human and natural resources differ from one another.
 2. Expanding markets and importing modern technology
 - a. Expand the market for goods that cannot be sold domestically.
 - b. Import more modern industrial machinery and better technical and managerial knowledge.
 3. Gain benefits from specialization
 4. To benefit from goods produced by countries engaged in trade
- Due to considerations of cost and labor availability (more or less expensive), both countries will specialize in determining which goods to export and import.

Exports

According to Syeh (2013), exports are defined as the transfer of commodities from one country to another in accordance with applicable regulations. As a component of international trade, they are often referred to as a key component of development, or export-led development, meaning they play a major role in a nation's development process. Following this definition, exports are the total sales of a country's produced goods legally traded with other countries to obtain foreign currency. A country can export goods to countries that cannot produce them.

Gross Domestic Product (GDP)

Mankiw (2006), the gross domestic product (GDP) receives is more attention because it is considered the best measure of a society's overall health. The GDP measures both the total amount of money earned by the economy, as well as the government's expenditure on commodities and services produced domestically.

Domestic Prices

Domestic prices are prices set within a region or country. Prices are influenced by supply and demand. As the demand for agricultural products abroad increases and domestic production rises, the government exports mangosteen to other countries. Fluctuating export volumes of mangoes are influenced by domestic prices. High domestic prices will result in lower export volumes, as the narrower the gap between domestic and international prices, the more exporters will consider exporting due to lower profits.

The Exchange Rates

According to Abimanyu (2004), a currency conversion rates is one currency had in terms of another. Since an equilibrium exchange rates depends on the supply and demand of the two currencies involved, it represents each currency's value. The equilibrium rates between two countries are the prices agreed upon by their citizens for trading with each other. According to economists, there are nominal and real exchange rates. A currency's nominal value is the rate used when exchanging one type of monetary unit for a different one. Meanwhile, a real exchange rate is the value used to exchange goods and services from one country for those from another.

METHOD

Research Location Method

The research location was chosen purposively in Indonesia. This is supported by data from *Badan Pusat Statistika* of the Republic of Indonesia, World Bank, Bank Indonesia and UN Contrade from 2003 - 2023 where mangosteen exports are the fruit export commodity with the largest volume.

Sampling Method and Research Data Collection

Purposive sampling was used for this study. Sample selection was based on secondary data. The time series of secondary data spans from 2003 to 2023.

Analytical Methods

Quantitative research uses quantitative data analysis methods. We use linear regression testing to determine the factors affecting gross domestic product, mangosteen export prices, and exchange rates. Multiple regression analysis addresses problems in regression analysis resulting from relationships between multiple-independent variables. The multiple Linear model is as follows :

$$Y = a_0 + a_1 \text{Ln}X_{1it} + a_2 \text{Ln}X_{2it} + a_3 \text{Ln}X_{3it} + a_4 \text{Ln}X_{4it} + a_5 \text{Ln}X_{5it} + \mu_i$$

Description:

Y = Volume of Indonesian mango exports to the United Arab Emirates (kg)

a = Costant

X₁ = Gross Domestic Product of the United Arab Emirates (billion US\$)

X₂ = Domestic price of Indonesian mangosteen (US \$/kg)

X₃ = Exchange rate of the dollar to the rupiah (Rp)

i = Observation number

t = number time periods observed (2003 - 2023)

Classical Assumption Testing

Ghozali (2016) states that the reasons of a classical assumption test is to validate the regression model. This test must be carried out before performing regression analysis. These tests include:

1. Normality Test

Kolmogorov Smirnov test measures whether the research data has a normal probability distribution, which is necessary for parametric statistics. In analyzing this study's data, the researchers used the Kolmogorov-Smirnov test to verify that the sample came from a normally distributed population. The following decision-making process is based on this test:

- a. If the p value is above 0.05, data's considered normally distributed.
- b. When the p value is smaller than 0.05, conclude that data's not normally distributed.

This study also conducted a normality test using graphical analysis, which involved examining a normal probability plot comparing the cumulative normal distribution. ecisions from the normal probability plot analysis were based off the above conditions:

- a. We consider data to be normally distributed if it is scattered about the diagonal line and follows its direction..
- b. They are considered non-normally distributed if they are not aligned with the diagonal line, nor do they take its direction.

2. Auto-Correlation Test

The objective of the auto-correlation test is to determine if there is connection between the disturbance error on period t and the disturbance error in period t-1 (the previous period) in a linear model regression . One way to perform this test involves using the Run Test to check if the residual data is random. If the residual data is not random, then there is an auto-correlation problem. Using the following decision criteria, residuals are processed and then compared with the significance level (α) of 5% (0.05):

- a. Assuming a two-tailed test, when the asymptotic importance value is more than 0.05, then there is no auto-correlation.
- b. When the asymptotical significance (two-tailed) value is lower than 0.05, auto-correlation is present.

3. Multi-collinearity Test

Confirming the daerth of elevated correlation between the model's undependent variables is the purpose of this multi-collinearity test. Manifestation or non-manifestation of multi-collinearity could be determined using the variance inflation factor (VIF) and tolerance values of the basic independent variables in the process making decision:

- a. No multi-collinearity exists in the event that the tolerance value is over 0.10 or the VIF value is under 10.
- b. Multi-collinearity is indicated if the tolerance value is under 0.10 or the VIF value is over 10.

4. Heteroscedasticity Test

Heteroscedasticity tests determine does it make a difference in variability among derived from one observer to something else within a regressive model. If the residual variance remains constant among observers, the Glejser

test and scatterplot are used. The foundation for decision producing in the Glejser test follows the following procedure :

- a. Whether the importance of the value is more than 0.05. If so, then that is no heteroscedasticity..
- b. Heteroscedasticity occurs if the significance value is equal to or fewer than 0.05.
Meanwhile, when using the scatterplot pattern, heteroscedasticity is not a factor in decision-making if:
 - a. Data points should not be patterned.
 - b. Data points may be found above, below, or near the number 0.
 - c. Clustering of data points is not limited to above or below..

5. Test Goodness of Fit

Samples can be used to estimate the actual value with a regression function, and the accuracy of this estimation can be measured by the goodness of fit. This can be made by the ratio of variance explained, F value, or t statistic value. Such a calculation is considered significant if the test statistic falls within the critical area (H_0 is rejected). Conversely, it is considered insignificant if the test statistic falls within the area where H_0 is accepted..

a. Coefficient of Determination (R^2)

R-squared (R^2) is a gauge of an independent variable's ability to explain variability in a dependent variable. A small R^2 value suggests that the independent variables are not very good at explaining the variation in the dependent variable. Meanwhile, a score close to one means the model provides most of the information needed to predict the dependent variables.

b. F Test (Simultaneous test)

An F test (a simultaneous test) determines whether the gross domestic product (X_1), the domestic price of Indonesian mangosteen (X_2) and dollar-to-rupiah conversion rate (X_3) influence Indonesia's mangosteen export volume to the United Arab Emirates market (Y).). The testing steps are:

- 1) First, define the level of significance (α) as being 0.05 (5%).
 - 2) Determine degrees of freedom (df). $F_{(table)} = \text{number of variables} - 1$.
 - 3) Determine the formulation of H_0 and H_1 .
 - a) $H_0 = \beta = 0$, meaning there is insignificant positive influence of GDP (X_1), domestic mangosteen price (X_2), or dollar-to-rupiah exchange rate (X_3) on Indonesian mangosteen export volume to the United Arab Emirates (Y).
 - b) $H_1 = \beta > 0$: There is a significant positive effect of GDP (X_1), on domestic price of Indonesian mangosteen (X_2), and the dollar-to-rupiah exchange rate (X_3) on Indonesian mangosteen exports to the United Arab Emirates.
- 4) F-Count Formula

According to Sugiyono (2018), the following formula is employed:

$$F = \frac{R^2/k}{(1 - R^2)/(n - k - 1)}$$

Description:

R^2 : determination coefficient

k : Count of independent variables

n : List of members

5) Decision/Conclusion:

Conclusion of null (H_0) and alternative (H_1) hypotheses:

- a) Reject H_0 and accept H_1 in the even that the sig value is no greater than 0.05 or the F count is bigger than the F table value. This indicates that gross domestic product (GDP) (X_1), the domestic price of Indonesian mangosteen (X_2), and the dollar-to-rupiah exchange rate (X_3) affect the amount of Indonesian mangosteen exported to the United Arab Emirates (Y).).
- b) connect H_0 and reject H_1 if the sig value is more than or the same as 0.05 and the F count is less than the F table value. This means that GDP (X_1), the domestic price of Indonesian mangosteen (X_2), and the dollar-to-rupiah exchange rate (X_3) do not affect the volume of Indonesian mangosteen exports to the United Arab Emirates (Y).

c. Test t (partial test):

The t test reveals the degree to which an independent variable affects a dependent variable. Its steps are as follows:

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- 1) Formulate of H_0 and H_1
 - a) $H_0: \beta_i = 0$ means that the GDP of the United Arab Emirates, the domestic price of mangosteen in Indonesia, and the dollar-to-rupiah exchange rate are not significant explanatory variables for mangosteen exports to the United Arab Emirates market.
 - b) $H_1: \beta_i \neq 0$ means that the United Arab Emirates' GDP, the domestic price of Indonesian mangosteen, and the dollar-to-rupiah exchange rate are significant explanatory variables of the mangosteen export volume in the United Arab Emirates market.
- 2) Level of significance ($\alpha = 0.05$)
 Sample size (n): Number of samples
 T table = $t(\alpha/2, n-k)$.
- 3) Determine the test criteria
 - a) We accept H_0 accepted in the even that t-count is shorter than t-table.
 - b) We refused H_1 if t-count is bigger than t-table.
- 4) Conclusion:
 - a) H_0 is refused if the sig value is fewer than 0.05 or the t_count is taller than the t_table value. This indicates a significant effect.
 - b) H_0 is accepted if the sig value is more than 0.05 or the t-count is lesser than the t-table value, indicating that there is insufficient evidence of a significant effect.

RESULTS AND DISCUSSION

Classical Assumption Test

The classic assumption test is utilized to ensure that the acquired regression equation is accurate, unbiased, and consistently estimated.

1. Normality Test

When determining if data is normally distributed, the Kolmogorov-Smirnov test can be used. The criterion for normality is a significance value above 0.5. Below are this test's results:

Table 2. Results of Data. Normality Test with Kolmogorov Smirnov Test

Test	Asymp. Sig. (2-tailed)	Criteria	Conclusion
One Sample Kolmogorov Smirnov	0,200	$0,200 > 0,05$	The data are normally distributed.

Kolmogorov-Smirnov normality test outcome show that the significance value of 0.200 is more than 0.05, indicating normal distribution of the data. The normality of the data can also be determined by examining the distribution of points on the diagonal axis of the P-p plot of residuals. A normal P-p plot of regression standardized residuals is used to determine if the data is normally distributed. Point distribution in a straight line (diagonally) or slightly away from it indicates that the data is not normally distributed. Figure 1 shows the P-P plot..

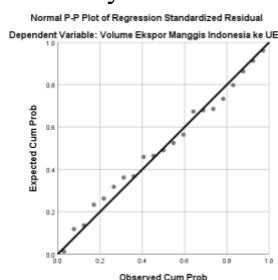


Figure 1. Data Normality (Normal Probability Plot Graph)

The graph above shows that the distribution of points spreads along a diagonal line, indicating that the data is normally distributed.

2. Auto-Correlation Test

Detect auto-correlation using the Run Test. Then, compare the Run Test value to a significance level of 0.05. If the Run Test value is greater than 0.05, there is no auto-correlation. The Run Test results appear in Table 3.:

Table 3. Results of Data Autocorrelation Test Run Test

Test	Value	Criteria	Conclusion
Run Test	0,364	$0,364 > 0,05$	No autocorrelation symptoms

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The Run Test is used to detect auto-correlation based on Table 3. A Run Test value over 0.05 is significantly indicative of the absence of auto-correlation symptoms when the data's random.

3. Multicollinearity Test

Multicollinearity tests detect relationships between the independent variables within a regression model. The results of the multicollinearity test for the independent variables are displayed in Table 4:

Table 4. Multi-collinearity Test Results

Independent Variables	Criteria		Conclusion
	<i>Tolerance</i>	<i>VIF</i>	
Gross Domestic Product of the United Arab Emirates country	0,379 > 0,10	2,637 < 10	No multicollinearity occurs
Domestic price of mangosteen in Indonesia	0,494 > 0,10	2,023 < 10	No multicollinearity occurs
Dollar to rupiah exchange rate	0,367 > 0,10	2,726 < 10	No multicollinearity occurs

As the multicollinearity test revealed, the three independent variables are not multicollinear. In a multiple regression model, multicollinearity can create dramatic changes in the β -coefficient value of an independent variable when other variables are added to or subtracted from the model. Although multicollinearity does not reduce simultaneous predictive power, it affects the predictive value of an independent variable. A variable's predictive value is its beta coefficient. Therefore, if multicollinearity occurs, there will be a disruption in the relationship between the independent and dependent variables.

4. Heteroscedasticity Test

Order to regress the independent variable on the absolute value of the residual, the Glejser test was used to test for heteroscedasticity in this study. If a p-value greater than 0.05 is obtained when regressing the independent variable on the absolute residual, there is no heteroscedasticity problem. The outcome of the Glejser test are displayed in Table 5..:

Table 5. Heteros-cedasticity Test Results with Glejser Test

Variables	Sig.	Criteria	Conclusion
Gross Domestic Product of the United Arab Emirates country	0,434	0,434 > 0,05	No heteroscedasticity problem occurs
Domestic price of mangosteen in Indonesia	0,212	0,212 > 0,05	No heteroscedasticity problem occurs
Dollar to rupiah exchange rate	0,146	0,146 > 0,05	No heteroscedasticity problem occurs

In the heteroscedasticity test research above, the significance values of all the independent variables were higher than 0.05. Therefore, it can be concluded that is nonexistent heteroscedasticity problem between the independent variables. Another technique for detecting heteroscedasticity is the scatterplot graph heteroscedasticity test shown in Figure 2 :

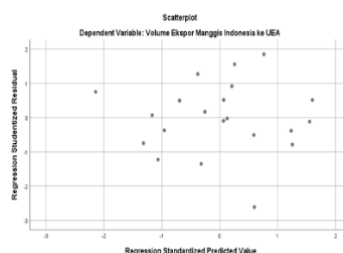


Figure 2. Heteros-cedasticity Test (Scatterplot)

From the picture, there is no specific pattern. Dots are scattered beneath and above the number 0 on the Y-axis. Therefore, no heteroscedasticity exists.

5. Test Goodness of Fit

After the classic assumption test is fulfilled, the next stage is the suitability test. Intended to verify the feasibility of a research model, the suitability test consists of a simultaneous test (F test), a partial test (T test), and a coefficient of determination (R^2). Table 5 shows the regression test results on the effect of UAE GDP, the domestic

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price of Indonesian mangosteen, and the dollar-rupiah exchange rate on the amount of Indonesian mangosteen exported to the UAE:

Table 5. Multiple Linear Regression Test Results

Independent Variables	Regression Coefficient	t-count	Sig.	Description
(Constant)	1108152,301	4,786	0,000	
Gross Domestic Product of the United Arab Emirates country	3,398E-6	5,008	0,018	significant
Domestic price of mangosteen in Indonesia	-398304,755	-2,613	0,000	significant
Dollar to rupiah exchange rate	-95,267	-3,137	0,006	significant
R ² = 0,627				
F-count = 9,523				
Sig. = 0,001				

Table 5 shows the findings of multiple linear regression test used analyze the factors affecting the amount on Indonesian mangosteen exports to the United Arab Emirates. The multiple regression equation is as follows:

$$\text{Indonesian Mangosteen Export Volume to the United Arab Emirates} = 1108152.301 + 3.398\text{E-}6X_1 - 398304.755X_2 - 95.267X_3$$

Constant value of the regression model is 1,108,152,301, which means that if all variables in the research models are equal to zero (have no value), the export volume of Indonesian mangosteen fruit to the United Arab Emirates is 1,108,152,301, which is the influence from outside this regression model. The level of export volume of Indonesian mangosteen fruit to the United Arab Emirates of 1,108,152,301 means that the amount of Indonesian mangosteen fruit to United Arab Emirates is high.

a. Coefficient of Determination (R²)

Analysis results show coefficient of determination (R²) of 0.627, which means that 62.70% of the total variance in the variable export volume Indonesian mangosteen fruit to United Arab Emirates can be explained by variations in the GDP variable of United Arab Emirates (X₁), domestic price of Indonesian mangosteen fruit (X₂), dollar to rupiah exchange rate (X₃). Remaining 37.3% is explained by other variables outside the model..

b. Concurrent Test (F test)

Table 5 indicates the F count in 9.523 is more than the F table of 3.555, and the significance value in 0.001 at the level of $\alpha = 0.05$. This indicates that the value of significance of F (0.001) is less than the probability value (0.05). Therefore, there is an affect of the independent variable GDP of UAE (X₁), the export price of Indonesian mangosteen fruit (X₂), dollar to rupiah rate (X₃) affect the dependent variable, Indonesian's mangosteen exports volume to UAE, simultaneously.

c. Partial Test (t-test)

1) The impact of the United Arab Emirates' gross domestic product on Indonesian's mangosteen volume exports to the UAE is examined in this study

Variable United Arab Emirates's GDP (X₁) holds a positive sign with a regression coefficient value of 3.398E-6, indicating that, partially, the GDP of the United Arab Emirates holds a positive and significant effect on volume of Indonesia's Mangosteen Import to the United Arab Emirates. This indicates that if the GDP of the United Arab Emirates increases by US\$1 with all other factors remaining constant (*ceteris paribus*), the amount of Indonesian mangosteen exports to United Arab Emirates will increase by 3.398E-6 kg. This means that an increase in the GDP of the United Arab Emirates will increase Indonesian mangosteen exports to United Arab Emirates because the United Arab Emirates is able to import mangosteen from Indonesia.

Similar with the findings of Amala (2019), this research suggests that a country's GDP is one of the factors that positively and significantly influence export volume. A higher GDP of the export destination country enables it to import mangoes and increase the volume of mango exports from Indonesia..

2) The Influence of Indonesian Mangosteen Domestic Prices on Mangosteen Export Volume to the United Arab Emirates

Variable domestic price of Indonesian mangosteen (X₂) shows a negative sign with a regression coefficient of -398.304.755, indicating that, partially, Indonesian's mangosteen domestic price holds a negative and significant's effect a look at how well Indonesian mangosteen compete in the United Arab Emirate. This indicates that if Indonesian domestic mangosteen prices increase in the amount of Rp 1,000/kg with all other factors remaining the same (*ceteris paribus*), it can reduce Indonesian mangosteen exports to the United Arab Emirates by 398,304.755

kg. Therefore, if domestic prices increase, export volume will decrease, and mangosteen producers will only market their mangosteen domestically.

These findings are consistent with Azizah's (2021) research, which states the domestic price of a commodity significantly affects the export volume of that commodity to a destination country. An increase in the domestic price of Indonesian mangosteen can decrease domestic demand's Indonesian mangosteen, but local producers will increase sales volume in the local market because local producers are not required to export mangosteen and will reduce high export costs.

3) The Dollar-to-Rupiah Exchange Rate's Effect on the Volume of Indonesian Mangosteen Exports to the United Arab Emirates

Variable dollar exchange rate to rupiah (X3) had a negative sign with regression coefficient's -95.267, implying a partial negative and significant effect of the dollar-to-rupiah exchange rate on the volume of Indonesia's mangosteen exports to the UAE. If the dollar exchange rate increases of 1 US\$/Rp (rupiah decreases) with all other factors remaining constant, the volume's Indonesian mangosteen exports to the United Arab Emirates will decrease to 95.267 kg.

This study's results align with Azizah's (2018) research, which states that the exchange rate of the- dollar-rupiah or the exchange rate's significantly affects the total amount of exports of a commodity to the export destination country. Because an increase in the USD/IDR exchange rate will raise export costs, Indonesian mangosteen producers will reduce the quantity of mangosteen exports to the UAE, resulting in a decrease in overall Indonesian mangosteen exports to the UAE..

CONCLUSION

1. United Arab Emirates's GDP partially had positive and significant effects to total amount of mangosteen exported from Indonesia to the United Arab Emirates. The regression coefficient for the UAE's GDP is 3.398E-6. This means that if the UAE's GDP increases by 1 USD with all other factors remaining constant, it will increase the amount of Indonesian mangosteen exports to the UAE was 3.398E-6 kg.
2. The domestic price of Indonesian mangosteen partially the amount of Indonesian mangosteen exports to the United Arab Emirates is negatively impacted by this. Regression coefficient's value for the domestic price of mangosteens is -398,304.755. This means that an increase in the domestic price of mangosteens by Rp 1,000/kg, with all other factors remaining constant, will decrease the volume of mangosteen exports to the United Arab Emirates by 398,304.755 kg.
3. The dollar-to-rupiah exchange rate has partially negative and significantly fewer such exports to the United Arab Emirates. Its regression coefficient is -95.267. This indicates increasing of dollar (a decrease in the rupiah) by 1 US\$/Rp, with all other factors remaining constant, will result in a 95.267 kg decrease in the United Arab Emirates's volume exports mangosteen from Indonesia.
4. Concurrently, the United Arab Emirates' gross domestic product (GDP), Indonesian mango prices, and dollar-to-rupiah exchange rates all affect the volume of mango exports to the United Arab Emirates.

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