INDONESIAN SOYBEAN IMPORT IN INTERNATIONAL TRADE

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Abstract: Indonesia's reliance on soybean imports due to inadequate domestic production, understanding the multifaceted influence of macroeconomic conditions on soybean imports, and analyzing the factors driving import decisions alongside the effectiveness of existing import policies in ensuring supply security and promoting domestic production. Data collection consists of secondary data obtained from several sources such as the Ministry of Trade (KEMENDAG), the World Bank and UN Comtrade. The data analysis method used are descriptive and panel data regression analysis with the Gravity model. The result of the level soybean import that the United States occupies the first position as the largest soybean exporting country to Indonesia. The share of US soybean exports is very large in Indonesia, reaching 72% of all soybean imports in Indonesia.The results of the panel data regression analysis show that the variable of import tariff, import price and import restriction dummy significantly affect with importing value of Indonesian soybean in the world trade. In addition, exchange rate and economic distance don't significantly affect with importing value soybean. Implementing Indonesia's soybean policy is expected to help achieve soybean self-sufficiency and reduce dependence on soybean imports from soybean producing countries in the world. The Indonesian government has issued policies namely expanding land, providing superior seeds and technology. The domestic government needs to implement a protection policy by implementing an entry tariff policy.

Keywords: soybean Indonesian, international trade, affecting imports, policy soybean, policy implementation

Abstrak: *Ketergantungan Indonesia pada impor kedelai karena produksi dalam negeri yang tidak memadai, memahami pengaruh beragam kondisi makroekonomi terhadap impor kedelai, dan menganalisis faktor-faktor yang mendorong keputusan impor serta efektivitas kebijakan impor yang ada dalam memastikan keamanan pasokan dan mendorong produksi dalam negeri. Pengumpulan data terdiri dari data sekunder yang diperoleh dari beberapa sumber seperti Kementerian Perdagangan (KEMENDAG), Bank Dunia dan UN Comtrade. Metode analisis data yang digunakan adalah metode deskriptif dan analisis regresi data panel dengan pendekatan Gravity Panel Model. Hasil penelitian menunjukkan USA merupakan negara paling banyak mengekspor kedelai ke Indonesia dengan tingkat 72% dari keseuluruhan negara yang melakukan impor ke Indonesia. Hasil analisis regresi data panel menunjukkan bahwa tarif impor,harga kedelai impor dan kuota batasan berpengaruh terhadap nilai impor kedelai di Indonesia. Sedangkan variable nilai tukar dan jarak ekonomi tidak berpengaruh terhadap nilai impor kedelai di Indonesia. Implementasi kebijakan kedelai Indonesia diharapkan dapat membantu tercapainya swasembada kedelai dan dapat mengurangi ketergantungan impor kedelai dari negara-negara penghasil kedelai di dunia. Untuk membantu dalam mewujudkan swasembada kedelai, pemerintah Indonesia telah mengeluarkan kebijakan yaitu perluasan lahan, penyediaan bibit unggul dan teknologi. Selain itu, pemerintah dalam negeri perlu melakukan kebijakan proteksi dengan pemberlakuan kebijakan tarif masuk bagi kedelai impor yang akan memasuki wilayah Indonesia.*

Kata kunci: *kedelai Indonesia, perdagangan internasionak, pengaruh impor, kebijakan kedelai, implementasi kebijakan*

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INTRODUCTION

Domestic trade and foreign trade for agricultural commodities, which include the plant sub-sector food, horticulture, plantation and animal husbandry still have the potential to continue developed. According to Cavallo et al. (2023) Indonesia has great potential to double export gains various agricultural commodities on the one hand, and suppress imports, especially agricultural commodities that can be cultivated domestically. A country imports goods when the country cannot produce those goods with the lowest absolute loss or has no comparative advantage over these goods. Indonesia's soybean trade balance with Malaysia and Canada has experienced a deficit for the last seven years (2017–2023), while with USA it has experienced a surplus. The increase in imports varies and tends to increase, with an average growth rate of 18.4 percent per year, making it impossible to cover the domestic supply of soybeans where supply has not been able to meet the level of public consumption. This can be seen in Figure 1.

According to the graph, the level of dependence on Indonesian soybean imports tends to increase from year to year. The average import of soybeans in Indonesia per year is 2,576,619 tons. Indonesia's soybean demand increases every year, but local soybean production is decreasing from year to year. The biggest imports occurred in 2021 with import figures of 2,670,086 tons. Soybean products such as tempeh, oncom, tauco, tofu and soy sauce are widely consumed. As a result, soybean raw materials play a strategic role in meeting national food needs. According to Sihotang et al. (2020) the increase in national soybean consumption has not been met by domestic soybean production, where domestic soybeans can only contribute around 30% to national soybean consumption. Based on data on world soybean exports, it appears that five countries dominate soybean exports in the world. The countries with the largest export Value in the world are the United States, Canada, Argentina, Brazil and Malaysia. The Import Volume of soybean exports from these countries can be seen in the following Figure 2.

Based on the Figure 2, it can be seen that the United States is in first position as the largest soybean exporting country to Indonesia. The share of United States soybean exports to Indonesia is very large, reaching 72% of all imported soybeans in Indonesia. This will help the Indonesian government meet its country's soybean needs. For now, Indonesia still needs soybean imports to meet people's needs. This import was not carried out because the quality of soybeans produced in the country was not good. However, domestic soybeans are not suitable for other processed production. And other reasons such as Indonesia not being able to meet national needs.

The national soybean problem is Indonesia's dependence on other countries in meeting domestic soybean needs. The existence of an imbalance between production and consumption of national soybeans resulted in the existence of an import deficit that remained high. The high import of soybeans can be influenced by one of them is per capita income, because by increasing per capita income the purchasing value of the community will also increase. This per capira income ultimately increases people's purchasing power and causes the value of soybean imports to increase every year. Factors of affect the Value of soybean imports in Indonesia in the short term are previous soybean imports, US soybean prices, the Rupiah exchange rate which has a negative effect on the value of Indonesian soybean imports and the price of Argentine soybean oil which has a positive effect on the value of Indonesian soybean imports.
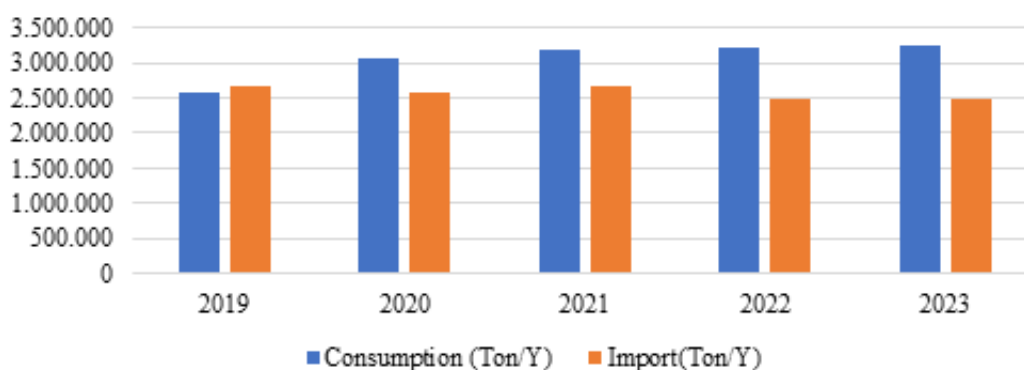

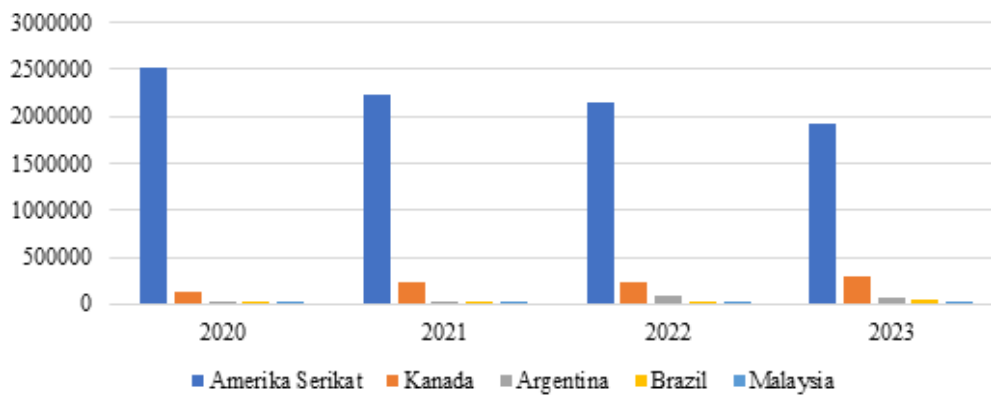Figure 1. Indonesian consumption and import soybean 2019 - 2023

Figure 2. Soybean import volume from the main country (2020–2023)

A country whose production is less than its consumption can fill the shortfall by buying from other countries. This context is the original terminology of import. Of course, to meet the demand for soybeans, the government implemented a policy of importing soybeans from the international market to overcome this vacancy. The figure shows that soybean imports tend to continue to increase to meet national soybean consumption. The main reason for soybean imports is low domestic soybean production. In international trade, export and import activities are one of the most important factors for increasing economic growth.

Many Indonesian importers bring in soybeans from the United States because of the price difference. The increase in population, consumer preferences for imported soybeans and the development of soybean raw material industries have resulted in the availability of domestic soybeans being filled by import activities. Based on previous research Malik et al. (2020) and Ningrum et al. (2018) about soybean trade and Factors affecting the import of soybean in Indonesia, the research show that the macroeconomic conditions directly affect soybean production and consumption. On the other hand, consumption has a direct effect, but production does not directly affect soybean imports. Macroeconomic conditions do not have a direct effect on soybean imports. Nevertheless, the total effect (combined direct and indirect effects) of macroeconomic conditions on soybean imports is significant. In addition, Consumption is positively influenced by imports and production, while production is influenced positively by consumption and negative by imports. So, the research will examine the level of Indonesian soybeans, factors of soybean import, and

soybean Indonesia policy. The purposes of the research are 1) to analyze Indonesian soybean imports in the world soybean export market, 2) to analyze the factors that influence the value of Indonesian soybean imports and 3) to analyze Indonesian soybean import policies.

METHODS

The method used in this research is a descriptive method and quantitative method. Quantitative methods used in this study include the Gravity Model of Panel Data Regression. The time series data used in this study are for the last five years, namely from 2017–2023. As well as cross section data from 5 countries, namely the United States, Argentina, Malaysia, Singapore, and Canada. The commodities studied only included soybeans with HS code 1201 (soybeans). The use of the four-digit HS is intended to describe the overall demand for Indonesian soybean imports. The data and data sources used in this study can be seen in Table 1.

The gravity model of panel regression is used to estimate the factors that affect soybean imports in Indonesia. The dependent variable in the panel regression model is the value of soybean commodities imported into Indonesia. Then, the independent variables in this study were obtained from various references both in the form of research results and based on the theory of each variable that had been found. An initial model estimation was carried out. Mathematically, the equation of the panel data regression model is as follows:

$$LnVIMP_{it} = Ln\beta0 + Ln\beta1PM_{it} + Ln\beta2ER_{it} + Ln\beta3EcDist_{it} + Ln\beta4MTar_{it} + Ln\beta5DRM_{it} + Ln\mu$$

Description: β0 (intercept); VIMPit (Value of soybean imports from country of origin i year t (tons)); PMit (Price of soybean imported country of import i in year (USD/ton)); ERit (The real exchange rate of the rupiah against the US Dollar in year t(Rp/USD)); EcDisit (Indonesia's economic distance to the country of origin of imports i year t (km/USD)); MTarit (Soybean import tariffs in year t (percent)); DRMit (Dummy variable (Year of import restriction)); µ (error (influence of other variables not included in the model)).

Soybean is an agricultural commodity that encourages the development of Indonesia's economic sector, creating jobs for the community and boosting the economy. More than 90% of soybeans in Indonesia are used for food, especially in food processing, namely, 88% is used for processing tofu and tempeh, 10% for other food processing, and around 2% for grains, so the soybean must be analyzed how the level of soybean competitiveness comparatively and competitively.

Comparative advantage examines that even if a country is less efficient than other countries in producing both goods, it can still trade because both parties benefit from it. According to De Maria et al. (2020) when there are differences in the prices of goods between two countries for similar goods, international trade will not occur because the prices of similar goods will be the same in both countries. Competitive advantage measures the operating probability of prevailing market prices. According to Norberg and Deutsch (2023) competitive advantage is the value created by producers for consumers that exceeds the cost of production.

The Indonesian Imports are carried out not because the quality of soybean production in Indonesia is not good, but because domestic soybeans are not suitable for the production of processed products. There are several factors that influence Indonesia's soybean imports, namely the price of imported soybeans, the rupiah exchange rate, import tariffs, and economic distance.

According to Figure 3, There are 3 main topics: competitiveness, factors of import value and soybean policy. In addition, the research has some hypothesis such as: 1) Import price, import restriction and import tariff have affect significantly with the value of import; 2) Economic distance and exchange rate don't have affect significantly with the value of import.

Table 1. Data Types and Sources

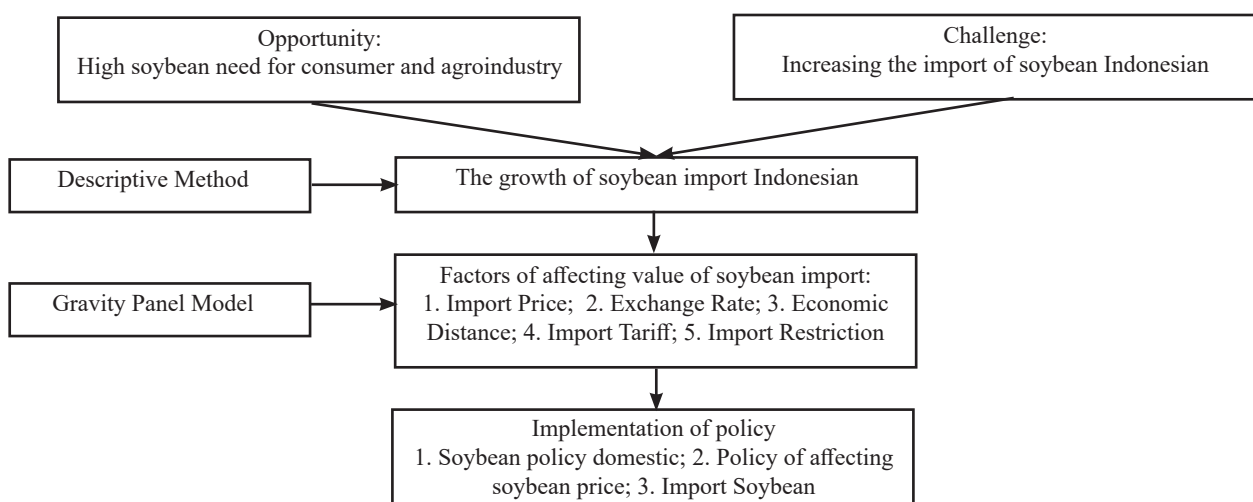| Data Type	Source
Import Value of Indonesian soybean commodities	UNComtrade
Prices of imported soybeans	UNComtrade
Exchange rate	World Bank
Economic Distance	ITC
Import tariffs	Ministry of Trade

Figure 3. Framework of soybean trade

RESULTS

Soybean Exporting Countries in Indonesia

In international trade, export and import activities are one of the most important factors for increasing economic growth. Exports are one of the sources of foreign exchange that are urgently needed by countries with open economies, because exports can work widely in various countries and will allow an increase in the amount of production that encourages economic growth so that it is expected to make a major contribution to the growth and stability of the country's economy.

Based on data on world soybean exports, it appears that five countries dominate soybean exports in the world. The countries with the largest export volume in the world are the United States, Canada, Argentina, Brazil and China. In Indonesia alone the largest soybean exporting countries in 2021 are from the United States, Canada, Argentina, Malaysia and Singapore.

Based on Table 2, it can be seen that the United States occupies the first position as the largest soybean exporting country to Indonesia. The share of US soybean exports is very large in Indonesia, reaching 72% of all soybean imports in Indonesia. This is able to assist the Indonesian government in meeting the needs of soybeans in the country.

According to Kahar et al. (2023) some countries has an open economic system but production can not fulfill consumption. A country with less production than its consumption side can fill the gap by buying from other countries. This context is the initial terminology of imports. Of course, in order to meet the demand for soybean consumption, the government implemented a policy of importing soybeans from the international market to overcome this gap. From the figure it can be seen that there is a tendency for soybean imports to continue to increase to meet national soybean consumption.

According to Baroh et al. (2022), low domestic soybean production is the main factor causing high soybean imports. Taking into account the large domestic demand for soybeans for industrial supplies (tofu, tempeh, soy sauce, etc.) which produce food for the majority of the Indonesian population, and imports of soybeans which continue to increase, various government efforts should be directed at increasing domestic soybean production. and reducing soybean imports, which naturally consume a lot of the country's foreign exchange.

Soybean consumption of the Indonesian people continues to increase significantly every year, but the conditions that occur in the field show that soybean production is declining and imports are increasing. It is very unfortunate to see the market opportunity is quite large. As Indonesia's population and soybean consumption increase, farmers must be able to increase production so that imports can be limited. This condition forces the government to import soybeans to meet domestic needs.

The national soybean problem is Indonesia's dependence on other countries to meet domestic soybean needs. The existence of an imbalance between production and consumption of national soybeans resulted in the existence of an import deficit that remained high. The high import of soybeans can be influenced by one of them is per capita income, because by increasing per capita income, the purchasing value of the community will also increase. This per capita income ultimately increases people's purchasing power and causes the value of soybean imports to increase every year.

Table 2. Indonesian soybean import data by country of origin

Country of origin	Year (Tons)	
	2022	2023
United States of America	1,085,373,558	1,262,399,244
Canada	160,973,011	172,965,903
Argentina	2,016,700	2,388,300
Singapore	4,709	5,493
Malaysia	4,190,204	4,397,624

Source: Un Comtrade 2023, processed

The soaring price of soybeans last year forced tempeh and yearly producers to stop their production for some time. The increase in the price of soybeans, the main raw material for making tempeh and tofu, occurred because most of these commodities came from imports and followed developments in world prices. Soybean prices rose by around 30% from the range of IDR 6,000–7,000 per kilogram to IDR 8,000–9,000. The impact of the price of tempeh and tofu on consumers could be more expensive or smaller in size. Economically, people like tempeh and tofu because they are affordable sources of vegetable protein derived from plants.

The high price of soybeans occurs because the supply of local soybeans cannot meet market demand, and this has been happening for years. Indonesia has also been importing soybeans since the import license was issued after the 1998 monetary financial crisis or more than 20 years ago.

The productivity of local soybean farmers is low due to various factors, making it quite complicated to fix. For example, the soybean planting area continues to decrease due to land conversion. Currently, there are only about 680,000 hectares of land for soybeans growing, whereas what is needed to meet domestic demand requires at least 2.5 million hectares.

In addition, farmers also face local soybean prices which they consider to be low at harvest, this is because the high costs of growing soybeans make farmers' profits even thinner. Then another reason is that local soybeans have low productivity, influenced by the climate in Indonesia. Soybean is a sub-tropical plant. This plant gets daily and seasonal temperatures that are more diverse than the tropics, so its growth in the tropics is not optimal.

Factors of The Effect Import Indonesian Soybean in World Trade of The Main Country

Analysis of the factors that Indonesian soybean imports from countries of origin of soybean imports is analyzed using panel data regression using the gravity model approach. The independent variables tested were the price of imported soybeans, the GDP of the importing country, the exchange rate, import tariffs, economic distance, and the dummy variable which in this study was the year of import restrictions. According to Mardiyati et al. (2023) import is a policy that contradicts the government's efforts to achieve self-sufficiency in a particular commodity. The existene of imports originates from a gap or discrepancy between the amount produced domestically and the total domestic consumption of a particular commodity.

Indonesia's dependence on soybean imports is caused by several factors, namely, low local soybean productivity. Based on world soybean productivity data in 2019–2023, the country with the highest average soybean productivity are Turkey (43.55 ku/ha), Italy (36.05 ku/ha), United States (33.40 ku/ha) and Brazil (31.14 ku/ha). Meanwhile, Indonesia is relatively low and only ranks 60th in the world, on average amounting to 14.88 ku/ha or not exceeding half of the US as the world's largest producer. The latest data also still shows this the same, where soybean productivity in Indonesia is around 1.5-2 tons/ha while productivity in the US reaches 4 tons/ha.

The selection of the best model is Fixed Effects Model (FEM). From the estimation results of the model, the factors that influence the value of soybean imports in Indonesia by using the panel data regression model and using the gravity model approach of Panel Data, the results of the model are presented in the following Table 3.

From the estimation results of the model of the factors that influence Indonesian soybean imports, the following equation is obtained:

Ln VIMPit = Ln 2.165377 + 12.51324 Ln Pm_{it} - 15.24105 $LnER_{it}$ - 6.115924 $LnEcDis_{it}$ -3.508221 $LnMTar_{it}$ -18.19246 $LnDRMi_{it}$ + μ.

Based on the estimation results, the factors that affect the value of imports of Indonesian soybeans, it can be seen the variable of import tariff and import restriction dummy affect significantly with importing value Indonesian soybean in the world trade. In addition, soybean import price, exchange rate and economic distance don't affect significantly with importing value soybean.

Table 3. Model estimation of factors affecting indonesian soybean value imports

Variables	Coefficient	std. Error	t-Statistics	Prob.
LnC	2.165377	188127.3	2.111258	0.0005
LnPMit	12.51324	33587.15	0.090408	0.0000
LnERit	-15.24105	62111.81	-0.142844	0.3645
LnEcDisit	-6.115924	5.21E+77	-0.002437	0.9210
LnMTarit	-3.508221	38264.28	-2.325279	0.0000
LnDRMit	-18.19246	28837.2	-4.126621	0.0000
Root MSE	2.3554713	R-squared		0.903415
Mean dependent	1.78E+21	Adjusted R-squared		0.905432
Sd dependent vr	1.84E+35	SE of regression		29.281157
Akaike criterion	42.21311	Sum squared residue		2.2472674
Schwarzcriterion	41.87712	Likelihood logs		168.92281
Ha-Quinn criter.	27.82313	F-statistics		39.11387
D, Watsonstat	1.321157	Prob(F-statistic)		0.000000

The import tariff and import restriction tariff affect importing value of soybean Indonesia significantly. For Example, It can mean that if import tariff soybean increase 1%, the value of soybean import Indonesian will decreasing 3,508221% , so it will reduce the Value of soybean imports in Indonesia. This is due to the increasing consumption of soybeans in the country, therefore the country will reduce its export Value and will prefer to fulfill its domestic consumption of soybeans. the increase in import tariff will causes the decreasing in soybean consumption import in Indonesian, therefore the country will reduce its export Value because it is more inclined to meet domestic consumption on the assumption that soybeans are normal goods.This is also supported by the results of research from Hulu (2023), which states that, if import tariff increases, the decreasing of demand soybean import will be followed.

In addition, The Indonesian government responded to the tendency to increase the flow of soybean imports by taking anticipatory steps in the form of implementing a policy of limiting soybean imports into Indonesia. Unfortunately, this policy was not accompanied by intensive efforts to increase domestic soybean productivity. As a result, it was found that the implemented import restriction policy could not last long and did not have a significant and sustainable positive impact. According to Montania et al. (2023) the existence of government regulations regarding the imposition of tariffs or import duties will result in an increase in the price of imported soybeans, because exports consider the additional costs imposed so that

the demand for imported soybeans will also decrease so import tariff and import restriction soybean have significant by importing value soybean. According to Haryanto et al. (2019) with this import restriction regulation, Indonesia can reduce significantly soybean imports each year According to Wang et al. (2022) it is also cannot be achieved if consumers do not have substitute goods for processed soy foods, so with the enactment of this regulation it is also hoped that consumers will be able to support these existing regulations.

Soybean import price, exchange rate and economic distance don't significantly affect with importing value soybean. The price of imported soybeans will be cheaper than domestic soybean prices from 2019 to 2022. Under conditions of increasing imported soybean prices, they will still be cheaper than domestic soybean prices. This makes the government continue to import soybeans from other countries on the international market. So if there is an increasing in the price of imported soybeans, it will still be cheaper than the price of domestic soybeans. When it happen, the exchange rate will be weak so exchange rate also does not significant. According to Simanjuntak et al. (2017) in the long- run, soybean price is the only one that reacts to correct equilibrium. This is reasonable since oil and meal have huge markets. Moreover, several possible substitutes can easily switch the demand of these joint products. If there is a shock, the soybean price returns to equilibrium at 31% each month. However, this adjustment speed is not as quick as expected.

The economic distance calculation used has a geographical distance component, a proxy for transportation costs. the Value of imports of soybean from the main exporting countries.The farther the distance from the country of origin of Indonesian commodity or soybean imports can reduce domestic soybean imports. This is due to the transportation costs being to be greater.

Managerial Implications

Based on estimation result the factors that affect the Value of imports of Indonesian soybeans, it can be seen the variable of soybean import price, import tariff and import restriction dummy significantly affect with importing value Indonesian soybean in the world trade. In addition, exchange rate and economic distance don't affect significantly with importing value soybean. These results provide policy recommendationsto help achieve itsoybean self-sufficiency and can reduce dependence on imports soybeans from producing countriessoybeans in the world. First, it's best the government issues policy order to realize improvements soybean production and productivity. Making this happen, several steps can be taken, including expanding planting land soybeans (extensification) with utilize fallow lands and sleeping land to be realized immediately as commodity farming land soybean. According to Malik et al. (2020) there are efforts to prevent decline agricultural land, especially for land soybean farming for maintain existing land. Besides Therefore, there needs to be an intensification program on the soybean commodity.

Facilitating agrotechs must find a superior soybean seed that can grow well in the country, such as quality soybeans abroad, and facilitate a lab to test these varieties. At the same time counseling domestic soybean farmers and fully supporting this program. According to Adam et al. (2023) the level of production and productivity achieved varies greatly, depending on the land area and the application of technology as related to the discussion on technological aspects in the previous section.

Imported soybeans have the quantity and quality higher than the quantity and quality local soybeans. Increasing productivity soybeans can be done with some steps provision of technology and superior seeds as well as the availability of quality fertilizer. To produce superior seeds, the good seed industry must be strengthened in terms of provision and research. It is an absolute requirement to produce soybeans greater than previous it. According to Setyawan et al. (2022) increasing soybean productivity also needs to be done, an example of its implementation is with the government providing superior technology and seeds as well as the availability of quality fertilizers. producing of superior seeds, it is necessary to strengthen the seed industry both in terms of supply and research that will support the creation of high quality soybean seeds.

In Addition, subsidizing output to offset prices Imported soybeans are relatively cheaper. It will create an incentive accepted by farmers becomes more feasible. One of the incentives farmers receive in running farming businesses soybeans is the price. Price becomes signal for farmers to decide whether to plant soybeans or not. According to Septiadi et al. (2019) and Kata et al. (2020) price Imported soybeans are relatively cheaper becomes a dis-incentive for farmers, moreover if it is related to the trade off of planting more other plants profitable.

After increasing domestic soybean production, the government needs to do its protection policy with enforcement import duty tariff policy for soybeans imports entering Indonesian territory. This results in increased prices of imported soybeans, so soybean importers will reduce soybean imports from the market internationally. These conditions will stimulate farmers' interest in producing domestic soybeans. It is similarity with the research of Da Silva et al. (2022) that explain the domestic government needs to carry out a protection policy by imposing an import tariff policy for imported soybeans that will enter Indonesian territory. This will cause the price of imported soybeans to increase, so that soybean importers will reduce soybean imports from the world trade.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Domestic soybean production is only able to meet domestic demand of no more than 15%. Therefore, most of the domestic demand for soybeans, namely 86.95%, must be met from imports. Five countries dominate soybean exports in the world. The countries with the largest export volume in the world are the United States, Canada, Argentina, Brazil and China. In Indonesia alone the largest soybean exporting countries

in 2021 are from the United States, Canada, Argentina, Malaysia and Singapore. This shows that there is a gap between soybean production and consumption which greatly influences the fulfillment of national soybean availability.e achieved or not.

Based on estimation result the factors that affect the Value of imports of Indonesian soybeans, it can be seen the variable of import tariff and import restriction dummy affect significantly with importing value Indonesian soybean in the world trade. In addition, soybean import price, exchange rate and economic distance don't significantly affect with importing value soybean.

The main factor causing high soybean imports is low domestic soybean production.Taking into account the large domestic demand for soybeans for industrial supplies (tofu, tempeh, soy sauce, etc.) which produce food for the majority of the Indonesian population, and imports of soybeans which continue to increase, various government efforts should be directed at increasing domestic soybean production. and reducing soybean imports, which naturally consume a lot of the country's foreign exchange.

The effect the Value of imports of Indonesian soybeans, it appears that the price of imported soybeans is positively related to the Value of imports of Indonesian soybeans. However, this variable has no significant effect on the Value of soybean imports from Indonesia. The estimation results provide policy recommendations to help achieve soybean self-sufficiency and reduce dependence on soybean imports from soybean-producing countries in the world. First, it would be better if the Indonesian government issued a policy or regulation in order to increase domestic soybean production. Facilitating agrotechs must find a superior soybean seed that can grow well in the country, such as quality soybeans abroad, and facilitate a lab to test these varieties.

Recommendations

The government continues to strive to ensure that meeting national soybean needs does not always depend on imports. Efforts made include encouraging farmers to use superior seeds and expanding soybean planting area In addition, more in-depth research is needed by formulating a modelmore complete and other policy simulations of factors that influence national soybean production and consumption to increase comprehensive, such as a policy simulation of increasing national soybean prices,policy simulation to increase the area of soybean harvest and others.

The Indonesian government also must be able to integrate between domestic policies in managing the domestic agricultural market with foreign policy, in this case the WTO agreement. This is carried out by the government to face negotiations multilateral trade that will take place so the government can protect soybeans without a loss, both the Bulog institution, farmers and the community.

CONFLICTS OF INTEREST: The authors declare no conflict of interest.

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