

Factors Influencing Rice Import Activities in Indonesia

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ABSTRACT

Rice is a very important commodity because it is consumed by the majority of the Indonesian population. Apart from being a source of carbohydrates, two-thirds of the calorie needs are obtained from rice. Rice is one of the most needed foods and is used as a staple food in Indonesia. It is undeniable that from the past and even in the future, humans need food to survive. The type of research used is Quantitative, namely the research method is a scientific approach to economic decisions. Based on the analysis and discussion of research results using multiple linear regression tests regarding the analysis of factors influencing rice imports in Indonesia, it can be concluded as follows: 1) The results of the study show that local rice variables, rice production and population partially have a significant effect on imports rice in Indonesia; 2) The results of the study show that the variables of local rice, rice production and population together have a significant effect on rice imports in Indonesia; 3) The results of the study state that the variables of rice consumption, rice stocks, domestic rice prices, and international rice prices have a positive and significant influence on rice imports in Indonesia with a confidence level of a 95%. Meanwhile, food is a very important term for agriculture, because food is one of the most basic human needs. Therefore, food scarcity can lead to economic vulnerability and social unrest.

Keywords : *rice; import; policy.*

INTRODUCTION

Rice is a very important commodity because it is consumed by the majority of the Indonesian population. Apart from being a source of carbohydrates, two-thirds of the calorie needs are obtained from rice. Rice is one of the most needed foods and is used as a staple food in Indonesia. It is undeniable that from the past and even in the future, humans need food to survive. Food has become a primary human need that must be met before meeting other necessities of life such as clothing, shelter and education. A very important food commodity for the Indonesian people is rice, especially because: (1) rice is the main food and source of calories for most of the Indonesian people, namely more than 90 percent of the total population in Indonesia; (2) rice farming provides employment for 21 million farming families and: (3) around 30 percent of the total expenditure of poor households is used to buy rice (Bangun, 2007). In addition, the share of rice in total calorie consumption is 54.3 percent and contributes 40 percent to protein intake (Arif Abdul Aziz, 2006).

Rice production in Indonesia makes Indonesia the third rice producing country in the world after China and India. Based on forecast figures (ARAM) II of the Central Bureau of Statistics (BPS), rice production in 2012 reached 69.056 million, an increase of 3.3 million tonnes from the 2011 production achievement of only 65.756 million tonnes. With the increase in production that Indonesia has achieved, it is not impossible for Indonesia to become the largest rice exporter. However, with the very high level of rice consumption in Indonesia, this still cannot be realized. Even so, Indonesia cannot be separated from rice imports. However, rice imports are attempted not to be too large considering there are things that deserve attention. First, the international rice market is a thin market, so it tends to fluctuate in terms of price and quantity traded. Second, rice imports are expected to make farmers lose money because it will make rice prices fall. It is feared that this price drop will eventually make farmers stop rice production and divert their resources to other commodity production.

Bearing in mind the above, achieving self-sufficiency in rice has always been a priority for the government in its agricultural development policies. The rice self-sufficiency policy is one of the main policies for agricultural development and is considered to have succeeded in increasing rice production and farmers' income. On the other hand, farmers as rice producers expect that the price of rice is high enough so that they can get a decent profit. A reasonable level of profit for farmers is needed because this will be an incentive for farmers to continue doing rice farming and support the rice self-sufficiency policy. The government is considered inconsistent with a number of policies issued regarding import bans and the determination of import duty tariffs on rice. Weaknesses in the data seem to have raised

concerns about guaranteeing food safety so that rice imports are still being carried out amid policies that prohibit imports (Sulastrri Surono, 2006).

Various policies in rice farming that have been adopted by the government are basically not in favor of the interests of farmers. This can be seen from: (1) the policy of low rice import tariffs, thus encouraging a flood of imported rice that exceeds domestic demand; (2) Elimination of fertilizer subsidies which are strategic production facilities in rice farming; (3) The government still uses inflation indicators to control food prices, by depressing rice prices at the wholesale trade level; and (4) post-harvest technology at the farm level is far behind, so the yield rate and quality of rice produced continues to decline (Dian Eko Prasetyo, 2011). However, the government's policy of importing rice is also very reasonable. This is done by the government to meet food needs in Indonesia and also to maintain reserves of rice stocks in Indonesia. By importing rice does not mean that Indonesia has failed to achieve self-sufficiency. This is done to maintain reserves, considering that Indonesia's population currently reaches 244,775,796 people. However, the current uncertainty threatens world food security. The trend of world population also contributes to price volatility related to food availability. For this reason, domestic food availability and self-sufficiency must be achieved (Dian Eko Prasetyo, 2019).

Bulog is an institution formed by the government to control price stability and supply basic commodities, especially at the consumer level. In order to be able to meet food needs in Indonesia, which has the fourth largest population in the world. Bulog's role was further expanded by controlling producer prices through basic price instruments to protect rice farmers. Indonesian people's rice consumption can be said to be high because at the end of 2012 rice consumption reached 102 kg per year. While the average consumption of rice every year in the world is only 60 kg. Indonesian people's per capita consumption of rice is acceptable because rice is the staple food of Indonesian citizens. What the government has done to meet its domestic rice needs is by importing rice from countries with low rice import duties.

Government policies in rice production and trade continue to be controversial because of the nature of the commodity rice which is closely related to macroeconomic stability, especially inflation, food security, unemployment and poverty. Indonesia continues to strive to increase domestic rice production and manage national rice stocks for emergencies and price stabilization purposes. Domestic rice production is very important to avoid the high risk of price volatility and rice supply from the world market, besides being closely related to efforts to eradicate poverty and rural development. So it is the government's duty to establish policies that will guarantee food security and rice self-sufficiency policies in Indonesia. The government's final decision regarding rice imports at this time cannot be separated from the problem of the government's partiality towards farmers, who in fact are the majority of our country's population and are generally poor. Real alignment is more important than grandiose concepts and promises that don't work. The government must be careful in a sensitive situation like this, lest suspicions emerge that the plan to import rice is actually nothing more than an attempt to rob the state of money by using Bulog as a vehicle, as has often happened in the past.

METHOD

The type of research used is Quantitative, namely the research method is a scientific approach to economic decisions. This method approach departs from data and then it is processed into valuable information for decision making (Sugiyono, 2019). This study intends to see what factors influence rice import activities. This research is located in Bulog, data obtained from PT Bulog and BPS to determine rice imports, prices, production and population. The data collection method in this study was through library research (data collection was done by reading various literature books related to the discussion in this research) and the data obtained from the field was in the form of documents. In this study the analytical method used is the panel data regression analysis model with the help of SPSS software, and to determine the significance level of each independent variable regression coefficient (local rice price, rice production and population) to the dependent variable (rice imports) (Ghozali, 2019).

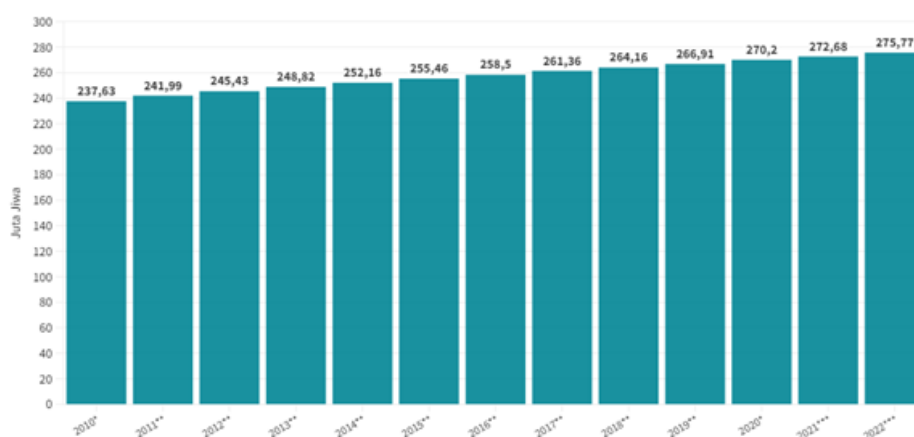
RESULT

Overview of Indonesia and Agriculture

Total Population of Indonesia

Indonesia is the country with the fourth largest population in the world. The population in Indonesia has continued to increase over the past decade. Based on data from the Central Statistics

Agency (BPS), Indonesia's population is projected to be 275.77 million people in 2022. This number has increased by 1.13% compared to last year's 272.68 million people. According to age, 69.25% of Indonesia's population is in the age range of 15-64 years. As many as 24% of the population is aged 0-14 years. Then, 6.74% of the population is aged 65 years and over. As the population increases, the population density also increases. This year, the population density in the country is projected to be 143.86 people/km². Furthermore, BPS projects that the number of births will reach 4.45 million people in 2022. This figure has increased by 0.22% from last year's 4.44 million people. Meanwhile, the number of deaths is projected at 1.73 million people in 2022. The number has also increased by 2.76% compared to the previous year of 1.68 million people (Monavia Ayu Rizaty, 2022).



Source: Central Statistics Agency Indonesia

Figure 1
Total Population of Indonesia

Agricultural Conditions in Indonesia

In general, the notion of agriculture is a human activity which includes food crop farming, plantations, forestry, horticulture, animal husbandry and fisheries. The history of Indonesia since the colonial period until now cannot be separated from the agricultural and plantation sectors, because these sectors have a very important meaning in determining the formation of various economic and social realities of society in various regions of Indonesia. Most people's livelihoods in Indonesia are as farmers and plantations, so these sectors are very important to be developed in our country.

Forms of agriculture in Indonesia, namely:

- 1) Rice fields. Rice fields are a form of agriculture carried out in wetlands and require a lot of water, both irrigated rice fields, lebak rice fields, rainfed rice fields and tidal rice fields. Which is now almost extinct.
- 2) Moor. Moorland is an area with dry land that depends on rainwater irrigation, planted with seasonal or annual crops and separated from the environment around the house. Upland land is difficult to make irrigation irrigation because of the uneven surface. During the dry season, the dry land will be dry and difficult for agricultural crops to grow.
- 3) Yard. Yard is a piece of land that is inside the house (usually fenced and enters the house area) which is used for planting agricultural crops.

Table 1
Test Results t

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.381	.862		1.603	.115
X1	.372	.142	.381	2.609	.012
X2	.332	.155	.257	2.142	.037
X3	.292	.125	.319	2.347	.023

Source: processed data

The results showed a significant value of 0.012 when compared to the significance level α (0.05), indicating a significance value greater than the significance level ($0.012 > 0.05$) so that H_0 was rejected H_a was accepted, thus there was an effect of local rice prices on rice imports in Indonesia. Based on the results of this study, rice prices have a significant but significant effect on rice imports. In theory, the price of rice is positively related to rice imports, as according to David Hume's mercantile view, an increase in domestic prices will certainly result in an increase in the price of exported goods, so that export volume will decrease. On the other hand, the price of imported goods is lower, so that the volume of imports increases. Based on the theory described above, in this study it can be emphasized that this research does not support this theory.

The results showed a significant value of 0.037 when compared to the significance level α (0.05), indicating a significance value greater than the significance level ($0.037 > 0.05$) so that H_0 was rejected H_a was accepted, thus there was an effect of rice production on rice imports in Indonesia. Based on the results of this study, rice production has a significant and significant effect on rice imports. This is in accordance with previous research conducted by Edward Christianto. 2013, regarding the factors that affect the volume of rice imports in Indonesia, using the variables rice imports, rice production, world rice prices, rice consumption. The results of the analysis show that rice production during this period has a significant effect on the volume of rice imports in Indonesia (Edward Christianto, 2013).

The results showed a significant value of 0.023 when compared to the significance level α (0.05), indicating a significance value smaller than the significance level ($0.023 < 0.05$) so that H_0 was rejected H_a was accepted, thus there was an influence on population size on rice imports in Indonesia. Previous research conducted by I Kadek Agus Dwipayana and Wayan Wita Kesumajaya 2014 examined the effect of prices, foreign exchange reserves, and population on Indonesian rice imports for the period 1997-2012. Variables consist of Imports, World Rice Prices, Foreign Exchange Reserves, and Total Population. The research results from I Kadek Agus Dwipayana and Wayan Wita Kesumajaya show that the population variable has no effect on rice imports in Indonesia in the period 1997-2012 (I Kadek Agus Dwipayana dan Wayan Wita Kesumajaya, 2014). This is contrary to the results of research showing that there is an effect of population on rice imports in Indonesia.

Table 2
F Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	209.819	3	69.940	102.002	.000 ^b
Residual	37.026	54	.686		
Total	246.845	57			

Source: processed data

The results of the simultaneous test stated that the local rice price variable (X1), rice production (X2), and population (X3) had an effect on rice imports (Y) simultaneously/together, showing the results of the Fcount value of 102.002 with a significant F of 0.000 or less than 0.05 (5%), thus rejecting H_0 and accepting H_a . These results state that simultaneously all independent variables, namely local rice price variables (X1), rice production (X2), and population (X3) have a significant effect simultaneously on rice imports in Indonesia (Y). This is consistent with previous research conducted by I Kadek Agus Dwipayana and Wayan Wita Kesumajaya 2014 which examined the Effect of Prices, Foreign Exchange Reserves, and Population on Indonesian Rice Imports for the period 1997-2012. Variables consist of Imports, World Rice Prices, Foreign Exchange Reserves, and Total Population. The results of this study indicate that simultaneously prices, foreign exchange reserves, and population have a significant effect on rice imports in Indonesia in the period 1997-2012 (I Kadek Agus Dwipayana dan Wayan Wita Kesumajaya, 2014).

Table 3
Determinant Test Result

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.922 ^a	.850	.842	.828

Source: processed data

From the results of the regression that has been carried out using SPSS 17, the effect of the variable price of rice, rice production and population on rice imports in Indonesia is obtained with an R² value of 0.842. This means that the value of the coefficient of determination (R-squared) with the number 0.842 indicates that 84.2% of rice imports in Indonesia are influenced by the three independent variables (rice price, rice production and population) and the remaining 13.8% is influenced by other variables. The percentage of the coefficient of determination can be said to be strong because it is more than 50%.

CONCLUSION

Based on the analysis and discussion of the research results, it can be concluded that the variables of local rice, rice production and population partially have a significant influence on rice imports in Indonesia. Local rice variables, rice production and population together have a significant influence on rice imports in Indonesia. The variables of rice consumption, rice stocks, domestic rice prices, and international rice prices have a positive and significant influence on rice imports in Indonesia with a confidence level of α of 95%. Meanwhile, food is a very important term for agriculture, because food is one of the most basic human needs. Therefore, food scarcity can lead to economic vulnerability and social unrest.

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