

## Business and Policy Strategies in Rice Import Management: Lessons from Indonesia

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### ABSTRACT

Rice imports constitute a critical element of Indonesia's food security strategy, but prior research has predominantly addressed the economic determinants of import demand, with limited attention to the government's strategic management role. This study investigates the influence of domestic rice production, international rice prices, exchange rates, and population growth on Indonesia's rice imports from Thailand and Vietnam between 2004 and 2023 and analyzes the business and policy strategies employed to maintain national food security. By employing a mixed-methods approach, the research integrates panel-data regression using annual data from Thailand and Vietnam with semi-structured interviews conducted with policymakers. Quantitative results indicate that exchange rates and population growth significantly impact Indonesia's rice import volumes, whereas domestic rice production and international rice prices do not exhibit statistically significant individual effects. Qualitative findings reveal that rice import management extends beyond economic factors and is operationalized through three complementary government roles: facilitator, regulator, and catalyst. In the facilitator role, the government coordinates procurement, licensing, logistics, and food reserves; as a regulator, it oversees import quotas, quality standards, and compliance; and as a catalyst, it enhances institutional coordination and long-term food security through deliberate governance. By integrating econometric analysis with policymakers' insights, the study demonstrates that rice import decisions are shaped by both market dynamics and institutional capacities. The findings contribute to the business and public policy literature by presenting an integrated framework for strategic rice import management that advances national food security and supply chain resilience.

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## Introduction

Rice is a critical food commodity and the primary staple in Indonesia. Ensuring sufficient rice supplies constitutes a fundamental government responsibility. Domestic production frequently falls short due to factors such as variable weather, declining productivity, land conversion, and population growth. Consequently, Indonesia has become increasingly reliant on rice imports from Thailand and Vietnam to maintain food availability and stabilize prices. Import volumes increased substantially in 2011 (2.75 million tons), 2018 (2.25 million tons), and 2023 (over 3.0 million tons). In 2023, imports from Thailand reached approximately 1.40 million tons, while those from Vietnam totaled 1.15 million tons (UN Comtrade, 2025).

Rice imports have become a central component of Indonesia's national food strategy, rather than a temporary response to production shortfalls. From a business perspective, import decisions involve more than financial considerations. The government must determine purchase timing, select suppliers, manage stock levels, maintain emergency reserves, and respond to changing local and global conditions. Effective rice import management depends not only on market dynamics but also on the government's capacity to develop and implement sound business and policy strategies. Previous research has mainly examined the effects of domestic production (Permatasari, 2020; Juliashar et al., 2024; Karunanayake et al., 2025; Obayelu et al., 2025), international prices (Prinadi et al., 2016; Fitriani, 2020; Saidah et al., 2025), exchange rates (Putra, 2019; Wiseman et al., 2021; Salsabil, 2023), and population growth (Hyuha et al., 2017; Permatasari, 2020; Oktaviana et al., 2023) on rice imports. While these economic factors clarify important aspects of import demand, they offer only a partial view of the strategic policy processes guiding government decisions. In reality, import volumes are also influenced by institutional factors, including food reserve management, import regulations, bilateral trade agreements, market stabilization policies, and national food safety priorities.

This study aims to: 1) assess the impact of domestic production, international prices, exchange rates, and population growth on Indonesia's rice imports from Thailand and Vietnam between 2004 and 2023, 2) analyze the business and policy strategies used by the Indonesian government to manage rice imports and ensure food security, and 3) provide integrated insights into strategic rice import management by combining quantitative analysis with qualitative evidence from policymakers. The conceptual framework merges import demand theory with the perspective of government intervention. Import demand theory highlights the influence of domestic production, international prices, exchange rates, and population growth, reflecting the interplay between domestic supply and external market forces. Government intervention may take the form of a regulator, establishing trade regulations and import mechanisms; a facilitator, ensuring market access, coordinating stakeholders, and maintaining food reserves; or a catalyst, supporting long-term food security, market stability, and supply chain resilience (Nurdin et al., 2014). This study contributes to the business and management literature by examining the factors influencing imports and how governments strategically manage them. Using a mixed-method approach, quantitative panel analysis identifies economic drivers, while qualitative interviews reveal managerial and policy strategies. The findings are expected to help policymakers develop more adaptive food import strategies.

## Method

### *Research design*

This study adopts a mixed-method design using a convergent approach to investigate the business and policy strategies underlying Indonesia's rice import management. The quantitative analysis identifies the economic determinants influencing rice imports, while the qualitative analysis examines how government institutions formulate and implement business and policy strategies to maintain food security and market stability. The integration of these approaches provides a more comprehensive explanation of rice import management than either quantitative or qualitative evidence alone.

### *Data sources*

Panel data covering Thailand and Vietnam from 2004 to 2023 were utilized for quantitative analysis, resulting in 40 panel observations. Secondary data were collected from several official sources, including the United Nations Comtrade Database for rice import volumes, the Food and Agriculture Organization (FAO) for international rice prices, the World Bank and Bank Indonesia for exchange rate data, and the Indonesian Central Bureau of Statistics (BPS) for domestic rice production and population statistics. For qualitative analysis, semi-structured interviews were conducted with key stakeholders involved in rice import management. Informants were purposively selected due to their direct involvement in food import policy and strategic management. These informants included representatives from the Ministry of Trade and Perum BULOG. Purposeful sampling was employed to ensure that participants possessed substantial knowledge of Indonesia's rice procurement policies and strategic food stock management.

### *Quantitative analysis*

A quantitative panel dataset analysis was conducted to investigate the economic determinants of Indonesia's rice imports from Thailand and Vietnam. Panel data were utilized because they combine cross-sectional observations of exporting countries with time-series data from 2004 to 2023, enabling more efficient estimation and controlling for unobserved heterogeneity across countries. The dependent variable is the annual volume of Indonesia's rice imports from Thailand and Vietnam. The independent variables are domestic rice production (tons), international rice prices (USD), the Rupiah to US Dollar exchange rate (IDR/USD), and the Indonesian population (people). The empirical relationship is estimated using the following panel regression model:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + e_{it}$$

Where:

$Y_{it}$	= Volume of Indonesian rice imports from country $i$ (Thailand or Vietnam) in year $t$
$i$	= country (Thailand, Vietnam)
$t$	= time (2014-2023)
$\beta_0$	= constant
$X_1$	= domestic rice production (Tons)
$X_2$	= international rice price (USD)
$X_3$	= exchange rate (IDR/USD)
$X_4$	= population (people)
$\beta_1, \beta_2, \beta_3, \beta_4$	= regression coefficients

$e_{it}$  = Error term

Model selection followed standard panel estimation procedures, including the Chow test and the Breusch–Pagan Lagrange Multiplier test, to identify the most suitable estimator. Diagnostic tests for multicollinearity, heteroscedasticity, normality, and autocorrelation were then conducted to ensure model robustness. All quantitative analyses were performed with EViews 12.

### *Qualitative analysis*

Qualitative analysis was employed to examine the business and policy strategies underlying Indonesia's rice import management. Qualitative data were analyzed through thematic analysis. Interview transcripts were systematically coded to identify recurring themes in government strategies for rice import management. In line with the conceptual framework, the coding process emphasized three complementary government roles as regulator, facilitator, and catalyst. The identified themes were interpreted alongside the quantitative findings to explain not only the economic determinants of rice imports but also the strategic issues guiding government decision-making.

### *Research validity*

The validity of this study was established through methodological triangulation, integrating both quantitative and qualitative evidence. Diagnostic tests confirmed the validity and robustness of the econometric model. Qualitative findings were corroborated using data triangulation, which involved interviews with stakeholders from multiple government institutions responsible for rice import management. Interview transcripts were systematically reviewed, coded, and interpreted based on predetermined theoretical categories, while also allowing for the identification of emerging themes.

## **Results and Discussion**

### *Economic determinants of Indonesia's rice imports*

The results of standard panel-data model selection procedures indicate that the estimated regression model satisfies the econometric assumptions, thereby supporting the validity and robustness of the empirical findings. The Chow test results indicate that the null hypothesis cannot be rejected, suggesting that the Common Effects Model (CEM) is appropriate. The Breusch-Pagan Lagrange Multiplier (LM) test further supports selecting CEM as the most suitable specification for panel data analysis. Multicollinearity testing reveals that most independent variables exhibit weak to moderate relationships, indicating that multicollinearity is generally not a concern. However, the correlation between the exchange rate and population is 0.933, indicating multicollinearity (Table 1). According to Yoo et al. (2014), even in the presence of imperfect multicollinearity, the estimator remains BLUE.

Table 1. Correlation matrix

<b>Variables</b>	<b>X<sub>1</sub></b>	<b>X<sub>2</sub></b>	<b>X<sub>3</sub></b>	<b>X<sub>4</sub></b>
Domestic rice production	1.000	-0.004	-0.416	-0.269
International rice price	-0.004	1.000	0.511	0.705
Exchange rate	-0.416	0.511	1.000	0.933
Population	-0.269	0.705	0.933	1.000

Source: Processed data, 2025

The heteroscedasticity test demonstrated that the residuals were homoscedastic, indicating that the estimated standard errors are both unbiased and consistent. The Jarque-Bera test produced a p-value of 0.102, which suggests that the error terms are approximately normally distributed. For domestic rice production (p-value = 0.303), international rice price (p-value= 0.695), exchange rate (p-value= 0.762), and population (p-value= 0.486), all p-values exceed  $\alpha = 5\%$ , confirming the absence of heteroscedasticity in the model. Furthermore, the Durbin-Watson test resulted in a value of 1.867. Given 40 observations and four independent variables, the upper and lower bounds are  $dU = 1.720$  and  $dL = 1.284$ , with  $4-dU = 2.279$  and  $4-dL = 2.715$ . Since  $1.720 < 1.867 < 2.279$ , the model does not exhibit significant autocorrelation.

The regression model is statistically significant ( $F = 2.802$ ; p-value = 0.041), indicating that the selected economic variables collectively explain variations in Indonesia's rice import decisions. However, the model's explanatory power is relatively modest (Adjusted  $R^2 = 0.243$ ). The estimated coefficients indicate that only the exchange rate ( $\beta = -0.314$ ; p-value= 0.002) and population growth ( $\beta = 49,579$ ; p-value = 0.003) are statistically significant at the 5% level. While the relationships between domestic rice production, international rice prices, and the Rupiah exchange rate are not statistically significant, the negative coefficients align with import demand theory (Table 2).

Table 2. Results of panel data regression analysis

Variable	Koefisien	t- hitung	Prob.
(Constant)	-7593,861	-2.887101	0.0066
Domestic rice production	-11,83817	-0.818910	0.4184
International rice price	-1,252090	-1.551479	0.1298
Exchange rate	-0,314777	-3.214795	0.0028
Population	49,57982	3.161487	0.0032
<i>R-Square</i>	0,242578		
<i>Adj R Square</i>	0,156015		
F- count	2,802340		
Prob (F-count)	0,040567		
F- table	2,641465		
t-table	2,030108		

Source: Processed data, 2025

The insignificant effect of domestic rice production ( $\beta = -11.838$ ; p-value= 0.418) should be interpreted carefully. This does not mean domestic production is unimportant. Instead, it shows that production alone does not determine import decisions. This result is consistent with the findings of Prinadi et al. (2016), Ruslini (2022), and Anggraeni et al. (2023). Ruslini (2022) notes that even when domestic rice production increases, it may still fall short of the minimum rice reserve requirement. As a result, the government continues to import rice to ensure a stable domestic supply.

The absence of statistical significance for international rice prices ( $\beta = -1.252$ ; p-value= 0.129) indicates that Indonesia's rice import decisions are not driven solely by international price changes. Unlike many other traded commodities, rice is a strategic food directly linked to national food security and stability. This finding aligns with Christianto (2013) and Karuniatama & Purwiyanta (2023). The government may continue importing rice even as international prices rise if national reserves fall below target levels. Conversely, lower international prices do not necessarily lead to higher import volumes when domestic production and reserves are sufficient.

The Rupiah exchange rate has a statistically significant negative effect on rice imports ( $\beta = -0.314$ ;  $p\text{-value} = 0.002$ ). The exchange rate reflects the financial dimension of rice import management. Since international rice transactions are primarily conducted in US Dollars, exchange rate fluctuations directly affect government procurement expenditures, import budgeting, and fiscal planning. A depreciation of the Rupiah relative to the US Dollar increases the domestic cost of imported rice, thereby reducing import volumes. Conversely, an appreciation of the domestic currency enhances purchasing power and may increase import volumes. This result is consistent with the findings of Putra (2019), Wiseman et al. (2021), and Salsabil (2023). From a managerial perspective, these results suggest that procurement timing, budget allocation, and purchasing schedules should be aligned with macroeconomic conditions to minimize procurement costs while ensuring adequate rice stocks.

Population growth has a positive, statistically significant impact on Indonesia's rice imports ( $\beta = 9.579$ ;  $p = 0.003$ ). As the population increases, import procurement rises to meet growing domestic food demand. This result aligns with Hyuha et al. (2017), Permatasari (2020), and Oktaviana et al. (2023). Population growth is a long-term structural driver of rice imports, not a short-term economic factor. From a business management perspective, the government should anticipate future consumption needs influenced by demographic trends, urbanization, and changing dietary patterns. Strategic procurement is essential for national capacity planning, allowing institutions to secure adequate food reserves ahead of potential shortages.

#### ***Business and policy strategies in rice import management***

Interviews with representatives from the Indonesian Ministry of Trade and Perum BULOG consistently revealed that rice import management in Indonesia extends beyond economic optimization. The government emphasized that the primary objectives of import policy are to maintain adequate public rice reserves, stabilize domestic prices, protect consumers while supporting domestic farmers, and ensure supply continuity during periods of unpredictability. These findings suggest that rice import management should be conceptualized as a strategic governance process rather than solely as a response to import demand (Table 3).

With a facilitatory role, the government facilitates rice imports by issuing permits, supporting international cooperation, and managing logistics and distribution. Permit approval follows two stages: *"We must first submit a Commodity Balance (NK) to the Ministry of Agriculture, and then process the import permit through the INSW system at the Ministry of Trade."* The NK application usually takes longer. Common challenges include choosing the receiving port, adjusting import quantities, INSW system disruptions, and unpredictable weather. To prevent shortages, the government maintains three to six months of stock: *"The stock in the warehouse is actually prepared for three to six months, so it doesn't run out immediately."* This allows continued imports even when domestic production is sufficient or international prices remain stable, prioritizing current demand and future supply security.

The Ministry of Trade has indicated that the licensing facilitation mechanism is governed by a service-level agreement (SLA), as outlined in Ministerial Regulations Number 18 and 37 of 2025. Licensing functions as a regulatory instrument to prevent unauthorized rice imports. Prior to permit issuance, importers must submit a Commodity Balance Sheet (NK) to the Ministry of Agriculture to verify domestic demand and stock availability.

According to an official source, *"The permit issuance process includes cross-ministerial coordination because import decisions are not only determined by the Ministry of Trade but also consider verification results from technical ministries such as the Ministry of Agriculture."* The

Ministry of Trade further noted that the entire process is conducted electronically, encompassing application, verification, and permit issuance. The results of the NK determination are automatically transmitted to the Ministry of Trade as a primary requirement for issuing an import permit (Import Approval). Therefore, the licensing process serves not only an administrative function but also plays a critical role in regulating the balance between domestic supply and import requirements.

In determining the country of origin for rice imports, Bulog identified two primary patterns. The first is a direct appointment (Government-to-Government), based on a Memorandum of Understanding (MoU) between the Indonesian government and the partner country. The MoU specifies the designated supplier, import quantity, and contract duration. The second pattern is an open auction (Government-to-Business), involving rice-producing countries such as Vietnam, Thailand, Myanmar, Cambodia, and Pakistan.

According to the source, Indonesia maintains long-standing trade relationships with major exporting countries, particularly Thailand and Vietnam, due to their stable production capacity, established export infrastructure, and consistent product quality. As a result, supplier selection is influenced not only by price but also by institutional trust, delivery reliability, logistics performance, and responsiveness during periods of supply uncertainty. Additionally, not all countries permit exports, as such policies depend on the status of their domestic food stocks. Consequently, the determination of the country of origin for imports is typically addressed during the Commodity Balance preparation process, in which governments evaluate the availability of supply from partner countries before making import decisions.

Regarding logistics, the source person stated that government support involves accelerating loading and unloading through coordination with the Ministry of Transportation, Customs and Excise, the Indonesian National Armed Forces (TNI), and local governments. Common challenges include weather, port congestion, and changes in quantity. To lower logistics costs, Bulog is increasing the use of receiving ports, distributing stocks more evenly across regions, and regularly reviewing freight rates. Bulog noted that the main cost driver in logistics is distribution from the port to the receiving region, not the import process itself. The Ministry of Trade does not directly manage logistics, so this responsibility lies with the National Food Agency and the Directorate General of Domestic Trade. These findings show that Bulog's logistics facilitation is mainly handled by the implementing agency, while policy and regulation remain with the relevant ministries.

The government, through its regulatory functions, plays a crucial role in balancing market efficiency with national food security objectives. Rice imports are managed under a comprehensive institutional framework that encompasses import quotas, safety standards, and tariffs. Import quotas are implemented to ensure national stock adequacy when domestic production is insufficient and to stabilize domestic rice prices and supplies. As noted by a source, *"Import quotas are important when the rice commodity balance is in deficit to maintain stocks. If there is a surplus, imports are unnecessary, as in 2025 there will be no imports because domestic stocks are sufficient."* In terms of safety standards, the quality of imported rice is strictly regulated and monitored through a multi-layered mechanism.

According to the Ministry of Trade, the safety and quality standards for imported rice fully comply with the Indonesian National Standard (SNI) for rice, issued in 2020. The Ministry of Agriculture and other technical institutions are responsible for determining these quality specifications. Quality inspections are conducted both in the country of origin and upon arrival at Indonesian ports by relevant institutions, including technical ministries and quarantine authorities. Bulog has reported that, to date, no quality violations have been identified, as any commodity failing to meet standards is automatically rejected. For effective supervision, Bulog coordinates with relevant institutions using an electronic

document system. All quality documents, certifications, and verification results are uploaded through an integrated system, which facilitates transparent supervision and documentation. Additionally, interviews with the Ministry of Trade confirm that the safety and quality standards for imported rice fully align with the Indonesian National Standard (SNI) for rice, issued in 2020. Bulog stated that rice imports are subject to a duty of Rp 45 per kilogram and a 2.5% Income Tax (PPh), while Value Added Tax (VAT) is exempt as a form of government support. Bulog also noted that import duties have minimal impact on total procurement costs. Despite these charges, imported rice remains less expensive than domestic rice.

The government plays a key role in subsidizing and coordinating institutions. Both Bulog and the Ministry of Trade have clarified that the government does not provide financial assistance for imports or purchases, leaving import financing solely to importers. Instead, government support is provided through programs such as the SPHP (Stabilization of Food Supply and Prices) rice program, which ensures the public has access to quality rice at more affordable prices. The source explained that *“Many institutions are involved in the rice import process, such as Customs, the Ministry of Transportation, the Ministry of Agriculture, the National Food Agency (Bapanas), the Ministry of Trade, and the Indonesian National Armed Forces (TNI) and the Indonesian National Police (Polri), who assist with security during unloading at the port.”* Each institution coordinates according to its authority. A joint decision-making mechanism is also in place, taking into account domestic production, supply availability, rice prices, and national distribution needs.

Table 3. Business and policy strategies in rice import management

<b>Government function: Facilitator</b>			
No	Business strategies	Policy strategies	Implementation evidence
1	Facilitate efficient procurement, international sourcing, licensing, and logistics to ensure uninterrupted rice imports.	Establish import licensing procedures, promote international cooperation through Government-to-Government (G2G) and Government-to-Business (G2B) channels, and improve logistics and distribution systems.	<ul style="list-style-type: none"> <li>• Commodity Balance (Neraca Komoditas) and Import Approval (PI) through the Indonesia National Single Window (INSW) to support import processing.</li> <li>• Bilateral agreements with rice-exporting countries to secure supply.</li> <li>• Coordination of customs clearance, ports, transportation, and regional distribution to improve import flow.</li> <li>• Inter-ministerial coordination to accelerate import processes.</li> </ul>
<b>Government function: Regulator</b>			
2	Create a predictable business environment by managing import volumes and by	Determine import quotas, establish food safety and quality standards, regulate tariffs and customs	<ul style="list-style-type: none"> <li>• Annual import quotas are set according to the Commodity Balance to align with supply requirements.</li> </ul>

	applying quality standards	procedures, and oversee compliance.	<ul style="list-style-type: none"> <li>• Quality inspections are conducted prior to shipment and upon arrival to maintain established standards.</li> <li>• Import tariffs and customs regulations are applied to control market access.</li> <li>• The Ministry of Agriculture, Ministry of Trade, Customs, and Bulog monitor and enforce compliance.</li> </ul>
<b>Government function: Catalyst</b>			
3	Enhance price stabilization and strengthen supply chain resilience by increasing collaboration between public institutions and market participants.	Implement targeted subsidy programs, coordinate cross-sectoral governance, clarify institutional responsibilities, and promote evidence-based policy formulation.	<ul style="list-style-type: none"> <li>• Operationalize the SPHP rice subsidy program,</li> <li>• Facilitate coordination among Bulog, Bapanas, the Ministry of Agriculture, the Ministry of Trade, Customs, the Ministry of Transportation, and relevant security agencies,</li> <li>• Establish joint decision-making systems based on production levels, stock availability, pricing, and distribution requirements.</li> </ul>

Source: processed data (2025)

### *Integrated understanding of strategic rice import management*

The integration of quantitative and qualitative analyses suggests that economic variables function as strategic decision inputs rather than direct determinants of import policy. Government institutions systematically monitor macroeconomic and agricultural indicators to assess potential risks to national food availability. Before implementing import decisions, these indicators undergo institutional deliberation involving multiple stakeholders, including the Ministry of Trade, the National Food Agency (Bapanas), Perum BULOG, and agricultural policy experts. This coordinated approach enables policymakers to balance economic efficiency with broader public policy objectives, including food security, market stability, consumer protection, and farmer welfare.

The findings further indicate that deliberate rice import management is implemented through three complementary functions of facilitator, regulator, and

catalyst. These three function as components of an integrated governance system that transforms economic information into strategic policy actions. Within this system, quantitative indicators provide evidence on the current and projected state of food supply and demand, while qualitative institutional capabilities shape governmental responses to these conditions. As a result, import decisions reflect strategic judgment rather than automatic market reactions. This perspective clarifies why variables such as domestic production and international prices may exhibit limited statistical significance but remain central to policy deliberations. In that perspective, Indonesia's rice import management closely resembles strategic supply chain management rather than conventional public procurement.

The government must manage multiple sources of uncertainty simultaneously, including production risk, exchange rate fluctuations, supplier reliability, logistics constraints, global political developments, and climate-related disruptions. Accordingly, successful import management depends not only on decreasing procurement costs but also on maintaining supply continuity, coordinating institutional responses, and enhancing system durability. Those strategic capabilities align with the contemporary supply chain resilience literature, which highlights flexibility, risk mitigation, and adaptive decision-making as essential organizational capabilities in conditions of uncertainty.

### **Conclusion and Recommendation**

The findings of this study demonstrate that Indonesia's rice import policy is shaped by both economic conditions and institutional decision-making. Exchange rates and population growth exert a strong influence on rice import volumes from Thailand and Vietnam between 2004 and 2023, whereas domestic rice production and international rice prices, while exhibiting expected relationships, are not individually significant. These results suggest that economic variables serve as important indicators of import decisions but, alone, do not determine government policy.

Qualitative analysis reveals that Indonesia manages rice imports through three complementary government roles. As a facilitator, the government coordinates procurement, logistics, and reserve management. As a regulator, it establishes import mechanisms and maintains market stability. As a catalyst, it promotes long-term food security by integrating strategic imports with domestic agricultural development and climate adaptation. Collectively, these roles position rice import management as a strategic governance mechanism rather than solely a trade policy. By integrating quantitative evidence with policymakers' perspectives, the study indicates that deliberate rice import management combines economic data with institutional capacities to ensure food availability, stabilize markets, and enhance the long-term resilience of the food system.

Based on these findings, policymakers are advised to strengthen integrated decision-support systems that incorporate domestic production, food reserves, exchange rates, international market conditions, and demographic trends. Strategic imports should continue to complement domestic agricultural development through sustained investment in productivity, infrastructure, technological innovation, and climate-adaptive farming. Future research should broaden this

framework by including additional institutional and external factors and conducting comparative analyses across major rice-importing countries.

### Authors' Declaration

Anisa Prity Mas – 70 % (research concept and design, collection and/or assembly of data, data analysis and interpretation, writing the article).

Puspi Eko Wiranthi – 30 % (research concept and design, critical revision of the article, final approval of the article).

### References

- Anggraeni, N. Y., Marseto, M., & Sishadiyati, S. (2023). Analisis Faktor-Faktor Yang Mempengaruhi Impor Beras di Indonesia. *Jurnal Ekonomi, Bisnis dan Manajemen*, 2(4), 299-314.
- Christianto, E. (2013). Faktor yang mempengaruhi volume impor beras di Indonesia. *Jurnal Jibeka*, 7(2), 38-43.
- Hyuha, T. S., Ekere, W., & Bantebya Kyomuhendo, G. (2017). Determinants of import demand of rice in Uganda.
- Juliashar, F., Tatimah, K., Abiyyah, N. A. S., & Wikansari, R. (2024). Pengaruh Impor Beras Asal Thailand Dan Vietnam terhadap Kestabilan Harga Beras di Indonesia. *AGRORADIX: Jurnal Ilmu Pertanian*, 7(2), 1-11.
- Karunanayake, K. A. I. D., Liyanage, U. P., & Hewaarachchi, A. P. (2025). Estimation of selected factors affecting rice imports in Sri Lanka. *Journal of Multidisciplinary & Translational Research*, 10(2).
- Karuniatama, W., & Purwiyanta, P. (2023). Analisis Pengaruh Pdb Sektor Pertanian, Tenaga Kerja Sektor Pertanian, Cadangan Devisa, Dan Harga Beras Internasional Terhadap Impor Beras Di Indonesia Tahun 1990–2021. *JER (Jurnal Ekonomi Regional)*, 15(2), 36-43.
- Nurdin, M., Nurmaeta, S., & Tahir, M. (2014). Peran pemerintah daerah dalam pemberdayaan masyarakat petani jagung di kecamatan biringbulu kabupaten gowa. *Otoritas: Jurnal Ilmu Pemerintahan*, 4(1).
- Obayelu, O. A., Yade, M., & Odjo, S. (2025). Trade policies' effects on rice import dynamics in Nigeria: implications for competitiveness in rice production by 2030. *World Food Policy*, 11(2), e70007.
- Oktaviana, S., Sandy, M. F. A. Z., & Alamanda, M. S. (2023). Faktor-Faktor Yang Mempengaruhi Tingginya Impor Beras Indonesia Dari Vietnam. *Jurnal Ilmiah Ekonomi Dan Manajemen*, 1(4), 258-264.
- Permatasari, A. (2020). Analyzing factors that affect rice import volume in Indonesia. *Journal of Economics and Sustainable Development (JEDS)*, 11(10), 1-6.
- Prinadi, R., Yulianto, E., & Mawardi, M. K. (2016). *Pengaruh Nilai Tukar Rupiah, Harga Beras Internasional dan Produksi Beras Dalam Negeri Terhadap Volume Impor Beras Indonesia (Studi Impor Beras Indonesia Tahun 2002-2013)* (Doctoral dissertation, Brawijaya University).
- Putra, K. (2019). Analysis of factors Affecting rice imports in Indonesia. *Russian Journal of Agricultural and Socio-Economic Sciences*, 91(7), 97-101.
- Ruslini, M. (2020). *Pengaruh Produksi Beras, Konsumsi Beras Dan Luas Lahan Pertanian Terhadap Impor Beras Di Indonesia Tahun 1985-2020* (Bachelor's thesis, Fakultas Ekonomi Dan Bisnis Uin Jakarta).

- Salsabil, Y. P. (2023). *Analisis Faktor Faktor yang Mempengaruhi Impor Beras Vietnam ke Indonesia* (Doctoral dissertation, UPN VETERAN JAWA TIMUR).
- UN Comtrade. (2023). Trade data. <https://comtradeplus.un.org/TradeFlow?Frequency=M&Flows=X&CommodityCodes> (Accessed May 9, 2025)
- Wiseman, T., Luckstead, J., & Durand-Morat, A. (2021). Asymmetric exchange rate pass-through in Southeast Asian rice trade. *Journal of Agricultural and Applied Economics*, 53(3), 341-374.
- Yoo, W., Mayberry, R., Bae, S., Singh, K., He, Q. P., & Lillard Jr, J. W. (2014). A study of effects of multicollinearity in the multivariable analysis. *International journal of applied science and technology*, 4(5), 9.