



Original Article

Investigating the Rice Seed Marketing Strategies between Malaysia and Indonesia: A Comparative Analysis

Muhammad Hafiz ¹, Rahmad Syukur Siregar ^{1,*} and Grida Saktian Laksito ²

¹ Department of Agricultural Product Technology, Faculty of Agriculture, Universitas Muhammadiyah Sumatera Utara, Medan Timur, 20238 Kota Medan, Sumatera Utara, Indonesia; (M.H.)

² Department of Economics, Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, 21030 Kuala Nerus, Terengganu, Malaysia; (G.S.L.)

* Correspondence: rahmadsyakur@umsu.ac.id (R.S.S.)

Citations: Hafiz, M., Siregar, R.S., & Laksito, G.S. (2024). Investigating the Rice Seed Marketing Strategies between Malaysia and Indonesia: A Comparative Analysis. *Global Journal of Emerging Science, Engineering & Technology*, 2(2), 46-50.

Received: 8 May 2024

Revised: 20 July 2024

Accepted: 31 August 2024

Published: 30 Nov 2024

Abstract: Today, the agricultural sector is critical to national development and plays a strategic role in the structure of national economic growth. Thus, this study analyzes the marketing strategy of rice seeds between Indonesia and Malaysia. This study was conducted in September 2023. The data used in this research is secondary data obtained through journals. The method used in this research is a descriptive method and SWOT analysis. This study found that Indonesia and Malaysia have distinct strengths, weaknesses, opportunities, and threats regarding the marketing of rice seeds. Malaysia has modern technological facilities, while Indonesia has abundant rice seed resources. A comparison of Malaysian and Indonesian rice seeds revealed that Malaysian rice seeds had a high germination success rate and strong growth. The seeds' size and shape are also uniform, resulting in consistent yields. Meanwhile, Indonesian rice seeds are more resistant to disease and extreme weather. Overall, the quality of Indonesian beans is excellent, and they can produce satisfactory yields.

Keywords: Seed; Paddy; Marketing strategy; SWOT analysis; Malaysia and Indonesia.



Copyright: © 2024 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The agricultural sector is critical to national development and continues to play a strategic role in the structure of national economic growth (Meijerink & Roza, 2007). It is divided into several subsectors, including the food subsector (Matsuyama, 1992; Norton, 2004). Food is a basic human need critical to national survival (Clapp, 2020; Falvey, 2010; Gostin, 2007). As a result, efforts must be made to ensure that food is available in sufficient quantities, is high quality, is safe to consume, and is easily accessible to all levels of society (Zulkifli, 2017). In Asia, rice is one of the commodities that is given prominence in the country's food security agenda. The increase in population in Asia has brought about a 70 percent increase in the amount of rice needed to meet future demand (Papademetriou, 2000). The pattern of food use by adults has shown that Malaysians use an average of two and a half bowls of rice daily (Norimah Jr et al.,

2008). Also, Ahmad Hanis et al. (2012) reported that Malaysians living in urban areas have a higher demand for rice than areas outside the city due to higher purchasing power.

Modern agricultural technology uses machines. It aims to ensure that the rice produced is high quality after 1930. According to Abdullah et al. (2009), the use of seeds with superior varieties contributes to the increase in national rice production by up to 56%, while the interaction between irrigation water, superior varieties, and fertiliser on the rate of increase in rice production contributes up to 75% (Somantri, 2016). Rice is the basic and main food for part of the world's population, and rice is grown as the main intermediate food crop in Asia as it accounts for 90% of the world's rice production. However, only 7% of rice production is sent to the export market from the country of origin. Rice cultivation in Malaysia has simple paddy plots of less than two hectares with a budget of 194,000 farmers involved and under small-scale farming.

Malaysia has a vast and fertile land to produce the necessary food products for the needs of the people without relying too much on other countries, especially in the paddy and rice sector. Malaysia has built a strong reputation for producing high-quality rice seeds. Recent research has shown their superiority in developing rice varieties resistant to extreme weather and diseases. In addition, modern infrastructure and supportive government policies enhance Malaysia's global rice seed market competitiveness. As a result, this research aimed to compare the marketing strategies for Indonesian and Malaysian rice seeds.

2. Materials and Methods

The study uses a descriptive SWOT analysis of phenomena observed in various journal sources. SWOT analysis assesses a business or venture's strengths, weaknesses, opportunities, and threats. In the context of rice seed marketing in Indonesia and Malaysia, SWOT analysis is used to assess the market and develop effective marketing strategies.

3. Results

3.1. SWOT analysis of Indonesian and Malaysian rice seed marketing

SWOT analysis of rice seed marketing in Indonesia and Malaysia have had Seed marketing has similarities, and these two countries have different potential analyses. It has an impact on global competition in rice seed marketing. The following is a comparison of marketing strategies in Indonesia and Malaysia, as shown in Table 1.

Table 1. SWOT analysis of Indonesian and Malaysian rice seed marketing

Analysis	Indonesia	Malaysia
Strength	<ul style="list-style-type: none"> • A sizable and growing market. • Good pricing competitiveness. • Broad distribution network. • Product quality is superior. 	<ul style="list-style-type: none"> • Research and development include machine tools like the Combine Harvester, which can simultaneously cut, hold, thresh, and clean. • Strategic collaboration with international rice seed producers. • Product quality is superior. • Quality guarantee.
Weakness	<ul style="list-style-type: none"> • Reliance on outdated technology. • The supply of rice seeds is less secure. • Information is not being distributed effectively enough. • Inconsistent regulations. 	<ul style="list-style-type: none"> • Rice seed varieties lack diversity. • The selling price is relatively high. • Production capacity is limited by volume/quota. • Only issued by the company.
Opportunities	<ul style="list-style-type: none"> • Rising domestic demand for rice seeds. • The demand for organic rice seeds has increased significantly. • Potential for rice seed exports to neighbouring countries. • Increased use of modern technology. 	<ul style="list-style-type: none"> • Strategic collaborations with international rice seed producers. • Increased use of modern technology.

Threats	<ul style="list-style-type: none"> Rice seed producers around the world are fiercely competitive. Food safety concerns and stringent regulations. Unpredictable climate change. Diseases and pests spread among rice plants. 	<ul style="list-style-type: none"> Seed regulations issued by GMD. Food safety concerns and stringent regulations. Unpredictable climate change. Diseases and pests spread among rice plants.
---------	--	---

On the basis of the SWOT analysis of Indonesian and Malaysian rice seed marketing, both countries have significant strengths in large and developing markets, high-quality products, and widespread distribution networks. However, both countries have weaknesses, such as reliance on outdated technology and less secure rice seed sources.

3.2. Comparison of the characteristics of Indonesia and Malaysia rice seeds

A comparison of the characteristics of rice seeds in Indonesia and Malaysia that have similarities in each of the characteristics of rice can be seen in Table 2.

Table 2. Comparison of characteristics of Indonesian and Malaysian rice seeds

Malaysian Rice Seed	Characteristic	Indonesian Rice Seed	Characteristic
1. CL220 	Quality Assurance 95% sprouts, plant age 85-90 HST, potential yield 9-12 tons/ha, flag leaves erect or disliked by birds, suitable for rainfed and irrigated areas.	1. Mapan P-05 	Mapan P-05 has a high level of adaptation, making it easy to grow and develop in all areas, care for, and produce abundant harvests. It is no surprise that these rice seeds are popular among farmers.
2. MR297 	The rice resists collapse, planthoppers, sunder/sink, fungus, blast, leaf blight, and neck fracture. It is also drought-resistant, sparrow-free, and has a soft texture due to its low amylose content of 21.4%.	2. Tongkol Dua 	Abundant yields with 300-600 rice grains per panicle; approximately half of the seeds will have two panicles hanging down at the top and bottom.
3. MR319 	It is resistant to Collapse, Planthopper Pest Attacks, HDB Disease, Blas, and Klowor viruses, and it can benefit from early pest management.	3. Sertani 14 	This superior rice seed has a relatively short plant life, approximately 85 days after planting. Seeds are a highly profitable option for farmers due to their quick harvest, ease of care, and abundant yields.

Indonesian rice seeds have significant advantages in variety, adaptability, and productivity. However, Indonesian rice seeds have limited reliance on specific varieties, the need for improved pest and disease control, a lack of access to modern technology, and a lack of resilience to climate change. On the other hand, Malaysian rice seeds have advantages in terms of modern technology, research, and high-quality assurance. However, Malaysian rice seeds have limited dependence on seed imports and variety diversity. As a result, the two countries must collaborate to address each other's shortcomings while capitalizing on existing opportunities to improve rice seed quality and productivity. This will help them meet increasingly stringent market demands and enhance global competitiveness.

3.3. Comparison of marketing strategies in Indonesia and Malaysia.

The rice seed industry in Malaysia and Indonesia has grown rapidly in recent years. Despite some similarities, the two countries have different rice seed marketing strategies. This has an impact on global competition in the rice seed industry. The following can be seen in Table 3.

Table 3. Compares rice seed marketing strategies in Indonesia and Malaysia.

Aspect	Comparison
Technological Innovation	Malaysia uses the latest technology for marketing rice seeds, while Indonesia only focuses on ensuring high quality.
Distribution Network	Malaysia has a less extensive distribution network, while Indonesia has an extensive one.
Rice Development	Malaysia focuses on developing rice seeds through research and development, while Indonesia prioritizes certification.

A comparison of marketing strategies for Malaysian and Indonesian rice seeds reveals that each has distinct advantages. Malaysia's rice seed marketing strategy is more sophisticated and focuses on developing more reliable rice seeds. Meanwhile, Indonesia focuses on more reliable quality and lower costs.

4. Conclusions

This study found that Indonesia and Malaysia have distinct strengths, weaknesses, opportunities, and threats regarding the marketing of rice seeds. Malaysia has modern technological facilities, while Indonesia has abundant rice seed resources. A comparison of Malaysian and Indonesian rice seeds revealed that Malaysian rice seeds had a high germination success rate and strong growth. The seeds' size and shape are also uniform, resulting in consistent yields. Meanwhile, Indonesian rice seeds are more resistant to disease and extreme weather. Overall, the quality of Indonesian beans is excellent, and they can produce satisfactory yields. Three comparison points were identified based on marketing strategy comparisons: technological innovation, distribution network, and development. Each country (Indonesia and Malaysia) handles these three points differently.

Author Contributions: Conceptualization, M.H., R.S.S. and G.S.L.; methodology, M.H.; software, M.H.; validation, R.S.S. and G.S.L.; formal analysis, M.H. and R.S.S.; investigation, M.H. and R.S.S.; resources, M.H.; data curation, R.S.S. and G.S.L.; writing—original draft preparation, M.H. and R.S.S.; writing—review and editing, M.H., R.S.S. and G.S.L.; visualization, M.H.; supervision, R.S.S. and G.S.L.; project administration, R.S.S.; funding acquisition, R.S.S. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Acknowledgments: The authors would like to thank Universitas Muhammadiyah Sumatera Utara, Indonesia, for supporting this research and publication. We also thank the reviewers for their constructive comments and suggestions.

Conflicts of Interest: The authors declare no conflict of interest.

References

Abdullah, M. A., Zainol, R. M., Rose, R. A. C., & Buang, A. (2009). Mengungkap kelestarian pertanian kecil Melayu pada zaman penjajahan British. *Geografia-Malaysian Journal of Society and Space*, 5(3), 76–87.

-
- Ahmad Hanis, I. A. H., Jinap, S., Mad Nasir, S., Alias, R., & Muhammad Shahrim, A. K. (2012). Consumers' demand and willingness to pay for rice attributes in Malaysia. *International Food Research Journal*, 19(1), 363–369.
- Clapp, J. (2020). *Food*. John Wiley & Sons.
- Falvey, J. L. (2010). *Small Farmers Secure Food: Survival Food Security, the World's Kitchen & the Critical Role of Small Farmers*. Thaksin University Press & IID.
- Gostin, L. O. (2007). Meeting basic survival needs of the world's least healthy people: Toward a framework convention on global health. *Geo. LJ*, 96, 331.
- Matsuyama, K. (1992). Agricultural productivity, comparative advantage, and economic growth. *Journal of Economic Theory*, 58(2), 317–334.
- Meijerink, G. W., & Roza, P. (2007). *The role of agriculture in economic development* (Issue 4). Wageningen UR.
- Norimah Jr, A. K., Safiah, M., Jamal, K., Haslinda, S., Zuhaida, H., Rohida, S., Fatimah, S., Norazlin, S., Poh, B. K., & Kandiah, M. (2008). Food Consumption Patterns: Findings from the Malaysian Adult Nutrition Survey (MANS). *Malaysian Journal of Nutrition*, 14(1), 25–39.
- Norton, R. D. (2004). *Agricultural development policy: Concepts and experiences*. John Wiley & Sons.
- Papademetriou, M. K. (2000). Rice production in the Asia-Pacific region: issues and perspectives. *Bridging the Rice Yield Gap in the Asia-Pacific Region*, 220, 4–25.
- Somantri, S. (2016). The use of improved varieties resistant to pests and diseases to increase national rice production. *Journal Litbang Pertanian*, 35(1), 25–36.
- Zulkifli, L. (2017). *Strategi pemasaran beras organik pada kelompok tani Sri Makmur di Kabupaten Sragen*. Bogor Agricultural University.