Proceeding International Conference on Economy, Education, Technology, and Environment
Vol. 3, No. 1, July 2025
https://prosiding.utp.ac.id/index.php/ICEETE

Analysis Of The Competitiveness Of Indonesian And Malaysian Palm Kernel Oil Exports In The Pakistan Market

Muhammad Abdul Rokhim[1,*], Suswadi[2], Agung Prasetyo[2]

1 Undergraduate Student, Agribusiness Department, Agriculture Faculty, Tunas Pembangunan University, Surakarta, Indonesia
2 Agribusiness Department, Agriculture Faculty, Tunas Pembangunan University, Surakarta, Indonesia

* E-mail: marokhim180401@gmail.com

ABSTRACT

This study analyzes the competitiveness of Indonesian and Malaysian Palm Kernel Oil (PKO) exports in the Pakistani market during 2013–2024. A quantitative descriptive approach was employed using the Revealed Comparative Advantage (RCA) and Constant Market Share (CMS) methods, with data on PKO export volumes and values sourced from UN Comtrade and other reliable secondary sources. The results show that Indonesia demonstrates a higher competitiveness than Malaysia, with an average RCA of 4.44 compared to 0.23 for Malaysia, although neither country consistently achieves full comparative advantage. Indonesia's stronger position is supported by larger production capacity, strategic market distribution, and the Preferential Trade Agreement (PTA) with Pakistan, while Malaysia maintains a more stable but lower competitiveness due to price sensitivity and less adaptive policies. Market share analysis further highlights Indonesia's dominance, reflecting its ability to align product composition with market needs despite challenges in quality standards and export constraints. The study concludes that Indonesia holds a superior position in the Pakistani PKO market, and emphasizes the importance of strengthening fiscal policies, diversifying markets, improving industrial efficiency, and enhancing downstream processing to sustain and expand its competitive advantage

KEYWORDS: competitiveness; indonesia; malaysia; palm kernel oil; pakistan

INTRODUCTION

Oil palm is a plantation commodity widely cultivated in Indonesia and plays a strategic role in supporting the national economy. Botanically, oil palm is known to originate from West Africa, specifically the Guinea Coast, as stated by Jacquin, a world botanist (Wahyuni, 2022). Palm oil's contribution to the Indonesian economy is significant; the Indonesian Palm Oil Plantation Fund Management Agency (BPDPKS) reported that in 2021 this sector generated revenues of IDR 72.45 trillion, the majority of which came from exports to various countries (Badan Pengelola Dana Perkebunan Kelapa Sawit, 2023). Taxonomically, oil palm is classified into the Kingdom Plantae, Division Tracheophyta, Class Magnoliopsida, Order Arecales, Family Arecaceae, Genus Elaeis, with the species Elaeis guineensis Jacq.

Palm kernel oil (PKO) is a leading commodity in international trade, possessing high economic value and a crucial role. PKO is widely used in various industrial sectors, including the food, cosmetics, and pharmaceutical industries, and even as a raw material for biofuel production. With increasing demand in the global market, PKO has developed into a strategically valuable commodity that makes a significant contribution to the economies of producing countries. Indonesia and Malaysia are listed as major producers, collectively supplying more than 80% of the world's PKO needs, thus positioning these two countries as dominant actors in the global PKO trade (Tsiwiyati, 2024).

Indonesia and Malaysia have distinct competitive advantages in the Palm Kernel Oil (PKO) trade. Indonesia is known as a producing country with a relatively lower production cost structure, supported by extensive land availability and more affordable labor costs. Meanwhile, Malaysia has advantages in product diversification and efficient logistics systems, enabling it to respond to market demand more quickly and adaptively. Competition between the two countries is intensifying as global demand for palm oil-based products, including PKO. This situation not only encourages innovation in each country but also influences international market dynamics, particularly in price formation and trade policy formulation (Tandra et al., 2023).

Pakistan is a key market for palm oil and its derivatives, including Palm Kernel Oil (PKO). Population growth coupled with increasing urbanization has driven increased demand for various palm oil-based products in the country. In 2023, Pakistan imported approximately 2.5 million tons of palm oil products, with Indonesia accounting for 55% of the supply and Malaysia accounting for 40% (Anwaruddin & Sutjipto, 2023). Pakistan's high dependence on palm oil imports presents significant opportunities for Indonesia and Malaysia to expand their respective market shares. However, these opportunities also face a number of challenges, including price competition, meeting quality standards, and increasingly diverse consumer preferences.

Over the past five years, Palm Kernel Oil (PKO) exports to Pakistan have shown a relatively stable growth trend, with an average annual increase of around 5%. However, the COVID-19 pandemic has significantly impacted the global supply chain, including PKO trading activities. This disruption has impacted supply availability and commodity price fluctuations, which in turn impact exporters' competitiveness. In light of these conditions, adaptive strategies are needed to address various challenges, including product diversification, increased logistics efficiency, and strengthened cooperation and trade relations with partners in Pakistan (Tandra et al., 2023).

The export competitiveness of Palm Kernel Oil (PKO) is influenced by various factors, including production cost structure, trade policies, product quality, and market accessibility. Indonesia has a comparative advantage in relatively lower production costs, while Malaysia excels in product innovation and the implementation of stricter sustainability standards. However, both countries face challenges in adapting to increasingly complex market preferences. Consumers in Pakistan, for example, are beginning to place greater emphasis on product quality and sustainability, requiring producers to meet these demands to maintain competitiveness (Itamary & Hendrati, 2022).

Trade policy plays a significant role in shaping the competitiveness of Palm Kernel Oil (PKO) products. Indonesia implements a progressive tax policy with the aim of encouraging the development of downstream industries to increase product added value. However, this policy is often perceived as reducing export competitiveness in the international market. On the other hand, Malaysia has implemented various export incentives aimed at strengthening the position of its products in the global market, including PKO. These differences in policy reflect the different strategies in managing the palm oil sector in each country (Irawan & Soesilo, 2021).

Sustainability is increasingly becoming a key concern in the palm oil trade. Global consumers, including those in Pakistan, are showing increasing concern about the environmental and social impacts of the products they consume. Sustainability certification, such as that from the Roundtable on Sustainable Palm Oil (RSPO), has become a crucial requirement for enhancing product competitiveness in the international market. Producers that meet these certification standards have a greater opportunity to attract consumer interest, especially in markets with increasing awareness of sustainability issues (Sulaiman et al., 2024).

Previous research has shown that Indonesia and Malaysia have strong competitive advantages in the global palm oil market, supported by large production capacity, cost efficiency, and conducive export policies. Although Indonesia's production volume advantage is significant, its progressive export tax policy has the potential to reduce profit margins and weaken competitiveness compared to Malaysia, which has a more stable policy (Sulaiman et al., 2024). Pakistan is a major palm oil importer in Asia, with consistently high demand, making it a strategic market for both countries (Anwaruddin &

Sutjipto, 2023). However, most studies still focus on crude palm oil (CPO), while research on Palm Kernel Oil (PKO) as a high-value-added derivative product remains limited, despite its distinct characteristics and industrial role (Saharda, 2024).

Penelitian lebih lanjut diperlukan untuk memahami faktor-faktor yang memengaruhi daya saing *Palm Kernel Oil* (PKO) di pasar Pakistan, menilai efektivitas kebijakan perdagangan Indonesia dan Malaysia, serta mengidentifikasi strategi untuk meningkatkan ekspor dan daya saing produk di pasar internasional (Tandra et al., 2023). Secara teoretis, studi ini akan memperkaya literatur tentang perdagangan internasional, khususnya komoditas strategis seperti PKO, dan secara praktis memberikan rekomendasi strategis bagi pemerintah serta pelaku industri untuk meningkatkan efisiensi dan daya saing, sekaligus mendukung pertumbuhan ekonomi negara produsen utama minyak kelapa sawit (Saeyang & Nissapa, 2021).

This study aims to analyze the competitiveness of Indonesian and Malaysian Palm Kernel Oil (PKO) exports in the Pakistani market using a quantitative indicator, Revealed Comparative Advantage (RCA). Furthermore, this study also focuses on identifying factors influencing the competitiveness of both countries in the market, including production costs, trade policies, and consumer preferences. The results of this analysis are expected to provide insight into the implications for policy strategies and the future development of Indonesian and Malaysian PKO export markets.

METHODOLOGY

Research Design

This study uses a quantitative and descriptive analytical approach to measure the competitiveness of Indonesian and Malaysian Palm Kernel Oil (PKO) in Pakistan, analyzing trade patterns, as well as the relationship between policies, prices, and consumer demand, with the aim of producing a comprehensive analysis that supports strategic decisions and academic literature (Itamary & Hendrati, 2022). This study applies a quantitative approach to examine the competitiveness of Indonesian and Malaysian *Palm Kernel Oil* (PKO) exports in the Pakistani market, using *Revealed Comparative Advantage* (RCA) as the primary analytical method.

Research Location

The research location was determined purposively in Indonesia. This study examines the competitiveness of Indonesian and Malaysian Palm Kernel Oil (PKO) exports in the Pakistani market during the period 2013–2024. Malaysia was chosen as the benchmark country because it is one of the world's largest PKO producers and exporters. Pakistan was chosen as the destination country because it is one of the main importers of Indonesian PKO, and Malaysia is also Indonesia's main competitor in that market.

Data Collection Techniques

This study uses secondary data in the form of time series data for the period 2013 to 2024. The data collected includes the volume and value of Palm Kernel Oil (PKO) exports from Indonesia and Malaysia to the export destination country, namely Pakistan. The analysis focuses on export data relevant to PKO competitiveness, which is analyzed using the Revealed Comparative Advantage (RCA) method. Secondary data is obtained from reliable sources, including the United Nations Commodity Trade Statistics Database (UN Comtrade), official trade reports, and supporting literature from scientific journals. The use of verified and comprehensive secondary data allows for an accurate and in-depth evaluation of long-term trends and factors influencing the competitiveness of Indonesian and Malaysian PKO exports.

Tools or Instruments Used

This study uses the Revealed Comparative Advantage (RCA) and Constant Market Share (CMS) methods to analyze the export competitiveness of Indonesian and Malaysian Palm Kernel Oil (PKO) in the Pakistani market. The RCA method is used to measure the comparative advantage of PKO in the international market, while the CMS method analyzes export performance by considering global demand and product competitiveness. Both methods provide insight into the factors driving export growth and help formulate strategies to improve PKO competitiveness.

Data Analysis Method

The data collected in this study were analyzed using a quantitative approach. This approach employs two analytical methods, namely *Revealed Comparative Advantage* (RCA) and *Constant Market Share* (CMS). Data processing is supported by Microsoft Excel software to facilitate calculations and analysis.

RESULTS AND DISCUSSION

Comparative Advantage of Indonesian Palm Kernel Oil Export Competitiveness Compared to Malaysia in the Pakistani Market

Based on the Revealed Comparative Advantage (RCA) analysis for the 2013–2024 period, the average RCA values of Indonesian and Malaysian Palm Kernel Oil (PKO) exports to Pakistan are still below one, at 0.16 and 0.23, respectively, indicating that neither country has achieved a comparative advantage. Malaysia is slightly superior, but neither has optimally utilized its production potential to increase the competitiveness of PKO exports.

The low RCA value is influenced by several factors, including production capacity, trade policies, price fluctuations, and emerging market preferences (Maghreza, 2022). Therefore, both countries need to take strategic steps to enhance their comparative advantage, such as increasing production efficiency, developing products, and strengthening trade networks to compete more effectively in international markets, particularly in Pakistan.

Table 1 shows the fluctuations in the RCA values of the two countries. Initially, Indonesia had a higher RCA, but since 2015, Malaysia has shown a more consistent increase in competitiveness, while Indonesia's RCA has declined. In 2024, Malaysia's RCA rose sharply to 0.45, while data for Indonesia is unavailable, indicating Malaysia's better ability to maintain and improve the competitiveness of its PKO exports to Pakistan.

Table 1

Indonesian and Malaysian PKO RCA Index in Pakistani Market 2013-2024

Year	RCA	
	Indonesia	Malaysia
2013	0,19	0,06
2014	0,20	0,15
2015	0,14	0,27
2016	0,26	0,43
2017	0,28	0,46
2018	0,26	0,26
2019	0,13	0,14
2020	0,11	0,10
2021	0,08	0,20
2022	0,06	0,12
2023	0,04	0,12
2024	51,58	0,45
Average	4,44	0,23

Source: UN Comtrade processed (2025)

Table 1 shows the fluctuations in the Revealed Comparative Advantage (RCA) Index of Indonesian and Malaysian Palm Kernel Oil (PKO) exports to Pakistan during 2013–2024. Overall, Indonesia's RCA decreased from 0.19 in 2013 to 0.04 in 2023, before sharply increasing to 51.58 in 2024. Malaysia's RCA was more stable, increasing from 0.06 in 2013 to a peak of 0.46 in 2017, then fluctuating between 0.10–0.20 and rising to 0.45 in 2024. Indonesia's average RCA (4.44) was significantly higher than Malaysia's (0.23) due to the 2024 spike, indicating Indonesia's comparative advantage in that year. However, Malaysia maintained a more stable competitiveness throughout the period. RCA movements were influenced by production capacity, trade policies, and trade networks, with RCA values above 1 indicating comparative advantage.

Indonesia has a competitive advantage in palm oil exports, primarily due to its significantly larger plantation area than Malaysia, enabling higher production and export volumes that surpass those of Malaysia and other countries. However, Indonesia's competitiveness in key export markets is affected by factors such as fluctuations in global Crude Palm Oil (CPO) prices, government policies, high export costs, unfavorable exchange rates, and productivity needs that remain to be improved (Azida et al., 2023). Meanwhile, Malaysia remains a major exporter, particularly of refined palm oil (RPO) products, even controlling almost the entire market share of RPO imports in Pakistan at certain times. Although Malaysia's comparative position is below Indonesia due to its higher product prices and the Pakistani market's shift toward Indonesian products, strong trade networks and established trade relationships have kept Malaysia's exports to Pakistan stable, albeit at a slower rate than Indonesia's (Firdaus et al., 2022).

Factors Influencing the Competitiveness of Indonesian and Malaysian Palm Kernel Oil Exports in the Pakistani Market

Based on Table 2, the average growth rate of Indonesian Palm Kernel Oil (PKO) exports to Pakistan from 2013 to 2024 was recorded at -0.0462, slightly higher than Malaysia's -0.0531. This indicates Indonesia's slightly better ability to maintain export volume despite both countries experiencing negative growth, influenced by market demand and global economic conditions. In terms of product composition, Indonesia recorded a negative value of -1,446,709.94, while Malaysia recorded -413,281.01.

This indicates that although Indonesia's PKO export growth is better than Malaysia's, the significantly negative product composition reflects a mismatch with Pakistani market needs. Conversely, Malaysia's smaller negative value indicates a more stable product structure. These fluctuations in growth and product composition reflect the challenges of maintaining export competitiveness, which are influenced by trade policies, export costs, and changes in international prices (Saban & Novianti, 2023).

Table 2

Export Growth and Composition of Indonesian and Malaysian PKO Products in 2013-2024 in the Pakistani Market

Year	PKO Export Growth		Standard Growth	PKO Product Composition	
	Indonesia	Malaysia		Indonesia	Malaysia
2013	-0,0394	-0,4167	0,0399	-178.229,45	-65.143,47
2014	-0,0357	0,0366	-0,0051	51.751,63	15.541,48
2015	-0,1458	-0,1289	-0,1260	-23.802,88	-10.236,56
2016	-0,0391	0,0676	-0,0283	-21.730,20	-13.071,26
2017	0,1684	0,1036	-0,8973	1.270.510,32	698.738,99
2018	0,0675	0,0176	10,7748	-17.929.509,36	-5.094.688,62
2019	-0,0695	-0,1723	-0,0271	-25.079,51	-8.249,38
2020	-0,0268	0,3134	-0,0692	209.148,13	49.296,95
2021	0,4187	0,4976	0,1443	319.834,72	158.413,94
2022	0,2611	0,1403	-0,7733	613.540,69	221.677,16
2023	-0,1137	-0,3116	4,0535	-1.538.319,95	-813.510,58
2024	-1,0000	-0,7843	-0,1657	-108.633,41	-98.140,80
Average	-0,0462	-0,0531	1,0767	-1446709,94	-413281,01

Source: UN Comtrade processed (2025)

The average composition effect of Indonesian and Malaysian PKO products in Pakistan is negative, indicating a lack of product alignment with consumer needs and preferences. This is related to the ability to meet quality and certification standards, in contrast to CPO, which has a positive composition effect. Furthermore, PKO export growth during 2013–2024 tends to decline, with an average of -0.0462 for Indonesia and -0.0531 for Malaysia.

This indicates challenges in penetrating the PKO market in Pakistan. Although Indonesian PKO product standards have tended to improve, this has not significantly impacted export growth. Meanwhile, the growth in Malaysian product standards has been less consistent, indicating the need for a better strategy to adjust product composition and improve quality to be more competitive in the Pakistani market (Sukirno & Romdhon, 2020).

Indonesia and Malaysia need to adapt their PKO products to Pakistani market demands and standards to overcome obstacles and maximize export opportunities, in contrast to the more stable and competitive CPO markets in India and the Netherlands.

Table 3

Market Distribution Effect of Indonesian and Malaysian PKO Products in 2013-2024 in the Pakistani Market

Year	PKO Market Distribution	
	Indonesia	Malaysia
2013	1.613,17	589,62
2014	-150,97	-45,34
2015	865,79	372,34
2016	5.615,67	3.377,97
2017	-5.165,32	-2.840,76
2018	7.296,78	2.073,39
2019	-3.151,59	-1.036,65
2020	5.839,68	1.376,43
2021	-1.445,76	-716,08
2022	1.399,01	505,47
2023	-1.995,07	-1.055,06
2024	-2.585,12	-2.335,43
Average	678,02	22,16

Source: UN Comtrade processed (2025)

In terms of market distribution and competitiveness of PKO in Pakistan during 2013–2024, Indonesia demonstrated a significantly stronger market position than Malaysia, with an average market share of 678.02 compared to 22.16. Despite fluctuations and several years of declining market share, Indonesia was able to maintain and increase its distribution in certain years, demonstrating greater competitiveness. In contrast, Malaysia struggled to maintain its market position, particularly in 2024. This underscores the effectiveness of Indonesia's distribution strategy and production capacity in meeting PKO demand in Pakistan compared to Malaysia.

Indonesia has demonstrated significant market expansion in Pakistan, supported by increasing demand and trade agreements such as the Preferential Trade Agreement (PTA), which strengthens Indonesia's position in the market. This advantage aligns with Indonesia's comparative potential in palm oil derivatives such as refined palm oil (RPO) and palm olein, as well as export growth influenced by economic factors such as Pakistan's GDP and free trade agreements (Tampubolon et al., 2022). In contrast, Malaysia has a more limited market distribution and is more sensitive to price fluctuations, which impacts its competitiveness in the Pakistani market (Firdaus et al., 2022). Overall, Indonesia remains a dominant player with greater PKO market growth potential than Malaysia, although both face significant challenges during the period.

Competitiveness of PKO Indonesia and Malaysia

Based on Table 4, during 2.013–2024, Indonesia demonstrated significantly higher PKO competitiveness in Pakistan than Malaysia, with an average competitiveness effect of 387.7 billion rupiah, compared to only 94.6 billion rupiah for Malaysia. Indonesia remains dominant despite experiencing negative values in several years, supported by its PTA with Pakistan, large production capacity, and effective distribution strategy. In contrast, Malaysia's PKO competitiveness is lower and often negative due to the lack of a similar agreement (Sukirno & Romdhon, 2020)

Table 4

The Effect of Competitiveness of Indonesian and Malaysian PKO Products in 2013-2024 in the Pakistani Market

Year	PKO Competitiveness	
	Indonesia	Malaysia
2013	748.188.338.788	273.465.393.910
2014	3.220.809.775.559	967.238.060.701
2015	563.714.387.368	242.428.548.297
2016	-626.390.049.574	-376.789.343.718
2017	208.630.066.044	114.739.690.125
2018	-380.043.931.341	-107.989.875.986
2019	-74.572.950.644	-24.529.228.141
2020	677.271.715.553	159.635.328.729
2021	1.062.944.452.217	526.475.733.321
2022	-94.022.210.996	-33.970.977.839
2023	39.491.739.761	20.884.438.178
2024	-692.428.901.111	-626.051.950.489
Average	387.799.369.301,99	94.627.984.757,39

Source: UN Comtrade processed (2025)

Overall, both countries face challenges in maintaining stable PKO competitiveness in the Pakistani market. Indonesia has managed to recover in some years, but significant losses in key years have lowered its average competitiveness. Despite its potential and comparative advantages, Indonesia needs to strengthen its downstreaming policies, improve product quality, and address production constraints and global competition. Malaysia, on the other hand, tends to be more stable with consistent policy support (Riwaldi et al., 2023).

The results of the PKO competitiveness analysis suggest several strategic implications for export market policy and development in Indonesia and Malaysia. Malaysia maintains more stable competitiveness thanks to consistent government policies, including export tax exemptions, while Indonesia needs to review its export tax policies, which suppress competitiveness. Market diversification and increased production capacity are necessary to address fluctuations in global demand, particularly following declining competitiveness in certain years. Improving industrial quality and efficiency, including labor productivity, technology adoption, and quality assurance, is crucial for strengthening PKO competitiveness. Post-pandemic recovery also needs to be geared toward not only short-term but also medium- and long-term competitiveness. Furthermore, investment development and industrial relocation can be leveraged to strengthen supply chains and enhance Indonesia's position as a PKO exporter (Pebrianto et al., 2024).

Palm Kernel Oil (PKO) is a strategic palm oil derivative for Indonesian exports, sought after by the oleochemical, cosmetics, and processed food industries. PKO exports are relatively stable, including to Pakistan, which is now opening up opportunities for derivative products. With adaptive export policies and product innovation, Indonesia can strengthen PKO's competitiveness despite competing with Malaysia, making it a key driver of increased national export value (Sekretariat Jenderal Kementerian Pertanian, 2024).

CONCLUSION

Indonesia demonstrates a comparative advantage and higher competitiveness than Malaysia in the Pakistani PKO market. During the 2013–2024 period, Indonesia's average Revealed Comparative Advantage (RCA) PKO was recorded at 4.44, while Malaysia's was below one, at 0.23, indicating that the competitiveness of both countries is not yet fully optimal. Indonesia's RCA fluctuates, but is able to demonstrate stronger market expansion, supported by greater production capacity and the utilization of the Preferential Trade Agreement (PTA) with Pakistan. Malaysia tends to maintain a more stable but lower RCA, indicating limited market response and greater sensitivity to price fluctuations. Indonesia's competitive advantage is also reflected in its ability to adjust product composition to market needs, although both countries still face challenges related to quality standards and consumer preferences. To strengthen export competitiveness, Indonesia needs to improve fiscal and investment policies, diversify markets, industrial efficiency, develop downstream processing, and address structural barriers such as export taxes, fluctuations in global demand, and improve product quality. Overall, Indonesia's position as a major PKO exporter to Pakistan is supported by its larger market share, strategic distribution, and comparative advantage, although continued efforts are needed to maintain and improve this position.

REFERENCES

Anwaruddin, F., & Sutjipto, H. (2023). Penguatan local value chain: analisis pembiayaan hijau terhadap comparative trade CPO di Malaysia. *JEMBAR: Journal of Economic, Business & Accounting Research*, *1*(1), 40–61. https://doi.org/10.61511/jembar.v1i1.2023.238

Azida, S., Yamin, M., & Riswani, R. (2023). Analisis Daya Saing Crude Palm Oil (CPO) Indonesia Di Pasar Internasional. *Agrica*, *16*(1), 84–94. https://doi.org/10.37478/agr.v16i1.2732

Badan Pengelola Dana Perkebunan Kelapa Sawit. (2023). *Laporan Tahunan BPDPKS 2022: Peningkatan Produktivitas Perkebunan Kelapa Sawit Untuk Mendukung Transformasi Sawit Yang Inklusif Dan Berkelanjutan*. https://bpdp-my.sharepoint.com/personal/tri_sujatmiko_bpdp_or_id/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Ftri_sujatmiko_bpdp_or_id%2FDocuments%2FAR%2F2022%2FAR 2022%2FANNUAL REPORT 2022 Rev. 7.pdf&parent=%2Fpersonal%2Ftri_sujatmiko_bpdp_or_id%2FDocument

Firdaus, M., Irawan, T., Salam, F. A., & Widyastutik. (2022). Komparasi Daya Saing Minyak Sawit Indonesia Dengan Malaysia Di Pasar Pakistan Dan Kawasan Sekitar Dan Determinan Ekspornya. *Buletin Ilmiah Litbang Perdagangan*, *16*(2), 119–144.

Irawan, B., & Soesilo, N. I. (2021). Dampak Kebijakan Hilirisasi Industri Kelapa Sawit terhadap Permintaan CPO pada Industri Hilir. *Jurnal Ekonomi dan Kebijakan Publik*, *12*(1), 29–43. https://doi.org/10.22212/jekp.v12i1.2023

Itamary, A. I., & Hendrati, I. M. (2022). Analisis Daya Saing Ekspor Crude Palm Oil (Cpo) Indonesia Di Pasar India. *Jurnal Ekonomi Pembangunan*, *8*(2), 208–217. https://doi.org/10.35906/jep.v8i2.1184

Maghreza, D. Y. (2022). *Daya Saing Crude Palm Oil (CPO) Indonesia Di Pasar Minyak Nabati India Periode 2010-2020*. Universitas Islam Negeri Syarif Hidayatullah Jakarta.

Pebrianto, A. R., Angka, A. W., & Karim, I. (2024). Analisis Daya Saing Kelapa Sawit di Indonesia : Studi Kasus di Kabupaten Mamuju Tengah , Provinsi Sulawesi Barat. *Journal of Integrated Agribusiness*, *6*(4), 234–251. https://doi.org/10.33019/jia.v6i2.5569

Riwaldi, S., Wijayanti, I. K. E., & Kusnaman, D. (2023). Analisis Daya Saing Ekspor CPO Indonesia Di Pasar Internasional. *JEPA: Jurnal Ekonomi Pertanian dan Agribisnis*, *7*(4), 1244–1257.

Saban, A., & Novianti, T. (2023). Perbandingan Daya Saing Crude Palm Oil Indonesia dengan Malaysia di Negara Tujuan Utama Ekspor. *Buletin Ilmiah Litbang Perdagangan*, *17*(2), 225–246. https://doi.org/10.55981/bilp.2023.89

Saeyang, R., & Nissapa, A. (2021). Trade competitiveness in the global market: An analysis of four palm oil products from Indonesia, Malaysia and Thailand. *International Journal of Agricultural Technology*, *17*(3), 1077–1094.

Saharda, S. (2024). *MEMBANGUN POLITICAL WILL DALAM PENGELOLAAN INDUSTRI SAWIT GUNA MENDUKUNG EKONOMI HIJAU*. Progam Pendidikan Reguler Angkatan (PPRA) LXVI LEMHANNAS RI.

Sekretariat Jenderal Kementerian Pertanian. (2024). *Analisis Kinerja Perdagangan Komoditas Kelapa Sawit*.

Sukirno, & Romdhon, M. M. (2020). Analisis Daya Saing Komparatif CPO Indonesia Di Negara Tujuan Utama. *Jurnal Imiah Management Agribisnis (Jimanggis)*, *1*(1), 1–8. https://doi.org/10.48093/jimanggis.v1i1.38

Sulaiman, A. A., Amruddin, A., Bahrun, A. H., Yuna, K., & Keela, M. (2024). New Challenges and Opportunities of Indonesian Crude Palm Oil in International Trade. *Caraka Tani: Journal of Sustainable Agriculture*, *39*(1), 94–106. https://doi.org/10.20961/carakatani.v39i1.81957

Tampubolon, B. I., Hastuti, Firdaus, M., Anggraeni, L., & Muna, N. (2022). Kinerja Ekspor Indonesia dan Persepsi Konsumen Pakistan terhadap Minyak Sawit dan Produk Turunannya. *Buletin Ilmiah Litbang Perdagangan*, *16*(1), 41–58. https://jurnal.kemendag.go.id/bilp/article/view/692

Tandra, H., Suroso, A. I., Syaukat, Y., & Najib, M. (2023). Relative Export Competitiveness in Indonesian and Malaysian Palm Oil Downstream Products. *Jurnal Manajemen dan Agribisnis*, *20*(3), 343–354. https://doi.org/10.17358/jma.20.3.343

Tsiwiyati, D. N. (2024). Transformasi Industri Kelapa Sawit: Hilirisasi Berkelanjutan Menghadapi Daya Saing Global dan Ekonomi Hijau. *Jurnal Esensi Hukum*, *6*(2), 27–45. https://doi.org/10.36841/growth-journal.v21i2.3971

Wahyuni, M. (2022). *Kelapa Sawit, Biologi, Pertumbuhan dan Produktivitasnya*. Penerbit Cahaya Harapan.