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New Challenges and Opportunities of Indonesian Crude Palm Oil in International Trade

Andi Amran Sulaiman[1*], Achmad Amruddin[1,2], Abd Haris Bahrun[3], Kanazawa Yuna[4] and Mathurada Keela[5,6]

[1]Department of Agribusiness, Faculty of Agriculture, Hasanuddin University, Makassar, Indonesia; [2]International Doctor Program in Agriculture (IDPA), National Chung Hsing University, Taichung, Taiwan; [3]Department of Agronomy, Faculty of Agriculture, Hasanuddin University, Makassar, Indonesia; [4]The course of Regional Development and Management Studies, Graduate School of Agriculture, Saga University, Saga, Japan; [5]Faculty of Animal Sciences and Agricultural Technology, Silpakorn University Phetchaburi IT Campus, Phetchaburi, Thailand; [6]Department of Applied Economics, National Chung Hsing University, Taichung, Taiwan

[*]*Corresponding author:* aas@unhas.ac.id

Abstract

Indonesia is one of the largest palm oil producers in the world. The palm oil industry must look at the market competition map, starting from competing countries and other export opportunities to absorb palm oil products to increase state revenues. This paper analyzes the new challenges and opportunities for Crude Palm Oil (CPO) in Indonesia in international trade. Analytical tools were Revealed Comparative Advantage (RCA), Revealed Symmetric Comparative Advantage (RSCA), Dynamic Product Export and X-model Potential Export. The results showed that Indonesian and Malaysian palm oil commodities obtained an RCA value of more than 1 and an RSCA value of close to 1. Indonesia is more competitive than Malaysia. The X-model showed that Indonesian CPO market share optimism is only in India and the rest is less potent. Malaysian CPO market share also has less potential. Therefore, Indonesia's new challenges are export tariffs, obstructed access, insufficient downstream production and a black campaign. The opportunity for participation in the CPO export market is only in India compared to Malaysia, which has less potential. The two countries have less potential in destinations such as the Netherlands, USA, China and Kenya. Indonesia can take external policies by establishing cooperation with export destination countries, such as trade agreements, so that information about Indonesian palm oil is well received. Meanwhile, internal policies strengthen domestic downstream industry policies, such as the food, health, and renewable energy industries, to strengthen the domestic economy and improve the welfare of Indonesian palm oil farmers.

Keywords: bilateral cooperation; comparative advantage; export challenges; palm oil industries; trade competitiveness

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INTRODUCTION

International trade is carried out among residents of two or more countries based on mutual agreement. Imports and exports characterize it and significantly increase the gross domestic product in many countries (Hasoloan, 2013). Furthermore, a country producing more export commodities has a higher Gross National Product (GNP). The level of imports also impacts the exchange rate. The decline in the price of domestic goods increases exports and decreases

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imports. Reducing import dependency through structural reforms should be a priority for policymakers (Yildirim and Ivrendi, 2016). Various products, such as agricultural products, livestock, fisheries, plantations, and others, are exported to foreign countries. Plantation is an important sub-sector in development activities because it relies on superior commodity products marketed internationally (Syahza et al., 2021). The exported products constituting Indonesia's primary commodities include palm oil, rubber, coconut, coffee, and cocoa (Luskin et al., 2014).

Palm oil is a major global commodity that dominates the oil market for the food industry and is used as a biofuel (Cattau et al., 2016; Prayitno et al., 2020; Amiruddin et al., 2021). Palm oil is one of the most developed plantation crops in Indonesia (Amiruddin et al., 2021; Suardi et al., 2022). Indonesia remains the world's largest palm oil producer (Raisa et al., 2024). This plant is often promoted to foster rural development and alleviate poverty (Balde et al., 2019), not only in Indonesia but also in Thailand and Malaysia, as a rural livelihood (Mukherjee and Sovacool, 2014). Palm oil is a plantation commodity with an important role in the economic improvement of Indonesia (Nahlunnisa et al., 2016), the largest producer and exporter worldwide. Palm oil fruit is processed into semi-finished Crude Palm Oil (CPO) and finished palm oil. In 2009, data from Statistics Indonesia showed that almost all of Indonesia's territory could be used as oil palm plantations to produce CPO (Syahza and Asmit, 2020). However, it is only concentrated in several large islands, including Sumatra, Kalimantan and Sulawesi (Maygirtasari et al., 2015).

Some countries have much higher productivity levels than the world. Indonesia ranked first in the average productivity of palm oil Fresh Fruit Bunches (FFB), followed by Malaysia, Thailand, Nigeria, Colombia, Ecuador, Cameroon, Ghana and Papua New Guinea (Sulistyanto and Akyuwen, 2011). Global demand and increasing profits have significantly increased palm oil cultivation for smallholders and prominent entrepreneurs. According to Monoarfa et al. (2021), palm oil production has increased due to the development of global consumption. There is a need for environmentally friendly oils such as biofuels derived from palm oil. Research on biofuels for vehicles and industrial needs is growing, considering that fossil fuels are limited natural resources and cause environmental pollution (Dey et al., 2021). As they provide advantages, including lower production costs and cleaner production processes, biofuels should be increasingly used in the energy and transportation sectors. Compared to fossil fuel sources that are exploited to the point of extinction, the main benefit of biofuels is that the quantity of renewable resources is more sustainable (Prasad and Ingle, 2019). In addition, biofuels are more environmentally friendly than fossil fuels, creating a greener environment (Sharma et al., 2020).

The five largest countries receive exports based on data on palm oil export activities. These countries include India, the Netherlands, China, the USA and Kenya (Rosyadi et al., 2021). These countries are also the main export destinations for Indonesian CPOs. However, currently, the country is also Indonesia's competitor in the Indian, Chinese, and Dutch markets in Malaysia. According to Prasetyo (2019) the lower growth of CPO exports compared to other producing countries is feared to cause Indonesia not to have an advantage in CPO products and make Indonesia potentially not have an excellent competitive ability in these central export destination countries. According to Jamilah et al. (2022), this is related to the fact that Indonesia can only process CPO into derivative products by 59.66% and export 40.34% of CPO in raw form. Indonesia's ability to process CPO is still far below Malaysia's. Malaysia exports only 17.5% of raw CPO and 82.5% of CPO processed into various products.

Indonesia's inability to process all CPO derivative products encourages domestic producers to export CPO to processing countries, such as China, India, the Netherlands and several European Union countries (Zuhdi et al., 2021). In addition, in export activities carried out by Indonesia, there are other challenges, including the black campaign from the European Union (Arifin and Putri, 2019). Action to conduct a black campaign by raising issues such as environmental and health issues is a new form of protectionism because the efforts that impose tariffs and subsidies cannot overcome the infant industry problem. This condition is evidenced by the fact that the European Union has subsidized its farmers and imposed tariffs on Indonesian palm oil entering the European Union, so it becomes one of the obstacles for Indonesia in exporting palm oil commodities (Tyson and Meganingtyas, 2022). However, as the largest palm oil producer, Indonesia sees the need for consumption and the increasing market share of palm oil as an opportunity to export. Indonesian palm oil export

value fluctuated from 2007 to 2014. The largest palm oil export value was in 2011 and the lowest in 2007 (Tan and Tan, 2017). This condition also certainly affects other countries' ability to compete with each other in improving their palm oil cultivation activities to produce good palm oil. As a promising export commodity, palm oil makes Indonesia one of the largest palm oil exporters in the world followed by Malaysia, Ecuador, Colombia and Thailand with an export value that reached 4.2 billion USD in 2014. Given situation above, the research question is what are the challenges and opportunities of Indonesian palm oil in international trade.

This research has a novelty in looking at the competitiveness of Indonesian CPO, specifically in the central export destination countries, so that the cooperation that has occurred can be maintained and see exports in other countries that have the opportunity for new collaboration, which is compared with competing countries of Malaysian palm oil producers with the latest data. So, the aim of this research is that it is hoped that policymakers can formulate appropriate policies for cooperation in Indonesian CPO exports and developing the downstream palm oil industry for the welfare of local palm oil communities.

MATERIALS AND METHOD

This study analyzed the global development of Indonesian CPO (HS 15111000) export competitiveness from 2016 to 2022 using Revealed Comparative Advantage (RCA), Revealed Symmetric Comparative Advantage (RSCA), Export Product Dynamic (EPD) and X-Model Potential Export Products analyses. CPO export destination countries to be studied are India, the Netherlands, China, the USA and Kenya. The selection of countries is based on the central export countries of Indonesian CPO products, namely India and the Netherlands. While China, the USA and Kenya are other potential countries for developing CPO exports. These five countries also represent the continents of Asia, Europe, America and Africa. Then, Malaysia is used as an export comparison country to find Indonesia's competitors in the world CPO trade.

The competitiveness analysis used RCA, which measures the gains or losses of certain commodities. Export competitiveness is also important to the comparative advantages as one of the most prominent international trade (Kim and Thunt, 2017). RCA compares the relative and theoretical export performance of international trades and approaches to measuring RCA. It also analyzes comparative advantage factors and proposes an export performance index. The basic concept of this method is the comparative advantage of a country that is represented by the trade between countries, which is then reflected in its exports. In addition, using the relative share of exports is very important because import data tends to be more biased. After all, the government often imposes various rules to suppress imports, making the export data more explicit in several ways. Distortions reveal their comparative advantage (Arsyad et al., 2020).

Balassa (1965) explained that RCA compares the export market share with the market share of other producers to show an industry's competitiveness. RCA puts the export performance against the total export, comparing it with the share of the product value in world trade. It is expressed by the Equation 1.

$$RCA = \frac{X_{ij}/X_{it}}{W_{ij}/W_t} \quad (1)$$

Where, X_{ij} = Export value of commodity j from country I; X_{it} = Exports value of all commodities from country I; W_{ij} = World export value of commodity j; W_t = Export value of all world commodities.

When the RCA exceeds 1 to infinity, good export performance is illustrated by a strong share in the international market. Conversely, when the RCA is smaller than 1 to 0, poor export performance is described by a weak share in the global market (Balassa, 1965). The benefit of the RCA technique is that it lessens government intervention, allowing commodities' competitive edge to occasionally be observed plainly (Destiarni et al., 2021). However, the competitiveness calculated with RCA is asymmetrical. This condition makes it difficult to determine a country's competitiveness level. The RCA index also cannot explain whether the trade pattern is optimal, and the output produced is incomparable on both sides.

RSCA was conducted to improve the RCA method (Dalum et al., 1998). This condition is because the index results of the RCA method are asymmetrical and override the importance of domestic demand, the size of the domestic market, and its development. The RSCA index is a monotonic transformation of RCA's comparative advantage (Mahdi and Nurmalina, 2021). The index is expressed by the Equation 2.

$$RSCA = \frac{(RCA-1)}{(RCA+1)} \quad (2)$$

The values obtained from the RSCA index ranged from -1 to 1 ($-1 \leq RSCAij \leq 1$). When the RSCAij of the country I is more than zero, the country has a comparative advantage for product j. Conversely, when the RSCAij is negative, the country lacks a comparative advantage for product j (Dalum et al., 1998; Laursen, 2015).

EPD analysis was conducted to assess and identify products or commodities with the highest competitive power and their rapid growth in a country's export trade (Esterhuizen, 2006). This method indicates competitiveness by measuring the market position of a particular destination (Hasibuan et al., 2012). The EPD matrix uses market attractiveness measured based on demand growth as the horizontal axis (X-axis) and business strength as the vertical axis (Y-axis). It is then grouped into four indicators: rising stars, falling stars, lost opportunities and retreats (Anggrasari et al., 2021), as seen in Figure 1.

X-axis: Export market share growth, expressed by the Equation 3.

$$\frac{\sum_{t=1}^{t}\left(\left(\frac{X_{aj}}{W_{aj}}\right)_t \times 100\% - \left(\frac{X_{aj}}{W_{aj}}\right)_{t-1} \times 100\%\right)}{T} \quad (3)$$

Y-axis: Product market share growth, expressed by the Equation 4.

$$\frac{\sum_{t=1}^{t}\left(\left(\frac{X_{tj}}{W_{tj}}\right)_t \times 100\% - \left(\frac{X_{tj}}{W_{tj}}\right)_{t-1} \times 100\%\right)}{T} \quad (4)$$

Where Xaj is the export value of Indonesia's commodity a to country j; Waj is the export value of world commodity a to country j; Xtj is the total export value of Indonesia to country j; Wtj is the total export value of world to country j; and T is the number of years (Nurhayati et al., 2019).

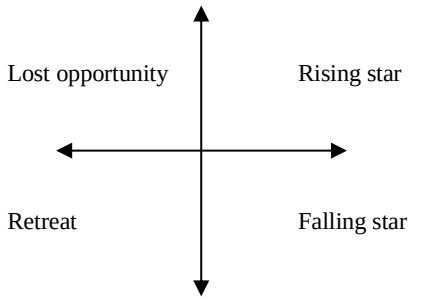

Figure 1. Product competitiveness position with the EPD method (Esterhuizen, 2006)

The X-Model Potential Export Products combines the RCA and EPD methods to cluster products with high or low development potential in certain areas (Rivai et al., 2021). This clustering focuses on the trading market, and the analysis is narrated and presented in text, tables or figures (Nurhayati et al., 2019).

RESULTS AND DISCUSSION

Competitiveness of Indonesian palm oil in international trade

The palm oil industry has a good outlook because it is competitive in the palm oil sector. Increasing global demand for palm oil from the food, oleochemical and energy industries, combined with high prices, has resulted in huge profits from palm oil production and thus incentivizes producers to expand their operations (Parveez et al., 2022). The competitive palm oil industry has good prospects due to its competitiveness and the production increase in line with the increasing community needs (Ewaldo, 2015). Furthermore, the area and production are increasing along with community needs. This condition is expected to continue growing following the development of the plantation industry's quality and competitiveness (Syahza, 2019). If farmers have high competitiveness, their income level will increase (Prihantini and Onuigbo, 2023). World palm oil consumption is higher than that of other vegetable oils, as shown in Figure 2. In 2019, the world's total vegetable oil consumption reached 207.93 million metric tons (MT). Figure 2 shows that palm oil is the most consumed, reaching 75.45 million MT or 36.3% of the world's vegetable oil consumption. It is followed by soybean oil with consumption at 59.48 million MT (28.6%), flaxseed oil at 27.64 million MT (13.3%), olive oil at 3.1 million MT (1.5%), coconut oil at 3.67 million MT (1.76%) and cottonseed oil at 4.89 million MT (2.35%).

Competition in international trade activities creates competitiveness levels from various regions and countries. Comparative and competitive advantages determine a country's competitiveness in a commodity (Suparmono et al., 2022). Each country must improve and maintain the competitiveness of its superior products (Hertina et al., 2021), such as palm oil in Indonesia. Furthermore, the RCA analysis measures competitiveness based on market share. The method compares the share of commodity export values to the total exports of producing

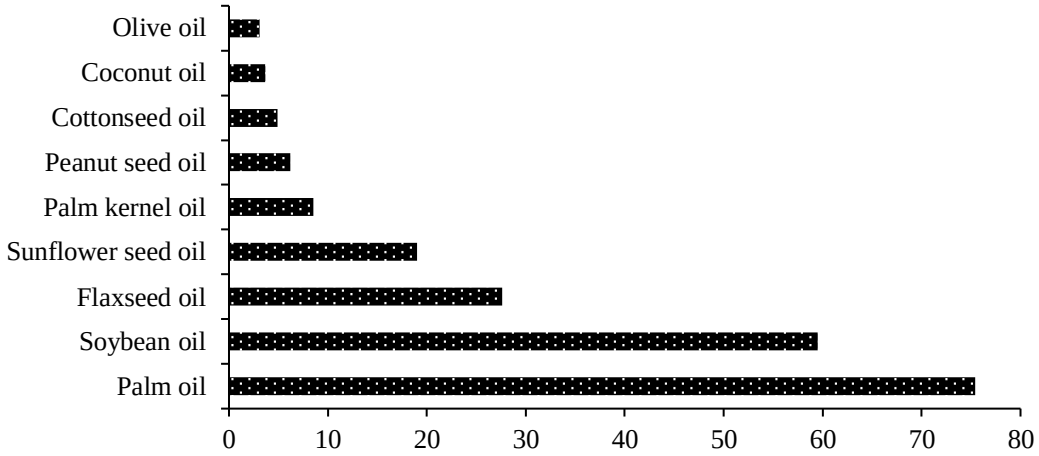

Figure 2. World vegetable oil consumption in 2019 (million MT) (Purba, 2019)

countries with the share of the export value of related commodities in international trade.

This study analyzed the competitive position of palm oil export products from Indonesia against Malaysia, the closest competitor due to its position as the largest CPO producer and exporter (Ramadhani and Santoso, 2019). Geographically, Malaysia is very suitable for planting oil palm. Apart from that, the Malaysian government's policy encourages and makes investing in palm oil commodities easier for entrepreneurs. On the other hand, to promote and develop the Malaysian palm oil industry, the Malaysian Palm Oil Board (MPOB) was established under the Ministry of Industrial Plantations and Commodities (Parveez et al., 2022). Indonesia and Malaysia are the largest CPO-producing and exporting countries worldwide. Their export values indicate their average RCA level in international trade is highly competitive. Moreover, Malaysia is the strongest competitor in international trade. This condition is one of Indonesia's biggest new challenges to always maintaining its position in exporting CPO commodities to the global market. Table 1 presents the CPO export data of Indonesia and Malaysia. The data shows that Indonesia has a higher average export development than Malaysia.

The competitiveness level of palm oil commodities is measured using the RCA. The development of the RCA of Indonesia and Malaysia's palm oil commodities with export destination countries in international trade is presented in Figure 3.

Export activities to India fluctuated but increased starting in 2018. The export value from 2016 to 2022 showed that the average RCA in Indonesia and Malaysia was 13.43 and 7.57, respectively. This condition indicates that the values of the two countries were positive, meaning they had a comparative advantage in competing in international trade. Based on the 2016 to 2022 RCA, Indonesia was more competitive than Malaysia. Wahyuningsih et al. (2020) stated that India is the destination country for Indonesia and Malaysia, with Indonesia being superior to Malaysia. Palm oil producers recognize that India's more relaxed demand requirements than those in Europe reflect their public interest and policy priorities. The current

Table 1. Development of Indonesia and Malaysia's CPO exports

Year	Indonesia's CPO exports		Malaysia's CPO exports	
	Volume	Value	Volume	Value
2016	5,283,953,440	3,305,575,089	3,840,769,980	2,335,674,952
2017	7,076,070,204	4,698,225,492	2,787,556,620	1,880,314,679
2018	6,554,497,333	3,576,824,756	3,341,772,210	1,937,676,358
2019	7,401,792,053	3,641,686,781	3,718,699,510	1,860,604,636
2020	8,476,820,329	5,321,877,282	4,722,438,214	2,455,512,523
2021	7,788,549,862	5,123,824,121	5,335,823,900	4,987,580,344
2022	5,311,257,329	3,522,312,800	4,712,824,267	2,235,674,410
Average	6,841,848,650	4,170,046,617	4,065,697,814	2,527,576,843

Source: UN Comtrade (2022)

challenge is to keep palm oil production increasing to meet increasing market demand in India (Kadarusman and Pramudya, 2019)

Figure 4 presents the export activities to the Netherlands as part of the European Union, which fluctuated but tended to increase. However, Indonesia's RCA is superior to Malaysia's, meaning it is more competitive in international trade. Widyaningtyas and Widodo (2017) found that Indonesia's export value in the European Union between 2008 and 2014 was superior to Malaysia's. However, Indonesian CPO's competitiveness needed improvement, considering Malaysia is the main competitor in export activities. The fluctuating value of CPO exports to European countries is due to the European Union's efforts to develop and utilize local vegetable oils sourced from soybean, rapeseed and sunflower (Jamilah et al., 2022).

Figure 5 shows that export activities to China have fluctuated, but the results are positive, meaning Indonesia and Malaysia have a comparative advantage in competing in international trade. The average results of the 2016 to 2022 RCA for Indonesia are superior to those of Malaysia and China. Indonesia, one of the ASEAN members, has agreed on free trade cooperation within the ASEAN-China Free Trade Area (ACFTA) framework. Through ACFTA, countries that are members of the agreement provide preferential treatment to three sectors, namely goods, services and investment, which aims to accelerate the flow of these sectors so that a free trade area can be formed, one of which is palm oil commodities (Maria, 2021).

Wahyuningsih et al. (2020) stated that China is the destination country for Indonesia and Malaysia, with Indonesia being superior to Malaysia. This condition is relative to derivative products in the Chinese market because China prefers processing and reselling crude oil. However, Malaysia also has the potential to seize the position from Indonesia as in China. The market share of Indonesia and Malaysia is almost similar, but Indonesia is superior.

Export activities to the USA fluctuated and were not recorded for several years. From 2016 to 2022, the average RCA from Indonesia and Malaysia to the USA was 0.90 and 0.72, respectively (Figure 6). However, the value was

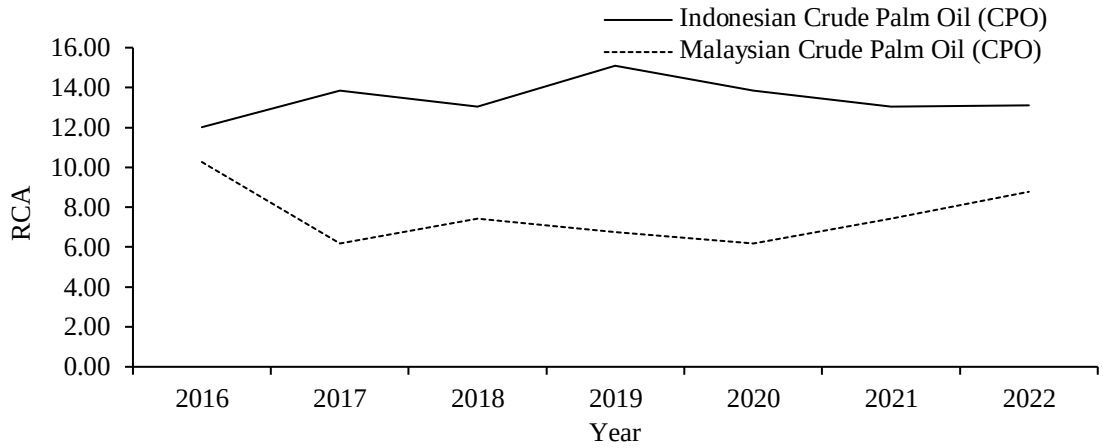

Figure 3. Development of Indonesia and Malaysia RCA values to India 2016 to 2022

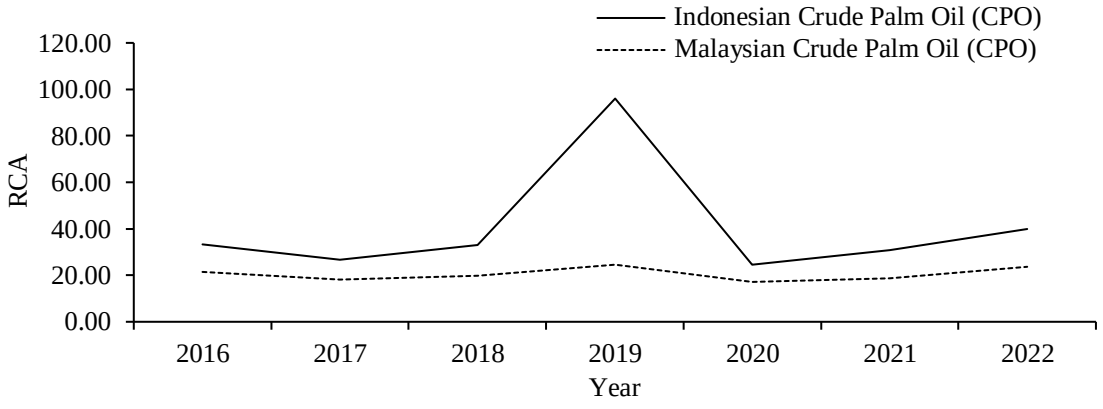

Figure 4. Development of Indonesia and Malaysia RCA values to the Netherlands 2016 to 2022

negative because RCA was less than 1, meaning Indonesia and Malaysia had no comparative advantage to compete in international trade.

Export activities to Kenya fluctuated and were not even recorded for several years. From 2016 to 2022, the average RCA from Indonesia and Malaysia to Kenya was 35.60 and 27.75, respectively. However, positive values mean that Indonesia and Malaysia had a comparative advantage in international trade. Based on the average RCA, Indonesia is more competitive because its value is superior to Malaysia (Figure 7). Kenya is the largest African country that consumes palm oil, and the food industry requires palm oil as a raw material for ice cream and snacks (Rifin, 2010). Efforts should be made to build trade cooperation specific to palm oil, such as research on processed industries or renewable energy from Indonesia that can be utilized on the African Continent.

Over the last ten years, Indonesia and Malaysia have had an RCA of more than 1. This condition classifies both countries as having a high comparative advantage over CPOs to compete internationally. According to Amiruddin et al. (2021), the high RCA reflects the two countries' ability to compete in international trade. It was found that Indonesia is less competitive than Malaysia. The reason is that Malaysia receives fair treatment because it is a former colony of Britain. Therefore, it is more competitive in its export activities than Indonesia. However, the comparison is insignificant because Indonesia's production is the same as Malaysia's. The difference is that the relationship between Malaysia and India is more significant because it has privileges as a former British colony. Therefore, Indonesia should suppress the downstream export of more derivative products than crude oil. The expansion of oil palm plantations, which involves a lot of labor and relatively significant investments in downstream industries, is expected to positively stimulate, grow, and create jobs and business opportunities (Syahza and Asmit, 2020).

RSCA analysis showed that Indonesia and Malaysia have a comparative advantage in palm oil commodities. This condition is indicated by the relatively high positive RSCA close to 1. Indonesia is the largest CPO-exporting country worldwide (Prasetyo, 2019). Its RSCA CPO average value is still higher than Malaysia's closest competitor country. Also, Indonesia has the opportunity to increase CPO production and competitiveness. The country's position is supported by its comparative advantages based on

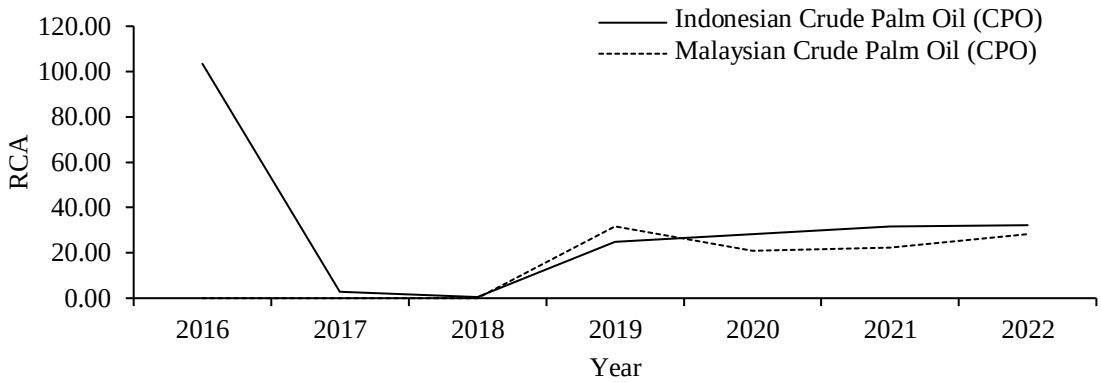

Figure 5. Development of Indonesia and Malaysia RCA value to China 2016 to 2022

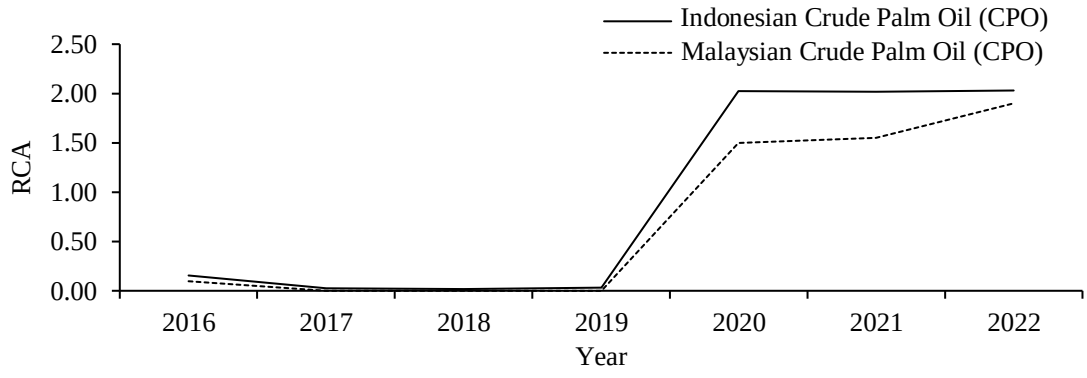

Figure 6. Development of Indonesia and Malaysia RCA values to the USA 2016 to2022

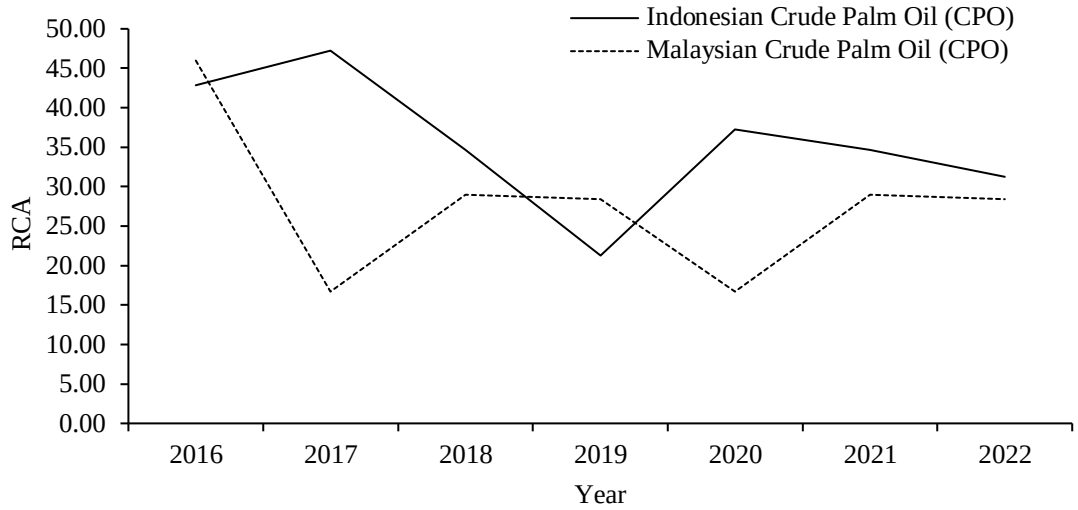

Figure 7. Development of Indonesia and Malaysia RCA value to Kenya 2016 to 2022

land and geographical conditions. In line with this, Quevedo et al. (2023) stated that several factors support Indonesia's comparative advantage in international trade. First, oil palm land in Sumatra, West Java, Kalimantan, Sulawesi, and Papua supports climate and environmental conditions. Second, many cheap human resources are a source of processing labor. Third, the input costs needed to produce palm oil are low, and raw and supporting materials are domestically easy to obtain. Fourth, Indonesia has supporting industries, such as the supply of seeds and fertilizer and the chemical industry.

The subsequent competitiveness analysis used is X-Model Potential Export Products, which combines the RCA and EPD methods and focuses on the trading market. Table 2 shows the results of the analysis of X-Model Potential Export Products.

Table 2 shows Indonesia's opportunity with India's potential market development in CPO export activities. Indonesia has an RCA of more than 1 in the Indian market share. As a result, it gains strong competitiveness and is in a Falling star position, indicating a state of share. The market is increasing because it has potential opportunities, though the product is not dynamic. Moreover, Malaysia to India shows that the CPO export market share has less potential but an RCA of more than 1. The results indicate that Malaysia is competitive but is in a retreat position. This is also an undesirable position because market share is lost, and the product is not dynamic. The development of Indonesian and Malaysian CPO market share has less potential in the Netherlands, China and Kenya. The market share has a strong RCA because it has more than 1. However, it is in a retreat position, and the CPO export market shares have less potential. This position is undesirable because the product is not dynamic when market share is lost. In the USA, the market share of Indonesia and Malaysia has less potential due to the weak RCA of less than 1. It is in an unexpected lost opportunity position, showing the dynamic nature of the product's market share loss.

Table 2. Calculation of X-Model Potential Export Products between Indonesia and Malaysia in 2016 to 2022

Country	RCA	EPD	X-Model
Indonesia-India	13.43	Falling star	Potential market development
Malaysia-India	7.57	Retreat	Less potential market development
Indonesia-Netherlands	40.60	Retreat	Less potential market development
Malaysia-Netherlands	20.50	Retreat	Less potential market development
Indonesia-China	31.99	Retreat	Less potential market development
Malaysia-China	14.79	Retreat	Less potential market development
Indonesia-USA	0.90	Lost opportunity	Less potential market development
Malaysia-USA	0.72	Lost opportunity	Less potential market development
Indonesia-Kenya	35.60	Retreat	Less potential market development
Malaysia-Kenya	27.75	Retreat	Less potential market development

New challenges and opportunities for Indonesian palm oil in international trade

Analysis and interviews showed Indonesia has opportunities and new challenges in international trade activities. Regarding the opportunities:

1. It controls 60% of the global CPO market share due to its high production supported by large and geographically suitable land conditions. The area of oil palm land reaches 16.37 million hectares, comprising people, private and state ownership. The progressive tax export policy on CPO commodities has changed the market share to Raw Palm Oil (RPO) commodities. This condition provides an important note for the government in opening new alternative markets while maintaining export shares in the main export destination countries (Rifin, 2019).
2. As shown in the processing stages, Indonesia has the same quality of CPO products as other competitive countries. The Indonesian palm oil industry is stepping up palm oil research to produce palm fruits with the latest technology (Syahza and Asmit, 2020).
3. The global need for palm oil consumption is increasing with the shift from fossil oil consumption to vegetable oil. Palm oil is cheaper and easier to produce, making it a suitable alternative to fossil oil. In order to overcome the difficulties of fossil fuels, alternative fuels can be a beneficial substitute for reducing global emissions (Dey et al., 2021).

The uncertainty of market demand has made Indonesia face several new obstacles or challenges in its trade activities, including:

1. A fiscal policy in CPO export regulates that a company must pay export duties or taxes. This can become an opportunity for other countries to supply to destination countries that do not require hefty export costs. Additionally, CPO prices depend on other vegetable oils, causing price fluctuations.
2. Indonesia's export access to former British colonies, such as India and Malaysia, is quite hampered. India is the world's highest palm oil consumer and export recipient. Malaysia is a former colony of the United Kingdom and an exporter of palm oil, meaning it has more opportunities than Indonesia.
3. Indonesia processes 60% of CPO into derivative products and exports 40% of palm oil in crude form. In contrast, Malaysia exports 82.5% of CPO derivative products, and the rest is exported in raw form. This condition makes Indonesia less competitive compared to Malaysia. Consequently, the government emphasized the downstream system that ensures the products comprise CPO and its derivatives.
4. Several European countries intensify black campaigns to bring down Indonesian palm oil, reducing the Indonesian CPO market share, especially in Europe. Similarly, Erizona et al. (2021) explained that Indonesian CPO exports are under pressure from the European Union. This is reflected in a black campaign for vegetable oil in the global market due to the increasingly high dependence on CPO. European countries are trying to secure rapeseed, sunflower and soybean oils as domestic products. Although the Indonesian government has handled the black campaign, they are still adamant about their unfounded accusations.
5. Companies should meet standards and obtain certification from the Roundtable on Sustainable Palm Oil (RSPO) or Indonesia Sustainable Palm Oil (ISPO) as a condition for palm oil export activities. ISPO policy shows that Indonesian crude palm oil products are environmentally friendly (Syahza and Asmit, 2020). This condition becomes an obstacle for entrepreneurs because of the numerous requirements for submitting the certification.

Indonesia's government has tried to maintain the market share to compete healthily with other palm oil exporters. It has intensified diplomatic activities, such as conducting positive campaigns by collaborating with the World Trade Organization (WTO), aiming to socialize CPO and restore the positive image of Indonesian palm oil. Second, Indonesia, Malaysia and other palm oil-producing countries formed a Council of Palm Oil Producing Countries (CPOPC) on November 21, 2015. Bayu et al. (2019) stated that the main concern of CPOPC is the development of cooperation and the economy. This organization aims to promote, develop and strengthen cooperation among member countries in the cultivation and industry of oil palm. It also deals with barriers to oil palm trade by the European Union in the economic field to curtail CPO exporters. Indonesia plans to make a roadmap to facilitate international trade routes or export activities. It aims to make these export activities more organized and reduce costs by adjusting the mapping location to the destination.

Fourth, Indonesia plans to limit CPO export activities to foreign countries and maximize domestic processing activities. This condition is intended to substitute CPO with diesel oil to suppress import activities by Indonesia, reducing state expenditure.

CONCLUSIONS

Indonesia faces new challenges in international trade competitiveness, including exit, hampered access to export activities, failure of downstream products and black campaigns from the European Union. Meanwhile, opportunities are faced, such as expanding land, improving product quality and increasing palm oil consumption. Policies can be implemented by strengthening trade cooperation with export destination countries and developing domestic downstream industrial policies, such as renewable energy. The limitation of this study is that it has not seen how RPO commodities can be an alternative to Indonesian CPO exports. Future research can add to this and increase the number of palm oil exporting destination countries from the perspective of international trade cooperation.

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