

## ANALYSIS OF THE STRUCTURE OF INDONESIAN PALM OIL EXPORT COMPANIES

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### Abstract

*This study aims to reveal the complex structure of Indonesian palm oil export companies. Primary data were obtained from a survey of 15 palm oil export companies in Indonesia. The survey was conducted through in-depth interviews. The list of companies surveyed was obtained through the Indonesian Palm Oil Research Center (PPKS) with a purposive sampling method. Based on the research results, 13.13% of palm oil export companies are state-owned enterprises (PTPN), and 86.67% are limited liability companies (LLC). 80% of the companies are involved in production, 93% are involved in processing, storage, and packaging, and 100% sell products domestically and export. The survey results show that 93% of the companies have the Roundtable on Sustainable Palm Oil (RSPO) certification, which aims to ensure responsible, environmentally, and socially friendly palm oil production. 66% of the companies have received ISO certification, confirming the quality and efficiency of management systems following international standards. Based on the research results, 93% of companies export to China, 86% to India, 66% to the USA, and 60% to the Netherlands, Germany, Singapore, and Vietnam. Palm oil companies face various problems, such as climate issues, high fertilizer prices, export restriction policies by the government and importing countries, and negative campaigns by NGOs on palm oil. Solutions implemented by the company include careful planning of fertilization, management of raw material purchases, market diversification, active participation in industry associations, and compliance with national and global palm oil sustainability standards.*

**Key words:** palm oil, export, Indonesian company

### INTRODUCTION

Indonesia, renowned for its lush landscapes and abundant natural resources, is an eminent global player in the palm oil industry. Indonesia is the biggest palm oil producing and exporter country in the world [5, 6], with an area of 15.38 million hectares and a total palm oil production of 45.58 million tons in 2022, followed by Malaysia, with palm oil production of 19.20 million tons, Thailand 3.26 million tons, Colombia 1.76 million tons, and Nigeria 1.40 million tons. Indonesia has been exporting palm oil for 104 years (1919-2023) [2], making the palm oil industry an essential engine of economic growth for Indonesia [9] as it contributes significantly to foreign exchange earner, a provider of employment and a source of household income [7]. The industry plays a fundamental role in strengthening Indonesia's position in the global market.

The Indonesian palm oil sector, pivotal to the nation's economy [9], is characterized by a multifaceted structure encompassing many

factors, including ownership models, governance practices, environmental sustainability, and supply chain management. However, as palm oil continues to face international scrutiny due to environmental and social concerns, the need to thoroughly analyze the structure of Indonesian palm oil export companies becomes even more compelling. These companies' structure is essential to their day-to-day operations and has profound implications for sustainability, environmental conservation, and responsible business practices.

This research seeks to uncover the complex structure of Indonesian palm oil export companies to provide deeper insight into the structure of palm oil export companies in Indonesia, including an understanding of company ownership composition, production and export activities, government regulations, company problems, and solutions, as well as identifying potential environmental and social impacts of the palm oil export industry.

## MATERIALS AND METHODS

The data used in this study are primary and secondary. Primary data is obtained from surveys conducted directly with companies that export palm oil in Indonesia. The survey was conducted through an in-depth interview. The survey was conducted from March to July 2023. The list of companies surveyed was obtained through the Indonesian Palm Oil Research Center (PPKS); the purposive sampling method was used due to time and resource constraints. This study involved 15 palm oil export companies in Indonesia. Secondary data were obtained from documents, publications, and year-end reports of Indonesian palm oil export companies and related agencies. The data obtained from this study were analyzed using basic statistical methods for comparative tables and interpretation.

## RESULTS AND DISCUSSIONS

### Demographic characteristics of company respondents

In this study, the characteristics of the surveyed company personnel are analyzed and presented in Table 1.

Based on the research results, 26% of the surveyed company staff are women, while 73% are men. 20% of the surveyed company respondents are 22-25 years old, 46% are 26-29, and 46% are 30-35.

20% of company respondents were single, while 80% were married.

Regarding education level, 100% of the company respondents surveyed are bachelors. Based on their workplace position, the majority of respondents (46%) are supervisors.

26% were assistant managers, 20% were operators, and 6.6% were trainees.

Based on the length of service of respondents in the company, 46% have worked for 1-3 years and 4-6 years, and 6.6% have worked for more than 10 years.

Table 1. The demographic characteristics of company respondents

Gender	n	%
Female	4	26.67
Male	11	73.33
Total	15	100.00
Age	n	%
22-25	3	20.00
26-29	7	46.67
30-35	5	46.67
>36	-	-
Total	15	100.00
Marriage status	n	%
Not married	3	20.00
Married	12	80.00
Total	15	100.00
Education level	n	%
Elementary school	-	-
Junior high school	-	-
High school	-	-
Diploma	-	-
Bachelor	15	100.00
Master	-	-
Doctorate/PhD	-	-
Total	15	100.00
Position at work	n	%
Supervisor	7	46.67
Manager	-	-
Assistant manager	4	26.67
Company owner	-	-
Operator	3	20.00
Trainee	1	6.67
Total	15	100.00
Length of time working in the company	n	%
1-3 years	7	46.67
4-6 years	7	46.67
7-10 years	-	-
>10 years	1	6.67
Total	15	100.00

Source: Author's data from the questionnaire survey.

### Information on palm oil export companies

Based on the survey results in Table 2, 13.13% of palm oil export companies are state-owned enterprises (PTPN), and 86.67% are limited liability companies (LLC). PTPN is a State-Owned Plantation Enterprise (SOPE) under the direct supervision of the Indonesian government and has specific responsibilities in implementing government policies related to plantations and the environment. LLC is a form of company with limited shareholding. It has greater flexibility in its business management and less direct involvement of the government in the company's operations, except within the

framework of applicable laws and regulations. Regarding company activities, 80% of the companies are involved in production, 93% are involved in processing, storage, and packaging, and 100% sell products domestically and export. In terms of production area (plantation), 80% of companies have their own production area, while 20% of companies do not have a production area. Based on the research, 93% of companies process oil palm in company-owned processing plants.

Regarding how long palm oil companies have been exporting, 20% of palm oil companies have been exporting for 11-15 years, and 80% of palm oil companies have been exporting for more than 20 years. Based on the survey results, 80% of the companies get their primary supply of palm oil from their own plantations (nucleus plantations) and plasma plantations. Nucleus plantations are plantation systems owned and managed by large companies. The company owns a large area of prime land for growing oil palm. This land is called the "core" or "core estate." The company usually uses its own labor to manage this core estate. The company is fully responsible for managing and investing in its core estate, including seed procurement, fertilization, maintenance, harvesting, and processing of the oil palm produce. At the same time, plasma oil palm plantations are plantation models that involve the participation of smallholders or farmer groups. In this system, the government or palm oil companies provide smallholders with a portion of their land. This land is called a "plasma estate." Plasma farmers are responsible for the management and maintenance of their own plantations. However, they can receive technical and capital assistance from the government or the parent company through agricultural guidance, fertilization, seed assistance, and access to palm oil processing facilities. Smallholders have contracts with companies to provide fresh fruit bunches (FFB). Moreover, 80% of the company sources its palm oil supply from partner companies, 66% from traders, and 33% from independent smallholders. The supply purchased by the company from smallholders,

intermediaries, and farmers is in the form of fresh fruit bunches (FFB) (Table 2).

Table 2. General information about palm oil export companies

Legal form of company	n	%
PTPN (State-owned plantation enterprise)	2	13.33
Regional company	-	-
State-owned enterprise	-	-
Public company	-	-
Limited liability company (LLC)	13	86.67
CV	-	-
Cooperative	-	-
<b>Total</b>	<b>15</b>	<b>100.00</b>
Company field of activity	n	%
Production	12	80.00
Processing	14	93.33
Storage	14	93.33
Packaging	14	93.33
Domestic marketing	15	100.00
Export	15	100.00
Own production area	n	%
Yes	12	80.00
No	3	20.00
<b>Total</b>	<b>15</b>	<b>100.00</b>
Palm oil processing method	n	%
Doing in own facility	14	93.33
Purchase in processed form	-	-
Using intermediaries	-	-
Facility ownership status	n	%
Owned	15	100.00
Lease	-	-
Partnership	-	-
Other	-	-
How long has the company been exporting	n	%
0-5 years	-	-
6-10 years	-	-
11-15 years	3	20.00
16-20 years	-	-
>20 years	12	80.00
<b>Total</b>	<b>15</b>	<b>100.00</b>
Product supply method	n	%
Own plantation (nucleus)	12	80.00
Plasma plantation	12	80.00
Partner of companies	12	80.00
Collector traders (Smallholder)	10	66.00
Farmers	5	33.33

Source: Author`s data from the questionnaire survey.

Palm oil companies, like other industrial companies, need access to capital markets and raise funds from investors by selling the company's shares to the public through an Initial Public Offering (IPO) or listing on the Indonesia Stock Exchange. Funding from an IPO can be used to finance business expansion, development of new oil palm plantations,

expansion of production facilities, investment in technology and innovation, and debt reduction. In addition, joining the stock exchange raises a company's profile and improves its image and reputation in the market. Listed companies usually have easier access to business opportunities and strategic partnerships with other companies. It can help palm oil companies to develop more business opportunities and optimize company value [4]. Based on the survey results, 46% of palm oil companies conducted an IPO, and 53% of companies did not conduct an IPO (Table 3). Some companies said they would conduct an IPO the following year, and some companies were not interested in doing an IPO because they did not need fresh funds for expansion.

Table 3. Palm oil companies that conduct Initial Public Offering (IPO)

Palm oil export company joins Indonesia Stock Exchange	n	%
Yes	7	46.67
No	8	53.33
Total	15	100.00

Source: Author's data from the questionnaire survey.

Certification is critical for palm oil export companies to demonstrate their commitment to environmental and social sustainable practices, quality, safety, and compliance with international standards. In addition, strong certification standards and ongoing verification are vital tools to assure buyers, consumers, and the general public that a company is implementing, executing, and fulfilling sustainable product production practices. Based on the survey results, 93% of companies are certified by Roundtable on Sustainable Palm Oil (RSPO). RSPO is an international body established in 2004 to regulate and promote sustainable palm oil production. RSPO members must fulfill the RSPO principles and criteria (P&C), a set of strict standards governing sustainable palm oil production. RSPO certification aims to ensure that palm oil production is carried out responsibly, environmentally, and socially friendly [10]. 66% of companies have received ISO (International Organization for Standardization) certification, which applies international standards to ensure that

companies have efficient and high-quality management systems. This certification confirms that the company has complied with specific requirements set by the ISO standards. The types of ISO certification obtained by Indonesian palm oil export companies are ISO 9001, the Standard for Quality Management Systems. ISO 9001 focuses on improving the quality of products and services and managing efficient business processes. Its scope ranges from the management system of oil palm plantations, palm oil mills, palm kernel processing, and other supporting facilities. ISO 14001: Standard for Environmental Management Systems. ISO 14001 helps companies identify and reduce the environmental impacts of their operations. It covers the management system of oil palm plantations, palm oil mills, palm kernel processing, and other supporting facilities. Moreover, the last is ISO 45001: Standard for Occupational Health and Safety Management Systems [12]. It covers the management system of oil palm plantations, palm oil mills, palm kernel processing, and other supporting facilities (Table 4).

Table 4. Types of certifications held by export companies

Certifications held by the company	n	%
RSPO Certification	14	93.33
ISO Certification	10	66.67
HACCP Certification	5	33.33
ISCC Certification	8	53.33
Halal Certification	11	73.33
Kosher Certification	8	53.33
GMP Certification	7	46.67
PROPER Certification	5	33.33
BHRISC Certification	1	6.67
ISPO Certification	9	60.00
IFC Certification	1	6.67
SNI	5	33.33
PHPL Certification	1	6.67
OHSAS Certification	2	13.33
FSSC Certification	2	13.33
SMK/OHS Management System	3	20.00

Source: Author's data from the questionnaire survey.

The Indonesian palm oil industry is essential to the Indonesian economy, and in order to maintain the stability of the national palm oil industry, associations are needed that aim to build and develop the Indonesian palm oil industry together. Joining an association

allows companies to have a strong representation in the industry and speak with one voice in dealing with everyday problems, such as government regulations, trade policies, or environmental issues. Associations also provide access to the latest information and knowledge about the palm oil industry, including market trends, new technologies, research, and statistics, which can help companies make better business decisions. Joining an association opens up opportunities to expand business networks with other companies in the palm oil industry, which can help find partners, new customers, or cooperation opportunities. Based on the survey results in Table 5, 100% of companies join the Indonesian Palm Oil Association IPOA or GAPKI. IPOA is an association representing companies in the palm oil industry in Indonesia, and IPOA's primary purpose is to encourage and protect the interests of Indonesian sustainable palm oil industry as a source of prosperity [3]. 13% of palm oil companies are members of the Indonesian Corporate Secretary Association (ICSA) and the Indonesian Seed Association (Asbenindo). 20% of companies are members of the Forum of Communication for Oil Palm Seed Producers. 33% of companies joined the Indonesian Palm Oil Council (DMSI). DMSI aims to improve cooperation and coordination between business actors and facilitate the formulation of national palm oil regulations and policies that can bring business actors to compete, challenging in the international market while still paying attention to environmental sustainability (Table 5).

26% of companies join the Indonesian Biofuel Producers Association (APROBI) According to Sipayung (2023) [11], this association consists of biodiesel and bioethanol companies and forges partnerships with the government and other parties to optimize the use of biofuels in Indonesia. APROBI also seeks to explore new export destinations for biodiesel made from crude palm oil (CPO) by seeking support from relevant departments in destination countries. In addition, APROBI aims to ensure its members' readiness to implement the B35 program, which is a government program to

increase the use of biodiesel blended with diesel fuel (Table 5).

Table 5. Export company membership in associations and partnerships

Membership in associations	n	%
Indonesian Palm Oil Association IPOA or GAPKI	15	100.00
Indonesia Corporate Secretary Association (ICSA)	2	13.33
Indonesian Seed Association (Asbenindo)	2	13.33
Forum of Communication for Oil Palm Seed Producers (FKPBKS)	3	20.00
Indonesian Palm Oil Council (DMSI)	5	33.33
Indonesian Issuers Association (AEI)	5	33.33
Indonesian Biofuel Producers Association (APROBI)	4	26.67
Indonesian Oleochemicals Producers Association (APOLIN)	5	33.33
Indonesian Association of Vegetable Oil Industries (GIMNI)	7	46.67
Global Agribusiness Alliance (GAA)	3	20.00
Food Industry Asia (FIA)	2	13.33
AVPN	2	13.33
Tropical Forest Alliance (TFA)	4	26.67
High Conservation Value Resource Network (HCVRN)	2	13.33
Consortium of Resource Experts (CORE)	1	6.67
Decent Rural Living Initiative (DRLI)	1	6.67
Earthqualizer	1	6.67
Fire Free Alliance (FFA)	4	26.67
International Finance Corporation (IFC)	1	6.67
Palm Oil Innovation Group (POIG)	1	6.67
Sustainable Landscapes Working Group	1	6.67
South East Asia Rainforest Research Partnership (SEARRP)	1	6.67
Radar Alerts for Detecting Deforestation (RADD)	1	6.67
Sustainability Assurance & Innovation Alliance (SUSTAIN)	3	20.00

Source: Author's data from the questionnaire survey.

### Information on palm oil export activities

Based on the survey results on export activities presented in Table 6, 86% of companies represent themselves in foreign markets, meaning that they directly and independently try to market, introduce and promote their products in international markets. Representing itself in foreign markets means companies take complete control of their marketing and promotion strategies in certain countries, such as by opening branch offices or corporate branches in destination countries, assigning sales and marketing teams in those countries, or using foreign channels own distribution and supply chain to spread products to overseas consumers. About 86% of the companies studied have overseas branch offices in Singapore, China, India, Germany,

Spain, the Netherlands, America, Brazil, and others.

53% of companies use the services of importing companies to represent their products in foreign markets. Importing companies not only serve as intermediaries between producers or exporters in Indonesia and importers and distributors abroad, but they also play an essential role in facilitating trade flows, assisting the promotion of Indonesian products in foreign markets, and ensuring that imported products meet quality standards and regulatory requirements. 13% of companies use in-country intermediaries to represent their products in foreign markets. The domestic intermediaries used are companies engaged in marketing services for commodities produced by state-owned plantation companies (Table 6).

Based on the survey and interviews, the factor that most influence the image of palm oil products in sales is compliance with established standards, totaling 100%. The standards and requirements that Indonesian palm oil producers must comply with in foreign markets are essential because they not only affect the product image but can also affect the competitiveness and market access of palm oil at the global level. Export destination countries, especially the European Union, have strict regulations regarding sustainability and environmental issues. Meeting these standards will help ensure Indonesian palm oil is accepted in international markets and does not face trade barriers or rejection by consumers. The standards required by palm oil export companies today are sustainability certifications such as Roundtable on Sustainable Palm Oil (RSPO), Indonesian Sustainable Palm Oil (ISPO), International Organization for Standardization (ISO), Hazard Analysis and Critical Control Points (HACCP) and other relevant certifications. 66% of product sales image is influenced by image and reliability in the receiving country, 46% by packaging style, external appearance, and promotion activities, and 33% by brand and brand reliability (Table 6).

Based on the research results, the types of products exported by palm oil companies are 86% CPO and PKO. 53% of companies export

oleochemicals, 46% biodiesel, 6.6% palm kernel meal (PKM) and seeds, 46% of companies export specialty fats and cooking oil, and 26% export shortening and margarine. Based on the research results, 93% of companies export to China, 86% to India, 66% to the USA, and 60% to the Netherlands, Germany, Singapore, and Vietnam. 46% export to Spain and Italy, 40% to Brazil, 33% to Bangladesh, Pakistan, and the United Kingdom, and 20% to South Korea.

Table 6. Palm oil company export activity information part one

Ways of representation in overseas markets	n	%
Self-represented	13	86.67
Importing company	8	53.33
Overseas intermediary	-	-
Domestic intermediary	2	13.33
Factors that affect product image in sales.	n	%
Brand and brand reliability.	5	33.33
Compliance with standards	15	100.00
Packaging style and external appearance.	7	46.67
Image and reliability in the receiving country.	10	66.67
Logistics and coordination with buyers.	-	-
Promotion activities.	7	46.67
Types of products exported	n	%
Crude Palm Oil (CPO)	13	86.67
Palm Kernel Oil (PKO)	13	86.67
Oleochemical	8	53.33
Biodiesel	7	46.67
Palm Kernel Meal (PKM)	1	6.67
Seeds	1	6.67
Specialty Fats	7	46.67
Cooking oil	7	46.67
Shortening	4	26.67
Margarin	4	26.67
Main export destination countries	n	%
China	14	93.33
India	13	86.67
Netherlands	9	60.00
Spain	7	46.67
USA	10	66.67
United Kingdom	5	33.33
Germany	9	60.00
South Korea	3	20.00
Bangladesh	5	33.33
Pakistan	5	33.33
Brazil	6	40.00
Singapore	9	60.00
Vietnam	9	60.00
Italia	7	46.67

Source: Author's data from the questionnaire survey.

The company also exports palm oil to France, Kenya, Turkiye, Japan, Philippines, Cameroon, Peru, Papua New Guinea, Nigeria, Gabon, Russia, Kenya, Ivory Coast, and Ghana (Table 6).

Based on the research results, 100% of palm oil companies export palm oil products and their derivatives using sea transportation (Table 7). The average company studied has its cargo

ship, dock, and port facilities in various strategic locations. Tank trucks will transport palm oil processed and stored in storage tanks from the mill to the port. Tank trucks are the most common mode of transportation used to transport palm oil from the mill to the port. Tank trucks are equipped with large-capacity tanks specifically designed to transport liquids such as palm oil. Based on the research results, the shipping terms most widely used by companies are FOB (Free on Board) and CIF (Cost, Insurance, and Freight). The choice between FOB and CIF depends on the agreement between the seller and the buyer and the specific needs of the export transaction.

Table 7. Palm oil company export activity information part two

Types of transportation channels used for export	n	%
Sea transportation	15	100.00
Land transportation	-	-
Air transportation	-	-
Shipping terms used in exports	n	%
FOB (Free on Board)	15	100.00
C&F (Cost and Freight)	-	-
CIF (Cost, Insurance and Freight)	15	100.00
Methods for finding buyers for the company	n	%
Through acquaintances or references	-	-
Through representative companies	-	-
Self-discovered import company	13	86.67
Through trade councils, export associations, governments and the like	8	53.33
Through overseas branches of the company	13	86.67
The buyer groups that companies target in exports:	n	%
Import companies	13	86.67
Agents	-	-
Company's own branch in destination country	13	86.67
Contract Type	n	%
Written	15	100.00
Oral	-	-
Written and Oral	-	-
Sales connection method in the company:	n	%
Short-term	15	100.00
Long-term	-	-
Short-term and long-term	-	-
None	-	-
Assessment of government incentives	n	%
Adequate	-	-
Insufficient	4	26.67
Inadequate	11	73.33

Source: Author's data from the questionnaire survey.

As for how companies find buyers, 86% of import companies find them themselves (Table

7); importers search for companies through search engines, their country's embassy office, or trade directories specific to the palm oil industry. After finding a few potential companies, importers will visit the company's website to get more information about the products offered, production capacity, palm oil quality, and trade terms offered. 53% of companies find overseas buyers through trade councils, export associations, governments, and the like by utilizing institutions or organizations that have a role in facilitating and encouraging international trade activities. 86% of companies find buyers through company branches abroad (Table 7).

Based on the research results, 86% of the buyer groups the company targets in exports are import companies and the company's branches abroad. The type of purchase contract is 100% written. The purchase contract method is 100% short-term due to fluctuating palm oil prices and changing government policies. Short-term contracts allow the company to adjust prices according to changing market conditions more quickly. If palm oil prices increase suddenly, the company can adjust the selling price to earn higher profits.

Based on the research results, the government sets 100% of Indonesian palm oil export prices through the Ministry of Trade of Indonesia (Table 8). The Ministry of Trade once a month sets the benchmark export price (HPE), which is based on the international average price or FOB average price. It follows the Regulation of the Minister of Trade of the Republic of Indonesia No. 35/M-DAG/PER/12/2005 on the Determination of Export Benchmark Prices (HPE) for palm oil, CPO, and its derivative products. Palm oil companies will follow the export prices set by the Indonesian government. The method by which export companies obtain market information is 100% from government publications and exporter associations such as CPOPC and BDPDKS (Table 8). The Council of Palm Oil Producing Countries (CPOPC) is an intergovernmental organization of palm oil-producing countries that aims to promote, develop, and strengthen cooperation in palm oil cultivation and commodities among member countries. It currently consists of Indonesia-Malaysia as the

world's largest palm oil producers [1]. 86% of companies rely on internal research institutes within their own company to obtain information about the market. 46% of companies get information about the market from government and industry publications in the countries where they export palm oil.

Table 8. Palm oil company export activity information part three

Export pricing methods within the company	n	%
Determined by the company itself	-	-
Buyers of the destination country collectively determine the price	-	-
Buyers individually determine the price	-	-
Company representative determines/suggests price	-	-
Government (Ministry of Trade)	15	100.00
Methods of obtaining market information	n	%
Representatives/distributors in the market	-	-
Government and industry publications in the market country	7	46.67
Government publications	15	100.00
Exporters' associations	15	100.00
Internal company market research	13	86.67
Market research company	-	-
Internet	-	-
Required information on overseas markets	n	%
Product price	15	100.00
Product demand	15	100.00
Market size	15	100.00
Market structure	15	100.00
Country policy	15	100.00
Foreign policy of export destination	15	100.00
Competitor prices in other countries	4	26.67
Product quality	15	100.00
Shipping information	15	100.00
New potential market	15	100.00

Source: Author's data from the questionnaire survey.

### Information on export company problems and solutions

**1. Climate problems.** Unpredictable weather changes (extreme weather), including abnormally high rainfall or long dry spells, affect the productivity of palm oil products and hamper the global logistics supply chain. Solution: The company conducts strict infrastructure maintenance, meaning that the company tries to ensure that the facilities and amenities used in the harvesting process remain optimally functional and uninterrupted despite the abundance of rainy weather conditions. In addition, the company also conducts careful fertilization planning with a short time interval to ensure that plants still get

the nutrients they need in unpredictable weather situations.

**2. High fertilizer prices.** Solution: The company uses processed fertilizer products produced through research and development conducted at the company's internal research center so as not to interfere with fertilization and crop maintenance. In facing the challenges of fertilizer prices and availability, a collaboration between companies, the government, and other stakeholders will be vital to finding sustainable solutions that positively impact the palm oil industry in Indonesia.

**3. Fluctuations in raw material supply.** That is, the purchase of fresh fruit bunches (FFB) from third parties has yet to be achieved. Solution: The company should have a clear and well-defined SOP for managing raw material purchases. These SOPs include conducting purchase requests, approval processes, supplier selection, supplier risk evaluation, stock availability monitoring, etc. With a structured SOP, the company can reduce the risk of raw material availability by ensuring that the purchasing process runs smoothly and is organized.

**4. Global economic uncertainty.** The palm oil industry has experienced the impact of global economic uncertainty caused by several factors, such as the trade war between the United States and China, the COVID-19 pandemic, and the conflict between Russia and Ukraine. Solution: Market diversification is one way to reduce dependence on markets affected by economic uncertainty is to look for alternative markets. Companies must actively seek new opportunities and develop markets in other countries, be it in Asia, Europe, or the Americas. In addition, implementing proper risk management strategies, including supply management, risk analysis, and reserve funds to deal with unexpected situations, can help mitigate the impact of global economic uncertainty.

**5. Export restriction policy (DPO and DMO)** by the government. Through the Ministry of Trade of Indonesia, the Indonesian government implemented a policy of limiting crude palm oil exports through Domestic Market Obligation (DMO) and Domestic Price



Obligation (DPO) to address the rising prices and scarcity of cooking oil in Indonesia. Palm oil exporters must fulfill a domestic supply of 20% of the company's export volume (DMO). The government also implemented a DPO policy set at IDR 9 300/kg for CPO and IDR 10 300/liter for olein [8]. The impact of these policies was that palm oil export volumes declined significantly, and the payment cycle for export product sales was constrained. In addition, the inconsistent implementation of the DMO and DPO policies has proven to hamper and reduce the competitiveness of the palm oil industry because it is based on policies that have been built for a long time. Palm oil companies and palm oil farmers have also experienced losses, namely difficulties in selling fresh fruit bunches (FFB) because many palm oil companies do not want to buy FFB from farmers because the stockpile tanks are full due to the absence of exports. Solutions: The company is actively involved in various palm oil organizations/associations. It works closely with industry stakeholders to provide positive input to the Indonesian government to create regulations conducive to the palm oil industry and other stakeholders domestically and internationally.

6. The government's implementation of export levy (PE) policies and export duty tariffs directly and materially affects the company's financial performance. The government determined the adjustment of export levies and export duty tariffs several times through the Minister of Finance Regulation of the Republic of Indonesia in 2022. Solutions: The company is actively involved in various palm oil organizations/associations. It works closely with industry stakeholders to provide positive inputs to the Government of Indonesia to create conducive regulations for the palm oil industry and other stakeholders domestically and internationally.

7. Regulatory changes by importing countries. Import tariffs, taxation, and other import restrictions imposed by importing countries affect the demand for CPO and its derivative products and encourage substitution for other vegetable oils. If the importing country bans imports of CPO from Indonesia, then other substitute products, which are taxed differently

from CPO, such as soybean oil with lighter taxes, can negatively impact the competitiveness of CPO and its derivative products, which in turn impacts the demand and prices of products from Indonesian palm oil companies. Solution: Palm oil companies continue to follow changes in Indonesian and international government regulations and analyze the impact of these changes to make business decisions quickly and appropriately.

8. Negative campaign on palm oil by environmental and social NGOs. Negative campaigns by environmental and social NGOs against palm oil and boycotts of consumer products containing palm oil in some parts of the world have led to a low product image and public acceptance of palm oil products. Solution: to meet the sustainability challenges of palm oil products, Indonesian palm oil companies are actively participating in ISPO (Indonesian Sustainable Palm Oil) and RSPO (Roundtable on Sustainable Palm Oil) and conforming to global requirements such as No Deforestation, No Peat, No Exploitation (NDPE). ISPO is the national palm oil sustainability standard, while RSPO is a global standard that applies internationally. By complying with ISPO and RSPO standards and integrating NDPE requirements, companies can ensure that their palm oil products meet globally recognized high sustainability standards. In this way, palm oil can remain a product that contributes positively to the economy and environment without compromising long-term sustainability. In addition, the company provides education and socialization on the palm oil industry's sustainability practices.

## CONCLUSIONS

This research provides valuable insights into the demographic characteristics of company personnel, the structure and practices of palm oil export companies, and their strategies for international market representation. It highlights the importance of compliance with sustainability standards, industry associations, and overseas branches in expanding market reach and ensuring a robust product image in sales. In addition, palm oil export companies

are actively addressing various challenges, ranging from climate-related issues to regulatory changes and negative public perception. Collaboration, adherence to sustainability standards, and proactive engagement with government and industry associations are crucial in their strategies for problem-solving and maintaining the competitiveness and sustainability of the palm oil industry.

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