

## Socialization of Indonesia Sustainable Palm Oil (ISPO) Certification Obligations for Smallholders Palm Oil Plantation in West Pasaman District

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### ARTICLE INFO

*Keywords:* Palm Oil Plantations, Palm Oil Farmers, ISPO, Certification, Socialization

*Received :* 18, December

*Revised :* 20, January

*Accepted:* 22, February

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### ABSTRACT

This socialization aims to socialize the obligation of ISPO certification for independent oil palm farmers. This socialization activity was attended by Supervisors, Management, and representatives of the Heads of Farmer Groups of three Palm Oil Plantation Cooperatives in West Pasaman Regency, West Sumatra, Indonesia. The results of the socialization showed that most participants agreed to take part in certification as long as the government provided price guarantees and technical and financial support. The socialization results also show that with the current conditions, oil palm farmers in the three cooperatives still need to meet ISPO requirements. The concern of local governments and relevant palm oil organizations in providing technical and financial support will influence the achievement of the ISPO certification program targets, improve Indonesia's welfare, and enhance the image of Indonesia's sustainable palm oil.

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## INTRODUCTION

The palm oil industry is one of the industries supporting the Indonesian economy. The contribution of this sector to the non-oil and gas sector reaches 13.50% and 3.5% of the national GDP (<https://www.indonesia.go.id/>). Globally, Indonesia and Malaysia are suppliers of 80% of the world's palm oil, making this commodity one of Indonesia's leading commodities. However, negative sentiment towards Indonesian palm oil remains intense, especially from the European Union. The Indonesian government continues to strive to address this negative sentiment by issuing regulations aimed at creating a sustainable palm oil ecosystem. To strengthen data, coordination, and infrastructure for palm oil's capacity and governance of the certification system, Indonesia has issued Presidential Instruction Number 6 of 2019 and Presidential Decree Number 44 of 2020 concerning the Indonesian Sustainable Palm Oil Plantation Certification System (ISPO).

The productivity per hectare of land is one of the main issues for Indonesian palm oil. Per hectare of oil palm land in Indonesia can only produce an average of 3.6 tons of CPO; this figure is very low when compared to Malaysia, which can produce 6 tons per hectare (PWC, 2021). The productivity of smallholder plantations is even lower, only reaching an average of 2.7 tons per hectare. The data is detrimental, considering that smallholder plantation land reaches 40.79% of the total national oil palm plantation area. This productivity problem is caused by farmers' poor quality of seeds and plant and land management aspects that must meet standards (Gapki. id). The quality of the seeds will affect the ability to produce fruit in the long term. On the other hand, land and plant management support factors influencing plant nutrition and mitigating various pest threats. The PIR-BUN OPHIR (Inti-Plasma) project in the West Pasaman district has been 43 years old since it was built in the early 1980s until 2024. This project initially covered 8,000 hectares of plantation land, of which 4,800 hectares were managed by the people (Plasma) and 3,200 hectares were managed by PT. Perkebunan Nusantara VI (Nucleaous). The Nucleaous company runs palm fruit processing facilities, while farmers (Plasma) become suppliers for the Nucleaous company. Plasma farmers are then divided into five plasmas (plasma 1, 2, 3, 4, and 5). Each plasma consists of an average of 400 families; each head owns 2 hectares of plantation and a Palm Oil Plantation Cooperative (KPS) to facilitate plantation management. Oil palm plantation cooperative activities vary, from ordering and distributing fertilizer to plantation areas, transporting fresh fruit bunches to factories, production administration, sales and distribution of sales proceeds to their members, and savings and loan businesses. Through this cooperative, each member receives monthly reports and results from fruit sales. All of these cooperatives have been replanting their oil palm plants since 2017 in stages.

The implementation of palm oil certification has been running since 2011, with the issuance of Minister of Agriculture Regulation number 19/Permentan/OT.140/3/2011. However, its implementation and achievement have encountered several obstacles and challenges (Gapki.id). One of the aims of this certification is to answer various negative issues regarding palm oil. However, until the end of 2020, only 5.8 million hectares of 14.9 million hectares of land were certified, or only around 38.92% (PWC, 2021). Presidential Decree number 44 of 2020 concerning certification of Indonesian sustainable palm oil plantations makes certification mandatory for both large companies and smallholder plantations. However, for smallholder plantations, five years is given after this regulation is implemented. The amendment to the regulations regarding palm oil certification indirectly acknowledges that there are sustainability and governance problems in Indonesian palm oil plantations.

Implementing palm oil certification on smallholder plantations is a critical problem that needs to be resolved. Palm oil certification for large companies will be more accessible because they have adequate resources to support the preparation and implementation of certification. The chairman of the Indonesian Palm Oil Farmers Association (APKASINDO) stated that it is not easy for small oil palm farmers to fulfill ISPO requirements (GAPKI.com). Apart from that, if oil palm farmers do not believe in the benefits of certification, then support for this government program will be low. Through direct confirmation with the Head of Supervisor of Palm Oil Plantation Cooperative (KPS MAJU), Mr. Erwin, There have been no measurable steps regarding ISPO certification in the cooperatives it supervises. It means a gap exists between the regulatory targets and farmers' responses to these regulations. This activity aims to socialize ISPO palm oil certification obligation for independent palm oil farmers and support the governance of sustainable palm oil plantations in Indonesia. This socialization is important, considering that plasma oil palm plantation is the primary source of income for ± 2000 heads of families. This activity was carried out on 12, 13, and 17 May 2022 at the hall of the Perintis Palm Oil Plantation Cooperative, Maju Palm Oil Plantation Cooperative, and Makmur Palm Oil Plantation Cooperative.

## **IMPLEMENTATION AND METHODS**

Palm oil plantations were first introduced in Indonesia in 1848 by planting four oil palm trees in the Bogor Botanical Gardens. The first commercial oil palm plantations were carried out in Sumatra in 1911 (31,600 ha) and 92,000 ha in 1925 in the context of World War II (Corley & Tinker, 2003). Most plantation areas are located in North Sumatra, where Dutch entrepreneurs gained access to large land areas suitable for plantation development. This plantation area was not operational during the Japanese invasion and the Indonesian independence struggle. During President Soekarno's administration, the plantation sector was not a major development issue due to the "Java Centralism Policy" (Casson, 2000; Zen, Barlow et al. 2005). During the reign of President Soeharto, supported by the World Bank and the Asian Development Bank, attention to development outside Java began to be encouraged (Casson, 2000).

President Soeharto built a state-owned company (PT. Perkebunan Nusantara) to focus on plantation efforts and export commodities such as coffee, coconut, rubber, and palm oil. PT Perkebunan Nusantara was established on plantation land that the Dutch previously owned through nationalization. Until the mid-1980s, the plantation was managed by PT. Perkebunan Nusantara continued to expand. In the 1988-1994 period, the Indonesian government supported the development of smallholder and private plantations through the Nucleus Estate Smallholder (NES) program. Since then, the development of oil palm plantations has also been driven by the private sector, where the private sector is required to allocate a certain amount of land intended for developing smallholder plantations, known as Member Primary Credit Cooperatives (KKPA).

The Nucleus Estate Smallholder (NES) program was introduced in the early 1980s. This program was influenced by the success of the smallholder plantation programs in Malaysia (FELDA) (Lim & Dorall, 1992) and Land Settlement Schemes (LSS) in Papua New Guinea (Koczberski, Curry et al. 2001). The first FELDA program was established in 1960 by the Malaysian government to improve the welfare of poor farmers and increase their contribution to national exports, and it proved successful (Zen, Barlow, et al. 2005). The LSS program in Papua New Guinea, which began in 1960, was an effort to reduce land pressure in the highlands and increase export revenues (Harries & Benjamin, 1991). Meanwhile, Indonesia's NES project uses a development participation principal approach, where farmers are the subjects, not the objects, of development initiatives. One of the NES projects built by the government in the early 1980s was the PIR-BUN OPHIR project in the West Pasaman district, West Sumatra Province.

Support for sustainable palm oil certification through activities has been carried out in several regions in Indonesia. For example, Dharmawan et al. (2021) show that the implementation of ISPO has several structural and socio-cultural challenges that make it difficult for small farmers to comply with the policy. Apriani et al. (2020) show that full support from external parties, such as local NGOs, is a critical factor that facilitates RSPO certification. Apriyanto's activities, Rujiah (2019) stated that the determining factor in achieving ISPO standards is the commitment of plantation companies as business actors supported by adequate human resources, the role of the government as a determinant of regulations as well as socialization and training regarding the principles and criteria of ISPO standards. Participants of the socialization were administrators, supervisors, and representatives of Farmer Group Chairs in the Perintis, Maju, and Makmur palm oil cooperatives. Participants were given material regarding the Regulation of the Minister of Agriculture of the Republic of Indonesia No. 38 of 2020 concerning implementing Indonesian Sustainable Palm Oil Plantation Certification. After that, a checklist survey of the ISPO requirement documents was given and ended with a discussion regarding the general identification of readiness for ISPO certification requirements. The checklist instrument of ISPO requirements uses the Indonesia Sustainable Palm Oil (ISPO) Indicator for the

smallholder scheme, which consists of 5 principles, 20 criteria, and 33 indicators as presented in Table.1 below:

**Table.1 ISPO Principles and Criteria for Smallholder Schemes**

No.	Principle	Criteria and Indicators
1	Compliance with Regulations	5 criterias, 7 indicators.
2	Implementation of good plantation practices	10 criterias, 17 indicators
3	Environmental Management, natural resources, and biodiversity	2 criterias, 3 indicators
4	Transparency Implementation	2 criterias, 5 indicators
5	Continuous business improvement	1 criteria, 1 indicators

The socialization participants comprised management, supervisors, and representatives of farmer group heads. Descriptions of participant characteristics are outlined in table.2 below:

**Table.2 Participant Characteristics**

	Number	Percentage
<b>Posisi</b>		
Supervisor Cooperatives	3	9%
Management Cooperatives	5	15%
Farmer Group leader	24	76%
<b>Age</b>		
30-40	3	9%
41-50	11	33%
51-60	13	39%
> 60	5	15%
<b>Education</b>		
SD	3	9%
SMP/SLTP/MTSN	3	9%
SMA/SMA/MAN	11	36%
D3	5	15%
S1/D4	7	21%
S2	3	9%
<b>Gender</b>		
Male	26	82%
Female	6	18%
<b>Average income per month</b>		
3 - 5 juta	5	18%
5,1 - 7 juta	12	36%
7,1 - 9 juta	11	33%
>9 juta	4	12%
<b>Total</b>	<b>32 Participants</b>	

Based on Table.2 above, it can be concluded that most of the participants are mature respondents aged 40-60 years; most are men and are the "first generation" oil palm plantation owners. The "first generation" are plantation owners who participated in the plantation ownership credit program at the beginning of the NES project. Apart from that, data on the educational level of participants generally shows that the understanding and certification processes will be smooth because, on average, they are at the high school level and above. The average income from palm oil sales per 2 hectares is relatively fine, namely five million rupiah and above, with an average production of 2 tons per harvest. This income data is based on income received in the last three months with the condition that the price of palm oil per kg is around Rp. 3,000,- and the harvest period is once every fifteen days. When plants are over six years old, harvesting will be done once a week. If the selling price of Fresh Fruit Signs is still around Rp. 3,000,- it can be estimated that farmers earn a monthly income of around IDR 20,000,000.

## RESULTS AND DISCUSSION

### Compliance with the Legality of Plantation Businesses

**Table.3 Recapitulation of Fulfillment of Compliance Principles with Regulations and Legislation**

No	Principles	Criteria	Indicators	Conclusion
1	Compliance with Regulations and Legislation	1.1 Legality and Management of Plantations	Have a land certificate, land sale and purchase deed, and other valid proof of land ownership.	Fulfilled
		1.2 Plantation Location	Planters' land refers to the determination of spatial planning.	Fulfilled
		1.3 Land Disputes and Compensation and Other Disputes: Planters must be able to ensure that plantation land is free from dispute status with surrounding communities or other disputes.	1. If there has been a land dispute or other dispute. 2. Documents of the progress of deliberations to resolve the dispute and a map of the location of the land dispute are available. Have a copy of the agreed agreement.	Fulfilled
		1.4 Legality of Plantation Businesses	Certificate of Registration of Plantation Business for Cultivation (STD-B)	Fulfilled

	1.5 Obligations related to Environmental Permits, Farmer groups or planter cooperatives must carry out the requirements and must have an Environmental Management and Monitoring Letter (SPPL)	<ol style="list-style-type: none"> <li>1. Have an environmental permit according to SPPL.</li> <li>2. Have a record of the implementation of SPPL</li> </ol>	Partial Fulfilled
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The survey results show that the legality of plantation passes and the location of all cooperative members in the three KPS have been fulfilled. Each legal document is archived in the cooperative's office. The only documents that still need to be available are those relating to reporting on implementing environmental activities.

### Implementation of Good Plantation Practices

**Table.4 Recapitulation of Fulfillment of the Principles of Implementing Good Plantation Practices.**

No	Principles	Criteria	Indicators	Conclusion
2	Implementation of Good Plantation Practices	2.1 Institutional Organization of Smallholder: Smallholders can join farmer groups or cooperatives as a collective forum to meet the aspirations and needs of their members.	Have documents on forming farmer groups and/or cooperatives known to authorized officials.	Fulfilled
		2.2 Plantation Management	<ol style="list-style-type: none"> <li>1. Have operational activity plan documents for planters, farmer groups and/or cooperatives.</li> <li>2. Reports on the activities of planters, farmer groups and/or cooperatives are available.</li> </ol>	Fulfilled

2.3 Technical Application of Palm Oil Cultivation and Transportation		
2.3.1 Land Clearing: Land clearing that meets soil and water conservation principles.	Have and implement SOPs and work instructions for clearing land without burning.	Not fulfilled
2.3.2 Seeds that support the productivity of plants and growers must come from seed sources that have received government recommendations.	<ol style="list-style-type: none"> <li>1. Use plant seeds from seed producers who have received certificates from authorized agencies and are recognized by the Ministry of Agriculture.</li> <li>2. Have a record of the origin of the seeds.</li> </ol>	Fulfilled
2.3.3 independent farmers must comply with technical standards to support plant productivity when planting on mineral land.	<ol style="list-style-type: none"> <li>1. Have and implement planting SOPs that comply with Good Agriculture Practice (GAP).</li> <li>2. Have a record of planting implementation.</li> </ol>	Fulfilled
2.3.4 Planting on Peat Land Planting oil palm in independent plantations on peat land can be done by paying attention to the characteristics of the peat land so that it does not cause damage to environmental functions.	Have records for planting on peatlands that refer to applicable rules and regulations.	Fulfilled
2.3.5. Plant Maintenance Plant maintenance to	1. Have SOPs and work instructions	Partial Fulfilled



	support plant productivity.	for plant maintenance. 2. Have records regarding plant fertilization and implementation of plant maintenance.	
	2.3.6. Control of Plant Pest Organisms (OPT) Planters, farmer groups, and cooperatives must monitor pest control by implementing Integrated Pest Management (IPM) in accordance with technical provisions and taking environmental aspects into account.	1. Have and implement Technical Instructions for Integrated Pest Observation and Control (IPM). 2. Have OPT control facilities according to technical instructions and trained control personnel (teams).	Not fulfilled
	2.3.7. Harvesting Planters, farmer groups, and cooperatives ensure that harvesting is done on time and in the right way.	1. Have a technical reference for the ripe fruit harvested right now. 2. Have recordings/notes of harvesting implementation.	Fulfilled
	2.3.8. Fruit Transportation Growers ensure that the harvested FFB must be immediately transported to the buyer's location to avoid fruit damage.	Have and implement technical instructions for transporting FFB.	Not fulfilled

Element 2 consists of three groups of criteria. The first criterion relates to the organizational aspects of farmer groups and cooperatives. The survey results show that the three cooperatives have no legal problems related to licensing for cultivation businesses, farmer groups, or cooperative organizational institutions. Documents related to this legality are available collectively and become cooperative archives. The second criterion relates to plantation management with the most indicators of fulfilling the criteria. The survey results show that technical procedure documents generally refer to the PIR BUN OPHIR Palm Oil Plantation Manual Procedures distributed when this project was launched. This manual explains planting procedures, plant spacing, fertilization procedures, plate maintenance, production roads, surface cover crops on immature plants, harvest procedures, identification of pests and leaf diseases and their management, transportation procedures, and other information. At the initiation, the Governmental Plantation Department periodically collaborated with PT Perkebunan Nusantara VI to provide regular assistance to farmers so that they were able to manage their plantations following good plantation management standards. This aspect differentiates oil palm farmers who are members of the NES scheme from other independent oil palm farmers. They are more educated than most independent smallholders in managing oil palm plantations. However, the manual is inadequate to fulfill ISPO certification requirements, requiring more detailed technical procedure documents and well-documented field implementation records. In terms of documentation of the activities of farmer groups under the auspices of the three cooperatives, the survey results show that documentation of activities is still in the form of monthly meeting minutes.

Based on the survey, the criteria for land clearing were completely met because there was no new land clearing in the third cooperative area. Criteria related to nurseries are also completely fulfilled following the provisions of the Ministry of Agriculture. All farmers in the three cooperatives use certified seeds from the Palm Oil Research Center (PPKS), known as Marihat seeds. Seeds in the form of sprouts are brought directly and placed in the nursery at each cooperative. After one year, oil palm seeds reaching a certain height are moved to the land, with a planting distance of 9x9 meters. Documents related to seed origin and nursery documentation are available in the archives of each cooperative. The following criterion relates to planting on mineral land. Technical guidelines regarding planting procedures, spacing, and planting culmination, including "inserts," refer to the technical guidebook. However, implementation documentation and technical procedure documents regarding pest control and fertilization, including herbicides, fungicides, and insecticides, have yet to be available. Limited human resources influence this regarding research related to leaf analysis, nutrients, and other pests and diseases. To overcome these weaknesses, cooperative Perintis collaborates with PT. Wilmar Plantation by sending leaf analysis samples for fertilization purposes, provided that cooperative Perintis purchases fertilizer from the company as a win-win solution. Meanwhile, the other two cooperatives needed to establish similar

collaboration. Specifically, regarding the manual procedures for sloping land because sloping land cannot be obtained in the three cooperatives.

The survey results regarding planting on peatlands and plant maintenance were fully met. This conclusion is because OPHIR's oil palm plantation land is not peat land, so documents related to this aspect are not available. Thus, these criteria are fully met by the three KPS. Plant maintenance criteria indicate some areas requiring improvement. Even though the plant population per hectare follows the principles of good plantation management, documentation regarding the area around the plants (plates), fertilization activities, use of pesticides/herbicides/fungicides, and written reports regarding these activities need to be revised. This situation happened in the three cooperatives, where weaknesses in the management of activity documentation became an aspect that needed to be followed up for certification purposes. Fulfilling the criteria for plant pests, including animals, fungi, and weeds, has yet to be met. Pest animals that are commonly encountered are rats, which, because their attacks are considered immaterial, cannot be eradicated using chemicals. In the future, natural enemies such as owls could be used as a solution to rat pests. Another pest that has been found to kill plants is the *Ganoderma* fungus, which is currently treated using fungicides. However, documentation regarding eradicating this ham still needs to be created.

Regarding garden sanitation, including handling weeds, farmers currently use more pesticides, but their use is still limited; as a result, farmers' garden areas are generally overgrown with weeds. One way to reduce the weed development rate is by intercropping techniques, planting chilies in the garden, or grazing cattle in the garden area. However, not all farmers do this. Using natural enemies for plant pest organisms is a development program worth pursuing in the future. Harvesting criteria are criteria that are 100% fulfilled. All participants understand the criteria for ripe fruit, including managing harvest rotation. Harvest rotation is carried out every 15 days because the average age of plants is around 4-6 years old. If the harvest rotation is stable, it will return to the initial rotation once a week. Generally, each farmer employs harvest employees and supervises them directly during harvest. This way, palm fruit will be harvested on time and ripe on the tree. Apart from that, maintaining the number of 48 palm fronds per tree outside the top leaves is something that employees and farmers understand. So, there is no excessive pruning of the fronds, even if it is difficult when lowering the fruit bunches or experiencing incidents where the fruit gets caught in the fronds. The harvested fruit is collected at the collection point and then transported.

Transportation criteria begin with picking the fruit for each farmer's garden plot. Fresh fruit bunch (FFB) transportation is coordinated and recorded by the farmer group leader, assisted by a clerk. After that, the factory creates and signs a Delivery Order (DO) document as proof that the factory has received the fruit. The fruit is transported to the factory on the same day. So, it is common for the fruit to arrive at the factory as fast as possible at night to maintain the freshness of the palm fruit. The oil palm truck rental business is quite popular with many farmers. Apart from that, employees are fit to become jobs targeted by Ophir

youth who do not continue their education to college. Every fruit-loading employee also understands the procedures for loading fruit into trucks. Even though the practice has been running well, the technical procedure documents are not all available, for example, the eligibility criteria for transportation equipment, written transportation partnerships, contamination, and standardization of the weighing equipment used. Thus, these transportation criteria still require improvement efforts.

**Environmental Management, other Natural Resources, and Biodiversity**

Table.5 Recapitulation of Fulfillment of Environmental and Biodiversity Management Principles

No	Principles	Criteria	Indicators	Conclusion
3	Environmental Management, Natural Resources and Biodiversity	3.1 Fire Prevention and Control Independent smallholders must prevent and control fires in their plantations in their respective environments.	Carry out fire prevention and control with local residents and nearby related agencies per the Fire Prevention and Control Guidelines.	Not fulfilled
		3.2 Conservation of Biodiversity Independent growers must maintain and preserve biodiversity in areas managed following applicable regulations.	<ol style="list-style-type: none"> <li>1. Know the presence of animals and plants in the area and around the plantation and after the start of the plantation business.</li> <li>2. Have records of the presence of endangered animals and plants in the area of the plantation.</li> </ol>	Not fulfilled

The third principle required for ISPO certification is environmental management, other natural resources, and biodiversity, as described in Table.5 This dimension consists of two criteria, namely fire prevention and biodiversity conservation. Criterion 3.1 regarding fire disaster management has yet to be fully fulfilled. There are no technical documents regarding fire mitigation because there have never been any incidents of land fires in the OPHIR oil palm plantation area. Oil palm fires are more common in peatland areas. However, technical procedures for fire disaster response are worthy of being completed. Criterion 3.2 concerns the conservation of biodiversity; these criteria have been met. Since the clearing of plantation land in the 1980s, the OPHIR oil palm plantation area is no longer a habitat for endangered species and plants. Ophir plantation, especially the KPS Maju and Makmur garden areas, are close to the Mount Talamau-Pasaman geopark area. When oil palm plants are in the immature plant phase, farmers use their land as corn fields. Due to the massive encroachment of the forest at the foot of Mount Pasaman, a herd of monkeys descended on people's gardens and ate corn. Animal-farmer conflict is inevitable. The solution taken by farmers was to wait in their corn fields in the morning and evening and shoot the monkeys. Whether the monkeys that entered the residents' gardens are endangered primates has not been identified. This disturbance stops when the oil palm plants bear fruit. The survey showed no incidents of endangered species entering people's oil palm plantations, as is often found in the provinces of Riau, Aceh, or other private plantations in the West Pasaman district.

#### Principle 4 Transparency of Data and Information (Implementation of Transparency)

**Table.6 Recapitulation of Compliance with the Principles of Data and Information Openness**

No	Principles	Criteria	Indicators	Conclusion
4	Implementation of Transparency	4.1 Sales and Price Agreement for Fresh Fruit Bunch: Fresh Fruit Bunches are sold to plantation companies at a price that determines the price for palm oil FFB produced by the planters.	1. FFB price information is available based on pricing determined by the FFB Pricing Team for each sales destination. 2. There are records of FFB prices and actual purchases by companies/factories and available sources of price information for determining FFB purchase prices,	Fulfilled

			which are regularly monitored by planters, farmer groups, and/or cooperatives.	
		4.2 Provision of Data & Information. Provision of data and information to relevant agencies and stakeholders other than information exempted according to statutory regulations.	<ol style="list-style-type: none"> <li>1. SOP for information services.</li> <li>2. Have documents providing information to stakeholders following applicable regulations.</li> <li>3. Have a response document or information service to information from stakeholders.</li> </ol>	Not fulfilled

Table.6 describes the fourth dimension, namely the implementation of transparency, which consists of two criteria. Criterion 4.1 is the implementation of sales and price agreements for Fresh Fruit Bunches. This aspect has been fully fulfilled, considering that the daily FFB price is regularly updated and informed to the heads of farmer groups. Partner factories report the monthly recapitulation of sales results to the cooperative, and transfers to farmers' accounts are managed by the Rural Bank Cooperative, which is owned by the three OPHIR cooperatives. Field findings show no difference in the price of FFB from plantations with certified seeds and those without certificates. Apart from that, palm oil processing companies do not use the price of FFB from West Sumatra province when purchasing palm oil from farmers. This issue could affect ISPO certification obligations for independent palm oil. Considering the significant price differences is the strongest motivation for farmers to participate in ISPO. The results of limited discussions with the heads and supervisors of the three KPSs strengthened this argument. "If there is no difference in the price of FFB between ISPO and non-ISPO, why would we take certification." Survey results related to criterion 4.2 show that there is not a single technical procedure document regarding this criterion. However, farmers and KPS in the OPHIR environment often receive visits from various universities such as Wageningen University in the Netherlands, Jambi University, Andalas University, STIE Indonesia Banking School, and most recently, the Open University.

### Dimensions of Sustainable Business Improvement

The last dimension of ISPO requirements is the dimension of sustainable business improvement. This dimension only contains one criterion covering improvement and documentation efforts toward sustainable palm oil. The survey results concluded that all respondents admitted they had yet to develop specific improvement efforts toward sustainable palm oil plantations. They were focused on efforts to increase production and cooperative performance reports. Thus, this aspect also needs to be added to every annual meeting and the preparation of the annual work plan.

**Table.8 Recapitulation of Fulfillment of the Principles of Sustainable Business Improvement.**

No	Principles	Criteria	Indicators	Conclusion
5	Continuous Business Improvement	Improve performance by developing and implementing action plans that support increased sustainable palm oil production.	Have documents on the results of implementing sustainable business improvements/improvement.	Not fulfilled

Table.8 summarizes the fulfillment of indicators for each ISPO principle for the Smallholder Scheme. Shows that only the principle of compliance with the legality of plantation businesses meets the ISPO criteria, while the other four principles still need to be fulfilled. However, it is not difficult for the three KPS to participate in ISPO certification because all farmers have implemented good plantation management practices, but they are not well documented

**Table.9 Recapitulation of Compliance with ISPO Principles and Indicators**

No	Principles	Indicators	Indicator Fulfilled
1	Compliance with Regulations	7 indicators.	6 indicators
2	Implementation of good plantation practices	17 indicators	11 indicators
3	Environmental Management, natural resources, and biodiversity	3 indicators	0 indicators
4	Transparency Implementation	5 indicators	2 indicators
5	Continuous business improvement	1 indicator	0 indicators
	Total	33 indicators	19 indicators (57,6%)

The survey results show that apart from legality and seed aspects, no quality procedures and supporting documents are required to obtain ISPO certification. The data is understandable, considering there has been no outreach and education regarding the ISPO prerequisites. In the future, management and farmers will slowly express the need for technical assistance regarding strategic and administrative readiness for ISPO certification.

The next phase is discussion, following participants' responses regarding the topic of ISPO certification obligations:

1. Response to ISPO certification regulations

The discussion results concluded that none of the management, supervisors, and members at the time the survey was conducted were aware of ISPO certification obligations for independent smallholders. As a result, aspects of ISPO certification assessment were also unknown to the participants. However, participants stated that, in principle, they were willing to participate in ISPO provided there was mentoring and financial support.

2. The role of local governments in encouraging ISPO certification efforts

The response of all management, supervisors, and members regarding the issue of socialization was the same, namely stating that until the socialization was carried out, there had been no socialization regarding ISPO from either the Plantation Service or the West Pasaman Regency Cooperative Service. Thus, it can be concluded that the active role of regional governments in implementing Presidential Decree Number 44 of 2020 is still relatively small.

3. The Role of the Indonesian Palm Oil Farmers Association (APKASINDO)

Farmer associations play the role of mouthpiece for independent oil palm farmers. APKASINDO is registered with the Ministry of Home Affairs as a professional social organization for oil palm farmers based on Registered Certificate 01-00-00/071/D. IV.I/X/2015. APKASINDO is currently spread across 22 provinces and 140 districts, from Nangroe Aceh Darussalam to Papua Province. The speakers also admitted that the role of the APKASINDO management at the West Sumatra branch and West Pasaman district had yet to carry out massive outreach regarding ISPO certification. Thus, APKASINDO needs to distribute information more effectively.

3. Costs and benefits of ISPO certification

Because there has been no in-depth socialization regarding ISPO from the relevant institutions, KPS management admits they still need to learn the cost range for ISPO certification for smallholder schemes. Regarding benefits, KPS management and representatives of farmer group heads are still determining the benefits of price increases for certified palm oil. This view is based on the government's failure to maintain price stability for fresh fruit bunches, the difficulty of getting subsidized fertilizer on the market, and the recent ban on CPO exports, which the government has lifted. Currently, there is no difference in market price between palm fruit obtained from certified and non-certified seeds once they enter the factory. Even though government policy also requires certified seeds, the price is more expensive; it makes no difference when the fruit is sold.



4. Smallholders' expectations regarding ISPO certification

Even though it was only through a general explanation, plantation cooperative management and representatives of farmer group heads stated that they were ready to support the ISPO certification program. However, it is hoped that the price of fresh fruit for certified gardens will be certain. If the government cannot guarantee price certainty, KPS management sees no benefit in pursuing this certification.

The government requires ISPO certification for palm oil processing companies, palm oil plantation and processing companies, palm oil plantation companies, and independent palm oil farmers, and is trying to raise the image of national palm oil to become sustainable palm oil. Through ISPO certification, Indonesia counters many negative sentiments towards palm oil plantations, especially from export destination countries. On the other hand, oil palm plantations also open up employment and business opportunities for millions of people. With the ISPO, the government is trying to increase the selling price of farmers' FFB to improve welfare. Thus, certification is one way to show commitment and proof that Indonesian palm oil plantations have met the principles and criteria of sustainable plantations that do not damage the environment.

## CONCLUSIONS AND RECOMMENDATIONS

This socialization aims to socialize the mandatory ISPO certification for independent palm oil farmers. The results show that most sample farmers agree to participate in certification if the government can provide price guarantees and technical and financial support. The results of the activities also show that with the current conditions, oil palm farmers in the three cooperatives still need to meet ISPO requirements. Therefore, the active role of local governments and related palm oil organizations in providing technical and financial support will influence the achievement of the targets of the ISPO certification program and programs to improve the welfare of palm oil farmers and improve the image of Indonesia's sustainable palm oil.

Year 2023 is the preparation stage. In this phase, each cooperative forms a team/task force to prepare for ISPO certification. This task force will learn about ISPO and provide members with socialization and education regarding ISPO and sustainable plantation practices. In 2023, it is targeted that all members will have the same understanding of ISPO. The year 2024 is the phase where the complete ISPO documents will begin to be provided. This process can run parallel to the socialization and education process. The hope is that at this stage, not only will the complete certification documents be available, but there will be a change in habits towards managing gardens into sustainable garden management. By the end of 2024, the documents can be completed. 2025 is the year to apply for ISPO certification. This year, each KPS seeks financial support for ISPO participation. This year is crucial, as it will determine the extent of farmers' perception of the government's seriousness in strengthening the national palm oil industry, especially regarding certification. Although farmers have tried to fulfill all the requirements independently, the government must provide support or policies

that reduce certification costs. In that case, it is worried that farmers' disappointment will make them apathetic about future government programs.

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