



KAMI

Sustainability of Malaysian
and Indonesian Palm Oil

Options to broaden smallholder inclusivity in legal and deforestation-free palm oil supply chains in Malaysia

Report

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Cover photo: Oil palm plantation at sunset. EFI

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Executive summary

This assessment, commissioned by the European Forest Institute (EFI), explores options for broadening the inclusion of Malaysian smallholders in deforestation-free palm oil supply chains, aiming to ensure compliance with EUDR regulations. It identifies opportunities to address information gaps within existing national systems in Malaysia to better align with EUDR requirements. The assessment was conducted collaboratively by the European Forest Institute (EFI), Malaysian Sustainable Palm Oil (MSPO), and Proforest. The findings highlight the potential impacts of the EUDR on smallholders and underscore the strengths of national platforms such as MSPO Trace¹, the Sawit Intelligent Management System (SIMS), and MPOB GeoPALM as key information sources. The report also provides recommendations for enhancing these platforms to offer EU operators more comprehensive information, particularly in areas where data is currently lacking.

The potential impacts on smallholders identified through stakeholder consultations could be split into **three** categories:

1. **Exclusion:** Smallholders may sell to mills that are not within the supply chain supplying to EU, but this may place them at a disadvantage as they may have to sell their crops at a lower price. Due to the challenges faced in obtaining traceability information for suppliers in Sabah and Sarawak, smallholders in these states will have fewer opportunities.

¹ At the time of publication, MSPO Trace is in the process of being phased out and gradually replaced by e-MSPO.




2. **Cost:** Smallholders may experience increased costs for compliance as the industry moves towards segregated supply chains and sees increasing need for geolocation information. The costs for implementing such requirements will trickle down to smallholders
3. **Privacy:** The requirement for more information on the origins of crops will raise data privacy concerns amongst smallholders and dealers who must share farm locations or business information.

Although the three national platforms assessed were not originally designed to meet EUDR requirements, the assessment found that each platform contains valuable information that can contribute to aligning with EUDR’s information needs:

1. **MSPO Trace:** Publicly accessible; holds a repository of information on certified entities including legal and deforestation-free information; has a traceability module.
2. **SIMS:** Contains records of all sales transactions from oil palm producers to export.
3. **GeoPALM:** Maintains a database of polygons and geolocation information of MPOB-licensed producers in Malaysia; restrictions on geospatial data sharing in Malaysia arise from a combination of personal data protection laws, national security concerns, and industry-specific regulations, which make it challenging to freely share and access this geospatial data.

Although not all the platforms are publicly accessible, the information they hold has potential value for due diligence information gathering by EU operators. Despite the strengths of these platforms, there are some key information gaps in relation to EUDR requirements. A summary of these strengths and gaps is provided in the table below:

Figure 1: Overview of the ability of each assessed national platform to demonstrate compliance with EUDR

	Legality	Traceability	Geolocation	Deforestation Free	Due diligence	Accessibility	Governance
	✓	✓	✗	✗	✗	✗	MPOB Act
Strength: Comprehensive traceability information is available, with nationwide implementation. Gaps: Geolocation information and other EUDR requirements are unavailable.							
	✓	✓X	✓X	✓X	✓	✓	MSPO
Strength: Most of the EUDR requirements are covered, with excellent industry coverage. Most information is publicly available. Gaps: Alignment on several definitions, implementation of dealer certification, & accuracy and data format of geolocation.							
	✓	✗	✓X	✓X	✗	✗	MPOB Act
Strength: Detailed coordinates and polygons are available for P. Malaysia (70% ISH mapped), deforestation analysis available. Gaps: Sabah and Sarawak are yet to be included. Other requirements of EUDR are not available.							

Potential options to enable transfer of geolocation, legality and deforestation-free information are:

1. Systems interoperability:

- a. The three assessed platforms each have different parts of the information that could demonstrate compliance.
- b. The assessed platforms could link with each other through APIs
- c. Databases could be linked based on a common data field, such as MPOB licence numbers
- d. To display information, a designated central site or platform could be developed
- e. The designated site/ platform could extract data from SIMS (traceability), GeoPALM (geolocation), MSPO Trace (legality, due diligence) to be displayed
- f. The designated site/ platform may only display selected data fields to maintain privacy and ensure no violation of the Personal Data Protection Act (PDPA)

2. MSPO certification improvements and MSPO Trace upgrades:

- a. MSPO is currently in the testing phase of its traceability platform, including the functionality for dealers through the new e-MSPO system. Traceability interface for dealers should allow recording of relevant information on smallholder suppliers, i.e. name, location, MPOB licence, monthly volume received
- b. Tiered access and data sharing – to address data sharing concerns, access to information will differ based on user type
- c. Geolocation Information – MSPO is currently in the process of integrating with GeoPALM through the new traceability system. This interoperability between systems should consider enabling the display of polygons on the platform, and Certification Bodies (CB) should be allowed to review this information when auditing and to flag discrepancies when detected.
- d. MSPO Sales Announcements and traceability function – consider promoting the use / reporting of MSPO-certified volumes and incentivise the use of segregated supply chain model.

1. Introduction

1.1 Background on EUDR

Malaysia is the world's second largest producer of palm oil with 15.1 million tonnes exported in 2023, representing approximately 34% of total global palm oil exports. The EU is a significant market for Malaysian palm oil, ranking third after India and China. Malaysia's exports to the EU in 2023 accounted for 1.07 million tonnes, or 7.1% of total palm oil exports.

The European Union Deforestation Regulation (EUDR), adopted in 2023, is a landmark policy aimed at combating global deforestation by regulating the import and export of seven

commodities (soy, palm oil, beef, timber, coffee, cocoa, and rubber) that contribute to deforestation. The EUDR will come into effect on 30 December 2025 for larger companies, and on 30 June 2026 for micro and small enterprises (SMEs). While the intention of this Regulation is to address the global challenges of deforestation linked to agricultural commodity production, there are concerns that the EUDR poses a risk for independent smallholders as they may be excluded from the EU market due to difficulty in providing proof of legal and deforestation-free production. The Regulation places a strong emphasis on due diligence, mandating businesses to trace and verify the origins of these products to demonstrate compliance. While the EUDR puts this due diligence responsibility on EU operators, it can be expected that the burden of proof will fall on the supply chain actors, including independent smallholders, who may face various challenges to demonstrate the legality of land and geolocation information, thus affecting their access to the EU market.

1.2 An overview of independent palm oil smallholders in Malaysia

1.2.1 Independent smallholders: profile

Fresh fruit bunches (FFB) producers in Malaysia are categorised into three categories: estate, organised smallholders, and independent smallholders. According to MPOB, smallholders are defined as farmers who own or lease less than 40.6 hectares (100 acres) of land², without being part of any organised scheme or estate. Typically, they are involved in farm management themselves, often with the help of family members or by outsourcing to service providers. Unlike organised smallholders, independent smallholders are free to sell their produce to any mills or intermediaries without any contractual obligations.

Table 1: Categorisation of FFB producers

Category	Land size (ha)	Farm management	Supply chain model
Estate	>40.6	By the company	Contractual obligation to sell to specific mill/intermediaries
Organised smallholders	≤40.6	By the company or scheme owner	Contractual obligation to sell to specific mill/intermediaries
Independent smallholders	≤40.6	By themselves, family members, and/or outsource to service providers	Free to sell to any mill/intermediaries without contractual obligation

From 2022 to 2023, the total planted areas of all three categories of FFB producers decreased slightly, from 5.675 million ha to 5.653 million ha. Producers in the estate category experienced a slight decline, while producers in both the organised and independent smallholders categories showed a modest increase in their planted areas over

² [CRITERIA AND GUIDELINES ON MPOB LICENSE APPLICATION EnglishVersion latest.pdf](#)

the two years. Independent smallholders made up approximately 14.5% of total oil palm planted areas in Malaysia, with Sarawak and Sabah having the largest planted areas.

Table 2: Oil palm planted areas by category

Category	Total planted areas (ha)			
	2022		2023	
Estate	4,190,766	73.8%	4,156,043	73.5%
Organised smallholders	667,868	11.8%	674,453	11.9%
Independent smallholders	816,107	14.4%	822,073	14.5%
Total	5,674,741	100%	5,652,569	100%

1.2.2 Independent smallholders: land-use rights

There are several types of land use rights independent smallholders have. These documents usually state the landowner's basic information, address, a sketch of the land, lot details and type of land use. The land title documents differ between Peninsular Malaysia, Sabah, and Sarawak.

Table 3: Land ownership in different regions in Malaysia

Region	Type of Land-use Rights	Relevant Government Agencies
Peninsular Malaysia	<ul style="list-style-type: none"> • Freehold Land • Leasehold Land (typically 99 years) • Native Customary Land (for Indigenous smallholders) 	<ul style="list-style-type: none"> • Department of Director General of Lands and Mines (JKPTG) • State Land and Mines Offices • Department of Orang Asli Development (JAKOA)
Sabah	<ul style="list-style-type: none"> • Native Title (NT) • Country Lease (CL) • Land Application (LA) 	<ul style="list-style-type: none"> • Sabah Land and Survey Department • Sabah Native Affairs Office
Sarawak	<ul style="list-style-type: none"> • Native Area Land • Native Customary Land (NCL) • Reserved Land • Interior Area Land 	<ul style="list-style-type: none"> • Sarawak Land and Survey Department • Sarawak Native Customary Rights (NCR) Land Development Office

1.2.3 Independent smallholders: productivity and livelihood

For smallholders, a well-managed farm can yield up to 30 tonnes per hectare annually, resulting in a net income of RM2,806, which is above Malaysia's latest poverty line income of RM2,208 per month (Department of Statistic, 2019). This indicates that there is potential for palm oil farming to improve livelihoods and reduce poverty among smallholders. However, on average, smallholders in Malaysia only achieve half of that yield.

In Peninsular Malaysia, independent smallholders typically achieve FFB yields ranging from 13 to 14.5 tonnes per hectare per year³. According to Ali⁴, in both Sabah and Sarawak, close to half of the independent smallholders (43%) were reported to produce 10-20 tonnes of FFB per hectare per year, and another 34% are reported to have low FFB yield below 10 tonnes.

Despite yields being sub-par compared to the national standard, oil palm cultivation has brought significant socio-economic benefits to Malaysia's independent smallholders compared to other crops. They have been able to improve their livelihoods through increased income, thus reducing poverty levels in the rural areas of Malaysia⁵ and various communities, including Orang Asli⁶. In Sarawak, oil palm cultivation is reported to be the major source of livelihood, followed by rice cultivation, in the rural areas of Miri for the Iban communities⁷. Additionally, the palm oil industry has facilitated better access to education and healthcare services, contributing to overall community development⁸.

1.2.4 Independent smallholders : supply chain models

Palm oil supply chains can be either integrated or independent. In Malaysia, **independent smallholders are part of an independent supply chain** (refer Figure 1), where they enter the supply chain through one or multiple intermediaries. At the intermediary level, all the crops from the supplying independent smallholders are aggregated and then transported to the palm oil mill for processing. Whether the FFB enters the supply chain through a direct or independent supply chain, depends on the region, market price, relationships, availability of transportation, familial connections, personal relationships, and more.

Compared to integrated supply chains, which are operated by a single company or a closely linked group of companies covering all stages from plantation to distribution, independent supply chains involve various independent entities at each stage of the supply chain and tend to have a higher presence of independent smallholder volume in comparison. While the independent supply chain offers a dynamic market, it presents challenges in maintaining consistency in data management and traceability, as suppliers are constantly changing.

³ Institute of Palm Oil Research. (2024). *Malaysian Palm Oil Industry*. Retrieved from [here](#).

⁴ Ali, M. (2019). *Independent smallholders and livelihood*. Malaysian Palm Oil Board. Retrieved from [here](#).

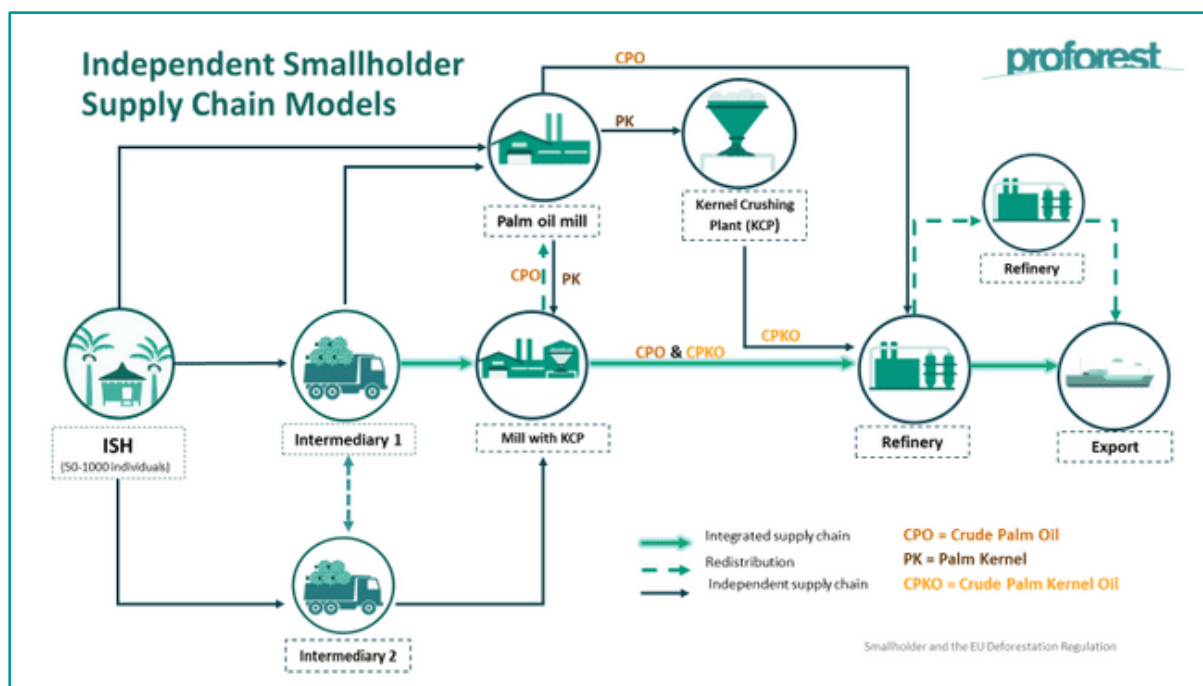
⁵ Malaysian Sustainable Palm Oil (MSPO). (n.d.). *Next generations of smallholders in Malaysia*. Retrieved from [here](#).

⁶ The Edge. (2017, October 19). *Life of independent smallholders*. Retrieved from [here](#).

⁷ Cramb, R. A., & Sujang, P. S. (2012). Pathways through the plantation: Oil palm smallholders and livelihood strategies in Sarawak, Malaysia. *Australasian Agricultural and Resource Economics Society (AARES) Conference, February 7-10, 2012, Fremantle, Australia*. <https://doi.org/10.22004/ag.econ.124277>

⁸ IOP Conference Series: Earth and Environmental Science. (2023). *Socio-economic impacts of oil palm cultivation on smallholders in Malaysia*. IOP Publishing. Retrieved [here](#).

Figure 1: Visual of the independent smallholder supply chain models in Malaysia



In the context of the EUDR, the complexity of the supply base presents challenges for EU operators in accessing independent smallholder data and other critical information related to EUDR requirements, such as legality, geolocation, deforestation-free status, and due diligence. These challenges are further influenced by the relationships between various actors across different supply chain models and the management of the chain of custody.

2. Objectives

The aim of this work is to assess options to support oil palm smallholders in Malaysia to connect to global markets in the context of new market requirements for legal and deforestation-free palm oil such as the EUDR. The specific objectives are to:

1. Assess the potential impacts of the EUDR on smallholders and opportunities to broaden producers' access to the EU market by making EUDR-relevant information available.
2. Explore options to transfer geolocation, legality and deforestation-free information from independent smallholders to mills via traders/ dealers based on available national systems, with upgrades as necessary.

3. Methodology

The assessment utilised a range of approaches to gather information, ensure stakeholder consultation and input, and develop recommendations. The assessment was divided into two parts:

1. An **impact study** where potential challenges faced by independent smallholders in complying with the EUDR were explored based on insights and lessons shared by stakeholders (refer to Annex 3) on smallholder production trends and existing systems.
2. An **analysis** focused on the EUDR-related information available within Malaysia's national systems, assessing their alignment with EUDR requirements. It also explores how these systems can be leveraged to collect and transfer relevant data to EU operators, while identifying potential solutions to address any information gaps.

3.1 Desktop research and analysis

The desktop analysis was conducted in two steps: firstly, to identify the criteria related to/information needed from palm oil smallholders to comply to EUDR, and secondly, to identify where there are gaps in data availability to demonstrate compliance between the available national platforms against the EUDR information needs.

The two key references used the analysis were:

1. Assessment of MSPO Certification Against the Requirements of the European Union Deforestation Regulation, commissioned by MPOC and written by Pierre Bois d'Enghein (dated 2 May 2024)
2. Joint Gap Assessment: EUDR information needs and information availability from the MSPO certification, EFI & MSPO (published August 2024)

The function and availability of data from national platforms – **MSPO Trace**, MPOB's **GeoPALM** portal, and Sawit Intelligent Management System (**SIMS**) – were assessed against the EUDR information needs relevant to smallholders.

After identifying the information gaps, recommendations were made for potential upgrades to further enhance the functionality and effectiveness of the national platforms.

3.2 Stakeholder consultations

To ensure a comprehensive understanding of the potential impacts of the EUDR on oil palm smallholders and to identify opportunities for improving their access to the EU market, a series of stakeholder consultations were conducted. These consultations engaged a diverse range of stakeholders, including NGOs supporting independent smallholders, government agencies assisting smallholders, selected palm oil companies (both integrated companies and mills), and certification bodies. Consultations were conducted through in-person and/or online interviews, site assessments and a roundtable discussion. The list of stakeholders consulted through the interviews can be found in Annex 1, along with the guiding questions used in the interviews.

To gain practical insights into the implementation of EUDR requirements and their implications on the ground, **site assessments** were carried out at three palm oil companies within EU supply chains. These assessments took place in Peninsular Malaysia, Sabah, and Sarawak, providing a broad geographical perspective and better understanding of the regional smallholder differences.

A **roundtable discussion** was held on 10 September 2024 in collaboration with MSPO and EFI to facilitate dialogue with companies with a smallholder supply base. The discussion aimed to identify (i) the proportion of FFB sourced from integrated plantations and other estates vs. directly from smallholders and from smallholders via dealers, and (ii) the approximate number of smallholders contributing to palm oil exports to the EU. The list of attendees can be found in Annex 3.




Based on the findings from the assessment and impact analyses, a set of recommendations and strategies was developed to address the challenges faced by independent smallholders in complying with EUDR requirements. Additionally, measures were proposed to improve the effectiveness of national systems / platforms for sustainable palm oil production. This report also highlights feedback from palm oil companies regarding their smallholder strategies for palm oil volumes to the EU market.

4. Findings I: Assessment of EUDR information needs and information availability from national systems

4.1 EUDR information needs

According to Article 3 of the EUDR, traders or operators placing relevant products on the EU market will have to ensure that their products are:

1. Deforestation-free,
2. Produced in accordance with relevant legislation of the country of production,
3. Covered by a due diligence statement.

 <p>Geolocation information: Needed to prove that the product was not produced in an area that was deforested after the cut-off date of 31st December 2020</p>	 <p>Confirmation of <u>no or negligible risk of deforestation</u> (i.e. that the product is deforestation free), with forest meaning land > 0.5 ha, with trees > 5m and canopy cover > 10%</p>	 <p>Demonstrate <u>legality according to laws of producer country</u>, including environmental, human and labour rights, and FPIC</p>
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According to EUDR Article 8 on due diligence, the due diligence report submitted by operators should include: the collection of information, data, and documents (as per Article 9), risk assessment and risk mitigation measures.

The table below describes in more detail the EUDR requirements listed above that are relevant to independent smallholders (though it is important to note that the EUDR does not explicitly define requirements specific to independent smallholders). The table below presents the outcomes of an exercise aimed at identifying the requirements relevant to independent smallholders.

Table 4: EUDR requirements that are relevant to the independent smallholders

Clause/Article	Article Description	Information and data to be provided by Smallholders
<p>Article 9 (Information Requirements – (d), (g), (h))</p>	<p>Requires operators to collect information, documents and data which demonstrate that the relevant products comply with Article 3.</p> <p>Where the relevant requirements for smallholders are:</p> <p>(d) geolocation of all plots of land where the relevant commodities were produced</p> <p>(g) verifiable information that the relevant products are deforestation-free</p> <p>(h) produced in accordance with the relevant legislation of the country of production, which include:</p> <ul style="list-style-type: none"> a) Land use rights b) Environmental protection c) Forest-related rules d) Third parties' rights e) Labour rights f) Human rights protected under international law g) The principle of free, prior, and informed consent (FPIC), including as set out in the UN Declaration on the Rights of Indigenous Peoples h) Tax, anti-corruption, trade, and customs regulations 	<p>Geolocation information (i.e., coordinates for plots of land smaller than 4ha and polygons for plots of land larger than 4ha) of the independent smallholders should be made available, potentially aggregated at a cooperative or community level.</p> <p>Compliance with the deforestation cut-off date from independent smallholders could be in the form of being MSPO-compliant (note: only for MSPO 2022 version) or if there is satellite/field monitoring of smallholder plots by suppliers since the cut-off date of 31 December 2020.</p> <p>Compliance to relevant Malaysian legislation by independent smallholders may include documents such as:</p> <ul style="list-style-type: none"> • Land titles/ land use rights (see Table 3) • MPOB license • MSPO certificate (2022 version covers compliance with ethical conduct; legal requirements; social, health, safety, and employment conditions; and environment, natural resources, biodiversity, and ecosystem services)

4.2 EUDR-relevant information available from national platforms

In 2019, MSPO (then known as the Malaysian Palm Oil Certification Council or MPOCC) launched **MSPO Trace** to make information on MSPO-certified entities and traceability of the certified volumes publicly accessible. The platform also includes a tab for submitting complaints and grievances.

More recently, two other national platforms were developed for the palm oil sector to further demonstrate transparency: MPOB's **Sawit Intelligence Management System (SIMS)** and MPOB's **GeoPALM**, which were both launched in early 2024.

All three national platforms / systems contain information relevant for EU operators gathering information for due diligence checks including on smallholders. Table 5 provides an overview of the three platforms.

Table 5: Overview of existing national platforms

	MSPO Trace	MPOB SIMS	MPOB GeoPALM Portal
Purpose	Monitor certification audited by Accredited Certification Bodies (ACBs) and traceability of the MSPO supply chain, complains and grievances.	Monitor compliance with MPOB regulations, ensure transparent palm oil transactions, collect and store data.	Serves as database of geospatial data by providing accurate geolocation and polygon for all MPOB licensed FFB producers in Malaysia.
User	MSPO Trace is publicly accessible to all stakeholders. Login access for data entry is restricted to ACBs, Pegawai Tunas Zon (PTZ), and MSPO SCCS-certified holders (palm oil mill, refinery, palm kernel crusher, oleochemical, biodiesel, and others, including end-product manufacture)	The whole value chain of palm oil, from plantation to export including intermediaries such as dealers, service providers, exporters and importers.	Ministry and government agencies, and to be publicly available in future
Basis	Mandatory	Mandatory	National commitments
Governance	MSPO	MPOB Falls under the purview of the Malaysian Palm Oil Board Act, 1998	MPOB Falls under the purview of the Malaysian Palm Oil Board Act, 1998

The table below summarises the information available on the national platforms that could help palm oil smallholders demonstrate compliance with the EUDR requirements. The development of this table references documents such as the: **official EUDR text** (published in June 2023), [Joint Gap Assessment: EUDR information needs and information availability from the MSPO certification](#) (published in May 2024) and assessment of **MSPO certification against the requirements of the EUDR** (published in May 2024).

Table 6: Demonstrating compliance with EUDR: information available regarding palm oil smallholders on the national platforms and related gaps

Key EUDR information needs	National Platforms		
	MSPO Trace	MPOB SIMS	MPOB GeoPALM Portal
Legality a) <i>Land use rights;</i> b) <i>Environmental protection;</i> c) <i>Forest-related rules, including forest management and biodiversity conservation, where directly</i>	Information available: <ul style="list-style-type: none"> The MSPO standard covers all 8 aspects of legality on Land use rights, Anti-corruption, Forest Related Rules (biodiversity and HCV assessment), Third parties' rights, Labour Rights, Human Rights, and FPIC. 	Information available: <ul style="list-style-type: none"> Land use rights information. Tax, anti-corruption, trade, and customs regulations are available Proof of compliance: MPOB Licence Current gap: <ul style="list-style-type: none"> Other aspects of legality are not covered by the 	Information available: <ul style="list-style-type: none"> Land use rights information is available. Identification of individual farm plots are done through geolocation data collected from MPOB licences and MSPO certification.

<p><i>related to wood harvesting;</i></p> <p>d) Third parties' rights;</p> <p>e) <i>Labour</i> rights;</p> <p>f) Human rights protected under international law;</p> <p>g) The principle of free, prior and informed consent (FPIC), including as set out in the UN Declaration on the Rights of Indigenous Peoples;</p> <p>h) Tax, anti-corruption, trade and customs regulations.</p>	<ul style="list-style-type: none"> • Proof of compliance: MSPO certificate, public summary of audit report 	<p>MPOB licence but, since MPOB licenses are only granted to holders with a valid MSPO certificate, MPOB license holders could demonstrate compliance with the eight aspects of legality by proxy.</p>	<ul style="list-style-type: none"> • Since only MPOB-licensed and MSPO-certified plots are mapped, they can be used to demonstrate compliance with the eight aspects of legality by proxy. <p>Current gap:</p> <ul style="list-style-type: none"> • 70% of smallholders mapped in Peninsular Malaysia and mapping work in Sabah and Sarawak is work in progress.
<p>Traceability <i>Ability to connect relevant products to the plot of land where the relevant commodities were produced to facilitate assessment of legal and deforestation-free production in the geolocation in which commodities were produced.</i></p>	<p>Information available:</p> <ul style="list-style-type: none"> • MSPO Trace utilises Sales Announcements to enable traceability along the supply chain for MSPO products (products using the MSPO logo). <p>Current gaps:</p> <ul style="list-style-type: none"> • Currently, no sales announcements are being made through MSPO Trace for MSPO-certified products. • Palm oil produced by smallholders and sold through intermediaries cannot be traced to the plot of land until intermediaries are certified under the 2022 MSPO standard. • MSPO MB products generally cannot be traced to the plot of 	<p>Information available:</p> <ul style="list-style-type: none"> • Able to demonstrate detailed traceability information from plantation to export <p>Current gaps:</p> <ul style="list-style-type: none"> • Information is not accessible to supply chain actors or EU operators. • Full traceability to the farm is only possible if dealers/intermediaries' consent to sharing transaction information with the mill. 	<p>Information available:</p> <ul style="list-style-type: none"> • GeoPALM collects, stores and displays polygons of certified and licenced smallholders. <p>Current gap:</p> <ul style="list-style-type: none"> • NA – GeoPALM is not a traceability system

	land where the product was produced.		
Geolocation <i>geographical location of a plot of land described by latitude and longitude coordinates. For plots of land larger than four hectares used for producing relevant commodities, this information must be provided using polygons with sufficient latitude and longitude points to describe the perimeter of each plot.</i>	<p>Information available:</p> <ul style="list-style-type: none"> Coordinate information (single points) and boundary maps are available. <p>Current gaps:</p> <ul style="list-style-type: none"> Polygon information as defined by the EUDR is not available. Data verification needed to ensure accuracy. 	<p>Information available:</p> <ul style="list-style-type: none"> Not available <p>Current gap:</p> <ul style="list-style-type: none"> SIMS does not collect, store or transfer geolocation information within the system. 	<p>Information available:</p> <ul style="list-style-type: none"> Geolocation information (polygons) available for licenced plots of land. <p>Current gap:</p> <ul style="list-style-type: none"> Data for both Sabah and Sarawak are limited. Geolocation information not accessible.
Deforestation-free⁹ <i>that the relevant products contain, have been fed with or have been made using, relevant commodities that were produced on land that has not been subject to deforestation after 31 December, 2020</i>	<p>Information available:</p> <ul style="list-style-type: none"> MSPO certification (version 2022) can demonstrate compliance with the EUDR's deforestation cut-off date, as MSPO's deforestation cut-off is set to 31 December 2019 <p>Current gaps:</p> <ul style="list-style-type: none"> MSPO uses a different forest definition to the EUDR/FAO definition, however, MSPO is reviewing the forest definition. There is no verification of deforestation during the MSPO 2022 standard's transition period. EIA, SIA, and HCV will be required prior to the new planting of plantations 	<p>Information available:</p> <ul style="list-style-type: none"> MSPO certificate could be used as a proxy for deforestation-free information <p>Current gap:</p> <ul style="list-style-type: none"> Refer to gaps under MSPO certification 	<p>Information available:</p> <ul style="list-style-type: none"> Deforestation analysis is carried out, which includes overlay with 2020 forest map from Forestry Department, and consultations with multi governmental agencies. <p>Current gap:</p> <ul style="list-style-type: none"> Data for both Sabah and Sarawak are limited. Information not accessible.

⁹ Definition of forest (as per Article 2 in EUDR): 'forest' means land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of more than 10%, or trees able to reach those thresholds in situ, excluding land that is predominantly under agricultural or urban land use

	established after 31 December 2019.		
Due Diligence	<p>Information available:</p> <ul style="list-style-type: none"> Valid MSPO certificates and public summaries of audit reports are available on MSPO Trace, making the information third-party verified. <p>Current gap:</p> <ul style="list-style-type: none"> The process of auditing and certifying smallholders as part of a Sustainable Palm Oil Cluster (SPOC) makes it difficult to detect non-compliance, given the large size of each group (approximately 1,500 smallholders per SPOC). 	<p>Information available:</p> <ul style="list-style-type: none"> As SIMS is an internal regulatory compliance monitoring system, certain aspects of EUDR Requirement on legality is available. <p>Current gap:</p> <ul style="list-style-type: none"> information not accessible to EU operators therefore cannot be used gather information for due diligence. 	<p>Information available:</p> <ul style="list-style-type: none"> As GeoPALM maps licenced and certified plots of land, information regarding the risk assessment may be considered verifiable. <p>Current gap:</p> <ul style="list-style-type: none"> Data for Sabah and Sarawak is limited and the platform is not currently accessible to public.

Table 6 shows that most of the EUDR-required information, including legality, traceability, geolocation, and other due diligence-related information, are available across the various national platforms. However, there are still information gaps present across the different systems / platforms. At present, only information on **MSPO Trace** is publicly accessible, while both **SIMS** and **GeoPALM** are exclusively internal to MPOB and governed by strict data-sharing policies under the MPOB Act.

5. Findings II: Potential impacts of the EUDR on independent smallholders

The Malaysian government, the EU, and palm oil supply chain stakeholders in Malaysia can all benefit from a clearer understanding of the potential impacts and opportunities arising from the implementation of the EUDR on independent smallholders. Clarifying these potential impacts (if any) is essential to support efforts aimed at maintaining or expanding smallholder inclusion in the supply chain.

To assess the potential impact of the EUDR on independent smallholders in Malaysia, key information was collected through interviews and a roundtable dialogue on (i) the proportion of fresh fruit bunches (FFB) sourced from independent smallholders and/or via dealers and the estimated number of smallholders contributing to palm oil exports to the EU and (ii) potential impact of the EUDR on market access.

5.1 Estimated smallholder volume and numbers contributing to export to the EU

Based on the roundtable discussion involving industry actors, independent smallholder groups, and CSOs (refer Annex 3), the volume of palm oil supplied by independent smallholders to EU markets through their buyers (mills or refineries) in the past two years showed significant variation. Surveyed companies indicated that independent smallholders made up between 5% and 50% of their FFB volumes (refer Annex 4) .

Most companies (85%) reported supplying the EU with products sourced from fewer than 200 independent smallholders. A few companies, however, reported having more than 1,000 individual smallholders FFB suppliers selling to mills linked to EU supply chains. This variation in numbers reflects the diverse smallholder supply base of mills and refineries, making it a challenge to collect the required information for EUDR compliance and to segregate EUDR compliant from non-compliant FFB. As a result, this could potentially impact the sourcing strategies of downstream companies as they work to ensure full compliance with the EUDR.

Not all refineries knew whether the volumes they sold were ultimately destined for the EU market, as their products might be sold to another facility that could later export them to the EU. This lack of transparency is further exacerbated when each production site operates independently, with products later handled and processed by other facilities owned by different companies.

5.2 Potential impact of the EUDR on market access

Stakeholders (refer Annex 3) expressed a range of opposing concerns regarding market access for independent smallholders in light of the EUDR implementation.

Some anticipate that the EUDR would exclude independent smallholders within their supply base. There is evidence of palm oil mills in Malaysia narrowing their supply base by refusing crops from independent smallholders in order to reduce the risk of smallholder exposure. Some companies interviewed in this study have decided to supply the EU solely with products from their own estates, excluding smallholder volumes, as a short-term strategy to avoid the risk of non-compliance and its implications. These companies are also actively engaging with smallholders to collect traceability and geolocation data, with the hope of including the independent smallholders for supply destined for the EU in the next two years.

Others anticipate that the EUDR may not actually have a significant impact on independent smallholders, because they can still sell their crops locally, to intermediaries or mills selling to non-EU markets. Responding independent smallholder groups, such as the Wild Asia Group Scheme (WAGS) and PERTANIAGA, expressed that they are unaware whether the crops from their groups are destined for the EU, as they operate independently from the mills and downstream processing facilities. Currently, they are still able to sell to nearby mills and intermediaries with no restrictions.

Furthermore, there is a cautionary note that excluding smallholders from the EU market could lead to unintended social changes, potentially affecting the society in rural areas. Observations made during site visits and interviews indicate that independent smallholders are experiencing increasing concerns and fatigue because they fear the regulation will create barriers and increase compliance costs¹⁰. Some are apprehensive about their future and foresee fewer business opportunities, leading them to sell off their farmland or convert it into non-palm crops or urban developments.

6. Challenges faced by independent smallholders

6.1 Legality (land ownership and land-use rights)

Demonstrating the legality of production is generally not a major issue in the Malaysian palm oil sector, and systems such as SIMS, MPOB GeoPALM, and MSPO Trace capture various aspects of legality to ensure regulatory compliance. However, independent smallholders in Malaysia, particularly farmers from indigenous communities and those in the Bornean states, face significant obstacles in securing land use rights. Many smallholders in Sabah and Sarawak cultivate on indigenous ancestral lands, and the lengthy, uncertain process of obtaining legal land ownership documents complicates their ability to demonstrate legal production. This lack of legal land ownership documents also affects the accessibility of their geolocation information, as detailed in section 6.3.

6.2 Deforestation-free

The historical land use of independent oil palm smallholders in Malaysia has evolved significantly over the years. In the 1990s, many smallholders converted forested land into oil palm plantations, contributing to the expansion of the palm oil industry. Between 1990 and 2005, more than 50% of oil palm plantations in Malaysia were converted from forested areas¹¹. This trend continued as the demand for palm oil grew, driven by its economic benefits and higher yield per hectare compared to other oil crops.

According to MSPO¹², 4.8 million ha of oil palm planted areas were certified by MSPO as of 31 December 2020, the deforestation cut-off date set by the EUDR¹³. The total planted areas in Sarawak demonstrated a slight increase from 1.58 million ha to 1.62 million ha between 2020¹⁴ and 2023¹⁵. Independent smallholders, particularly those with native

¹⁰ [Doppa: EU deforestation law 'creates barriers' for S'wak oil palm planters \(theborneopost.com\)](#)

¹¹ Gaveau, D. L. A., Sheil, D., Husnayaen, Salim, M. A., Arjasakusuma, S., Ancrenaz, M., ... & Meijaard, E. (2020). Rapid conversions and avoided deforestation: examining four decades of industrial plantation expansion in Borneo. *Earth System Science Data*, 12(2), 847-875. <https://doi.org/10.5194/essd-12-847-2020>

¹² [Speaker-3-Mr-Tan-Chee-Yong-MSPO-Potential-Solutions-How-MSPO-can-meet-EUDR.pdf](#)

¹³ Gaveau, D. L. A., Sheil, D., Husnayaen, Salim, M. A., Arjasakusuma, S., Ancrenaz, M., ... & Meijaard, E. (2020). Annual oil palm plantation maps in Malaysia and Indonesia from 2001 to 2016. *Earth System Science Data*, 12(2), 847-875. <https://doi.org/10.5194/essd-12-847-2020>

¹⁴ [Area_summary2020.pdf](#)

¹⁵ [Area_summary2023.pdf](#)

customary rights in the Bornean states, face challenges in this context. Many have only recently obtained legal rights to their land and are just beginning to develop it for oil palm cultivation.

Although the MSPO deforestation cut-off date (31 December 2019) predates the EUDR cut-off date (31 December 2020), the two frameworks apply different definitions of ‘forest’. As a result, additional verification is needed to ensure that MSPO-certified palm oil does not originate from areas classified as forest in 2020 under the EUDR/FAO definition.

Recommendations for addressing this discrepancy are provided in the EUDR MSPO Joint Gap Assessment (MSPO & EFI, 2024).

6.3 Geolocation

Geolocation information is needed to verify the deforestation-free status of the area of production. Gathering geolocation information from smallholder palm oil producers in Malaysia for compliance with the EUDR poses several challenges:

1. Need for polygon information

Smallholders typically own small and scattered plots of land, making it difficult to map and verify individual plots accurately. However, under the EUDR, polygon information (sufficient number of points to describe the perimeter of the plot) needs to be collected for any plot of land > 4ha. In Peninsular Malaysia, smallholders’ land sizes range from 1.48 ha to 4.42 ha, while in Sabah and Sarawak, they generally exceed 4 ha (see table 7 for the average size by state). The EUDR requires polygons for plots larger than 4 ha, making the availability and accessibility of this information crucial for independent smallholders in Sabah and Sarawak.

Table 7: Average farm size of independent smallholders in Malaysia

State	Total Number of Independent Smallholders	Total Planted Areas (Ha)	Average Farm Size Per Smallholder (Ha)
Johor	58,584	142,139	2.43
Kedah	6,186	25,265	4.08
Kelantan	2,318	6,821	2.94
Melaka	2,534	9,191	3.63
Negeri Sembilan	5,167	20,090	3.89
Pahang	12,357	41,872	3.39
Perak	32,654	79,783	2.44
Perlis	38	154	4.05
Pulau Pinang	1,244	5,494	4.42
Selangor	12,849	19,005	1.48
Terengganu	3,636	10,981	3.02
Sabah	31,090	203,680	6.55
Sarawak	44,803	257,609	5.75
TOTAL	213,460	822,084	

Source: Ministry of Plantation and Commodities, 2024

Consultations with MPOB’s GeoPALM Portal team revealed that geospatial data, including coordinates and polygons, are available for approximately 70% of independent smallholders in Peninsular Malaysia. However, in Sabah and Sarawak, the availability and completeness

of this data are still being developed, primarily due to issues related to land tenure and the jurisdictional overlap between federal and state agencies. Further, the platform is not yet accessible to the public or supply chain actors. While the GeoPALM Portal offers a potential solution to meet the geolocation information needs in line with EUDR requirements, it currently cannot support these needs due to strict data-sharing restrictions governing the use and dissemination of geospatial data in Malaysia.

2. Uncertain land ownership status and land use rights

Some smallholders may lack formal documentation or legal ownership of their land, complicating geolocation verification. In Sabah and Sarawak, independent smallholders with lands under Land Application (Sabah) or NCR status face challenges¹⁶ in providing the required polygon data and land use rights documents. The challenges related to providing the polygon data could further limit market access for independent smallholders. In most cases, plots of land under Land Application status (Sabah) and NCR lands (Sarawak) would not have been surveyed yet or may not have their survey plans finalised due to the limited resources of the Lands and Survey departments, and as such would not be available on the national platforms. Additionally, for NCR lands in Sarawak that are in the process of being legally recognised, the indigenous communities would have to go through a lengthy process to acquire the required legal land documents to meet EUDR requirements.

3. Technical challenges of mapping

Independent smallholders in Sabah and Sarawak, largely consisting of indigenous communities in rural areas, face significant challenges in accessing the knowledge needed to create their own digital farm boundaries. Additionally, many smallholders live in remote areas with poor network coverage, making it difficult for them to input data into portals or calibrate mapping tools. The technical and logistical demands of collecting and submitting this data further burden them. Many smallholders are elderly, and it may be challenging for them to understand the necessity of collecting such information. Furthermore, smallholders, intermediaries, and mills often lack the expertise to obtain and manage geolocation data, leading to additional costs for those attempting to comply with EUDR requirements. Given the numerous processes smallholders must navigate to demonstrate compliance, the associated costs could be substantial, potentially leading to their exclusion from the EU market.

4. Privacy and trust concerns

Smallholders may be reluctant to share precise geolocation data due to privacy concerns or mistrust of how the information will be used, especially if it reaches the tax authorities. Interviews with intermediaries such as dealers also revealed data sharing concerns, especially that competitors could gain access to market information like pricing, volumes, or supplier details.

¹⁶ Rahman, S. (2020). *Malaysian independent oil palm smallholders and their struggle to survive 2020*. ISEAS–Yusof Ishak Institute. Retrieved from [here](#).

6.4 Traceability

Traceability to smallholder plots is challenging because geolocation information is often unavailable or inaccessible, and intermediaries are hesitant to share supplier information due to business interests.

Intermediaries such as dealers in Peninsular Malaysia and ramps or collection centres in Sabah and Sarawak offer a wide range of services to independent smallholders. Currently, there are a total of 3,512 licensed¹⁷ intermediaries across the country. Independent smallholders often live on and manage their land themselves, while some outsource all their farm management to the intermediaries.

Intermediaries play a crucial role in connecting growers to mills and, in many cases, are the only link smallholders have to the broader oil palm supply chain. As a result, most traceability information for independent smallholders is aggregated at the intermediary level. However, intermediaries often show no interest in sharing FFB supplier information with mills, viewing them as direct competitors for the FFB. Furthermore, the absence of segregation mechanisms for FFB at the intermediary level further complicates efforts to meet traceability requirements.

Table 8: Typology and number of MPOB-licensed intermediaries in Malaysia by region

Regions	No. of Intermediaries	Overview of the services provided
Peninsular Malaysia	2,727	Land preparation, planting, nursery, pruning, agrochemical application, harvesting, selling of FFB to another larger intermediary or direct to mill, transportation from farm to mill, mini loan. Small to larger in business scale.
Sabah	503	Selling of FFB to another larger intermediary or direct to mill, transportation from site to intermediary or mill. Small to medium business scale.
Sarawak	282	Selling of FFB to another larger intermediary or direct to mill, transportation from site to intermediary or mill. Small to medium business scale.
Total	3,512	

Source: Ministry of Plantation and Commodities, 2024

1. Absence of segregation at the farm level

The option of physically segregating independent smallholder volumes by certification status is not feasible. This physical segregation would have to begin when FFB are collected from each supplier's farm, before being processed separately at the mill. This segregation would incur a significant cost which is not an attractive solution to intermediaries and mills.

The practice of unauthorised "shared license" by smallholder further complicates segregation, as the licensed party reports the harvest as their own, even though it comes

¹⁷ There are often a mix of formal and informal intermediaries along the independent smallholder supply chain.

from multiple external smallholder sources of unverified origin and legality status. For example, there is a 2.5 ton/ha/month/license quota, the actual FFB production for most smallholders falls below this threshold, uncertified/ unlicensed FFB is added from other smallholder sources to maximise sales.

Should mills start turning away FFB from intermediaries and smallholders in their effort to focus on supplying EUDR compliant volumes to the EU market, this could further limit already marginalised rural communities which may have limited options to sell their produce due to poor infrastructure and road networks¹⁸. This could mean an additional cost to travel further to sell their FFB.

2. Limited access to traceability data on existing platforms

Although the responding companies have engaged in various initiatives and collaborations to collect traceability data at the farm level, significant challenges persist. These challenges are largely due to the involvement of intermediaries who are yet to be MSPO certified and are hesitant to share supplier and geolocation information. Their reluctance stems from concerns about losing competitive advantage to other intermediaries or mills that may seek to source directly from nearby independent smallholders. This reluctance further complicates the access to traceability information of independent smallholders, especially in Peninsular Malaysia where the supply chain is more complex and could involve multiple levels of intermediaries, both licensed and unlicensed.

All transactions are currently captured daily in the **Sawit Intelligent Management System (SIMS)** platform, as mandated by MPOB in January 2023. This includes information such as the names of FFB suppliers (including independent smallholders), MPOB licenses, and total volume, which is recorded by all intermediaries. However, the SIMS platform is strictly for MPOB use and is not accessible to supply chain actors. At present, SIMS does not collect or store geospatial data such as coordinates and polygons, as required by the EUDR. Additionally, intermediaries have the option to withhold information about their FFB suppliers, including independent smallholders.

MSPO, through the **MS2530:2022 Part 4-3: General Principles for Dealers Including Supply Chain Requirements** (also known as dealers' certification), aims to promote environmental, social, and economic sustainability within the Malaysian palm oil industry by incorporating intermediaries, also called dealers, into the certification scheme. The MS 2530:2022 standard series has been fully implemented since 1 January 2025, including the voluntary adoption for FFB dealers under the MS 2530-4-3:2022 standard, which would eventually also become mandatory.

¹⁸ Martin, S., Rieple, A., Chang, J., Boniface, B., & Ahmad, A. (2015). Small farmers and sustainability: Institutional barriers to investment and innovation in the Malaysian palm oil industry in Sabah. *Journal of Rural Studies*, 40, 46-58. Retrieved from [here](#).

6.5 Summary

Several factors have been identified that present challenges for independent smallholders in fulfilling the geolocation requirement.

EUDR Requirements	Description
Legality	<p>Peninsular Malaysia: The majority have land ownership / land use documents.</p> <p>Sabah and Sarawak: Most are cultivation on communal land (NCR) and in the process of obtaining legal land ownership documents.</p>
Traceability	<p>All regions: The supply chain is complex with the involvement of intermediaries and faces high reluctance to share traceability information by the intermediaries. This also increases the complexities of the data collection and accuracy. Segregation at the FFB level is challenging.</p>
Geolocation information	<p>Peninsular Malaysia: Most farms on average less than 4ha (coordinate) and currently 70% of independent smallholder farms are mapped on GeoPALM.</p> <p>Sabah and Sarawak: Most farms are larger than 4ha (polygons) and on communal land, which increases challenges in collecting polygon information.</p>
Deforestation-free	<p>Peninsular Malaysia: Most of the farms are established prior to 31 December 2020.</p> <p>Sabah and Sarawak: Some are engaged in new plantings as they only recently obtained their permits to cultivate oil palm.</p>

7. Recommendations

To ensure broader market access, it is recommended that the assessed national platforms adopt several key enhancements. These improvements should capitalise on the strengths of these well-established platforms, which are already being used across the country and are trusted by supply chain actors. Most of the information and data such as valid licenses, traceability information, geolocation (coordinates and polygons), and certification reports are readily available on the platforms and databases, as noted in previous sections.

Based on the assessed platforms, two pathways are envisioned to enable smallholders to demonstrate compliance and gain access to broader markets.

The first pathway leverages the **interoperability** of the three national platforms to facilitate information sharing, as no single platform currently contains the complete set of data needed to align with EUDR requirements.

The second pathway involves **upgrading the MSPO Trace** platform to incorporate features that would streamline access to smallholder information aligned with EUDR standards. These upgrades should allow MSPO Trace to store, display, and transfer data in the appropriate format required by the EUDR.

The section below provides a more detailed description of these pathways and on-going initiatives by MSPO. These recommendations are based on the existing MSPO Trace which is in the process of being phased out and replaced by e-MSPO. The recommendations capture in this section would be relevant to e-MSPO and is being considered by MSPO.

Pathway 1: Systems interoperability

The interoperability of systems such as **GeoPALM**, **SIMS** and **MSPO Trace** would enhance the efficiency and coherence of agricultural and environmental management. By building on the strengths of these platforms, stakeholders can achieve a more unified and comprehensive approach to data management, and information availability and accessibility.

The **SIMS** platform provides real-time transaction data and comprehensive traceability information involving all supply chain actors, thereby demonstrating strong compliance with the traceability component of EUDR Article 10 (Traceability and Geolocation Information). However, it is crucial to integrate the geolocation information and transaction data from SIMS with platforms like **GeoPALM** that hold MPOB licensing information and polygons, to better align to provide additional information needed by EUDR. **MSPO Trace** holds information that is pertinent to demonstrate the eight aspects of legality on land use rights, anti-corruption, forest-related rules (biodiversity and HCV assessment), third parties', labour and human rights, and free, prior and informed consent (FPIC). The integration of information on all three platforms will enable traceability along the supply chain without the need for a sales announcement, as currently required on MSPO Trace.

However, the restrictions on geospatial data sharing in Malaysia that arise from a combination of personal data protection laws, national security concerns, and industry-specific regulations, make it challenging to freely share and access the geospatial data which is a key requirement under the EUDR.

Pathway 2: Upgrading MSPO Trace and improving the MSPO certification scheme

Upgrading MSPO Trace is recommended because it has the ability to share data publicly, unlike SIMS and GeoPALM which are governed by the MPOB Act and subject to stricter data-sharing restrictions. MSPO is currently upgrading the MSPO Trace to the new e-MSPO platform. This aligns with the Malaysian government's mission to strengthen MSPO's competitive edge as a certification scheme, enabling certified entities in Malaysia to better meet global market demands for legal, deforestation-free, and sustainable palm oil.

Linking of databases

MPOB's GeoPALM contains information on smallholders such as name, MPOB license number, certification status, and total planted areas, as well as certification information from MSPO. As there is a common link between the data on GeoPALM and MSPO Trace, MSPO is in the process of integrating with GeoPALM through the future e-MSPO system.

Traceability for FFB dealers

An interface for FFB dealers is important in ensuring full traceability to the production area. A mobile application (app) could further support this by facilitating the reporting of supplier information by dealers. Dealers would be able to report relevant smallholder details such as the supplier's name, geolocation, MPOB license number, MSPO certificate number, district, state, and monthly volume received. To streamline data entry, the interface should link up with relevant MPOB and MSPO information for smallholders, including MSPO certification status, Sustainable Palm Oil Cluster (SPOC) group, district, certified area, and farm size. Dealers would then have the option to consent to sharing either all traceability information or a summary of the data, managed through a simple checkbox to accept or decline sharing. MSPO is in the testing phase of the traceability platform including for dealers through the future e-MSPO system.

Tiered access and data-sharing options

Given that traceability information requests may arise at various points in the supply chain, MSPO Trace should develop an interface that allows for tiered access to information, based on each actor's specific needs. For example, a mill may only require visibility into the smallholders supplying intermediaries who, in turn, supply that mill. In contrast, an EU operator may need visibility across the entire supply chain, which could involve a network of mills, intermediaries, estates, and smallholders. To accommodate this, MSPO Trace should consider introducing additional registered user types and a verification process based on the organisation to which the user is affiliated. The visibility of information on MSPO Trace would then be determined by the user's account type and organisational affiliation. This approach would ensure privacy protection for all users and align with Malaysia's Personal Data Protection Act (PDPA).

Reporting on geolocation information

At present, MSPO Trace does not collect or display polygon information; only GPS coordinates are recorded and verified by certification bodies when an audit is conducted. These coordinates are only visible in PDF format with the certificate issued by the certification body. As the EUDR requires polygons for farms larger than 4ha, MSPO Trace should consider linking with GeoPALM's database to enable the display of polygons for smallholders. Certification bodies should be allowed to review this information and verify it during the audit by comparing it against the information uploaded or supplied by intermediaries. Discrepancies can then be flagged on the platform by the auditors, who should be given access and permissions to conduct such reporting tasks.

MSPO sales announcements and traceability function

MSPO Trace's traceability function offers a strong opportunity to broaden smallholder inclusion; however, the feature is tied to the trade of MSPO-certified volumes. This traceability function is only used by a small number of businesses due to the lack of interest in purchasing MSPO-certified volumes. For businesses that do purchase MSPO-certified volumes, a full list of suppliers can be viewed through MSPO Trace's traceability platform. However, as dealers are not part of the certification scheme, the volumes purchased through them are not visible. To fully utilise this traceability function, it is recommended that more

effort be made to campaign for the uptake of MSPO-certified volumes and encourage the adoption of segregated supply chains.

8. Conclusion

Independent smallholders face numerous challenges, including aging crops, rising farming costs, and market pressures. To meet the stringent requirements of the EUDR, these smallholders need substantial resources and support from government and industry actors. Inclusive and tailored interventions are essential to help them comply with these standards and gain access to the EU market. Initiatives and programmes such as MSPO certification are crucial for enhancing the sustainability of the industry in Malaysia and ensuring smallholder livelihoods in the face of evolving industry demands.

Annex 1: List of interviewees

No.	Interviewee(s) name(s)	Organisation/company	Type
1	Hoo Boon Han Gan Jing Ye Cheryl	Intercontinental Speciality Fats (ISF)	Independent refinery
2	Nagendran Selvanathan	Pacific Inter-Link (PIL)	Independent refinery
3	Zaki Salleh Malek Johan Arwandi	Kwantas Group	Mill and grower
4	Nazlan Jenny Shahrul Rizal	Sawit Kinabalu	Integrated refinery
5	Joshua Lim Rashmi Rajashekar Siew Theng Siew Wai Loo	Wilmar	Palm Oil processor and trader
6	Galau Melayong Marcie Lynda	Sarawak Oil Palm Berhad	Integrated refinery
7	Chan Kok Weng	Foong Lee	Palm oil mill
8	Celine Ulau	Keresa Plantations Sdn Bhd	Palm oil mill + Plantations
9	Hassan Abdul Jenner Lee Kim Huat	Wild Asia	Smallholder support organisation
10	Teoh Cheng Hai	Solidaridad	NGO/CSO
11	Pooi San Wong Gan Chin Keong	Earthworm Foundation	Smallholder support organisation
12	Parthiban Nurul Fathiah Nordiana	MPOB Tunas officers	Government agency
13	Navin Baskram Lukman Hakim and Nabila Asmidar	NIOSH	Certification body
14	Izzaty Iqlima	Ecco Certified	Certification body

Annex 2: Guiding questions for interviews

1. Current supply base composition:
 - a. Estate
 - b. Smallholder <4ha
 - c. Smallholder >4ha
2. Current FFB suppliers on boarding/selections - how do the CC decide the eligibility of the smallholder?
 - a. License
 - b. Certificate
 - c. IC
 - d. Any information on GPS location?
3. Any deforestation analysis?
4. What kind of service does the CC offer?
 - a. Transport from CC to mill
 - b. Transport from plot to CC
 - c. Agrochemical application
 - d. Renewal of licensing and certificates
5. Composition of land ownership:
 - a. Titled land
 - b. NCR land
 - c. Native area land
 - d. Leasehold
6. Average year of first planting and previous land use.
7. Any observation of recent land clearing in the vicinity?
If yes, what is the purpose of the conversion (OP, rubber, timber, etc.)?
8. Composition of Smallholder MSPO certification in %.
9. Average distance from smallholder to the CC.
10. Do you have any written contract with the mill?
11. Average FFB volume sold to the mill in a year.
12. Have you participated in any engagement/visits by the mill? (Might not be applicable to the internal CC)
13. Have you heard of EUDR? If yes, what are your thoughts about it?
14. Have you had to share information (land title, GPS, volumes) on your suppliers to your buyers? If yes, how do you do it?

Annex 3: List of stakeholders present for the roundtable

No.	Name	Company	Organisational type	Operating region
1	Felix Moh	Sarawak Oil Palm Plantation Owners Association (SAPPOA)	CSO	Sarawak
2	Victoria	Sarawak Oil Palm Plantation Owners Association (SAPPOA)	CSO	Sarawak
3	Galau Melayong	Sarawak Oil Palms Berhad (SOPB)	Supply Chain Actor	Sarawak
4	Marcie Elene M.J	Sarawak Oil Palms Berhad (SOPB)	Supply Chain Actor	Sarawak
5	Celine	Keresa Plantations	Supply Chain Actor	Sarawak
6	Abdul Aziz	Keresa Plantations	Supply Chain Actor	Sarawak
7	Dayang	Keresa Plantations	Supply Chain Actor	Sarawak
8	Lee Kim Huat	Wild Asia Group Scheme	CSO	Sabah
9	Hassan Abdul	Wild Asia Group Scheme	CSO	Sabah
10	Jeremy Jeffrey	Wild Asia Group Scheme	CSO	Sabah
11	Jenner Jasper	Wild Asia Group Scheme	CSO	Sabah
12	Aloysius Jublee Intang	Wild Asia Group Scheme	CSO	Sabah
13	Nazlan Mohamad	Sawit Kinabalu	Supply chain actors	Sabah
14	Jenny Francis	Sawit Kinabalu	Supply chain actors	Sabah
15	Johan A.J	Kwantas	Supply chain actors	Sabah
16	Liusin Gani	Kwantas	Supply chain actors	Sabah
17	Nursaiyidah Md Yusof	PERTANIAGA- Centre for Sustainable Small-owners (CSS)	CSO	P. Malaysia
18	Saifullah	PERTANIAGA- Centre for Sustainable Small-owners (CSS)	CSO	P. Malaysia
19	Ummu Hasinah	PERTANIAGA- Centre for Sustainable Small-owners (CSS)	CSO	P. Malaysia
20	Allie Subramanian	IDH	CSO	Malaysia
21	Khalis Abdulrahman	Earthworm	CSO	Malaysia
22	Gan Chin Keong	Earthworm	CSO	Malaysia
23	Wong Pooi San	Earthworm	CSO	Malaysia
24	Krishnabalan Jeyabalan	Earthworm	CSO	Malaysia
25	Eza Salwa	Earthworm	CSO	Malaysia
26	Teoh Cheng Hai	Solidaridad	CSO	Malaysia
27	Christine Cullen	EFI	CSO	Malaysia
28	Jeremy Broadhead	EFI	CSO	Malaysia
29	Su Shen	Proforest	CSO	Malaysia
30	Ming Yee	Proforest	CSO	Malaysia
31	Zurfatiha	Proforest	CSO	Malaysia
32	Chin Sing Yun	Wilmar	Supply Chain Actor	Malaysia

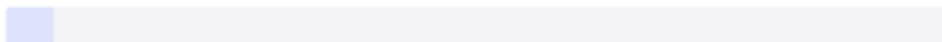
33	Yew Jun Huo	Mewah	Supply chain actors	Malaysia
34	Danial Adha	KLK	Supply chain actors	Malaysia
35	Cohen Cheong	KLK	Supply chain actors	Malaysia
36	Rashmi Rajashekar	Wilmar	Supply chain actors	Malaysia
37	Foo Siew Theng	Wilmar	Supply chain actors	Malaysia
38	Tan Chee Yong	MSPO	Certification Scheme	
39	Ainaa Rahim	MSPO	Certification Scheme	
40	Amni Syazana	MSPO	Certification Scheme	
41	Parthiban Kannan	MPOB	Governmental agency	
42	Dr Meilina Ong Abdullah	MPOB	Governmental agency	
43	Nordiana Abd Aziz	MPOB - GeoPALM	Governmental agency	
44	Philip Yap Yao Kong	Ministry of Plantation & Commodities	Governmental agency	

Annex 4: Breakout room discussion results

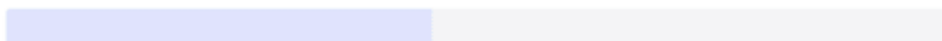
Response summary

1. Please select the supply chain model for the smallholder volumes applicable in your company/organisations 30

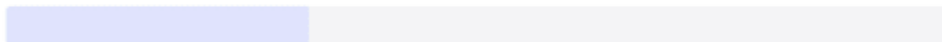
a. Independent smallholders → Palm Oil Mill 1 response 5%



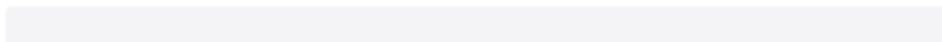
b. Independent smallholders → Dealer/Collection Centres → Palm Oil Mill 10 responses 45%



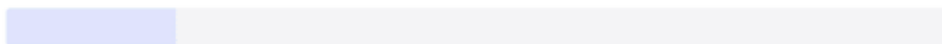
c. Independent smallholders → Dealer/Collection Centres → Super Dealer → Palm Oil Mill 7 responses 32%



d. Unknown No response 0%



e. None of the above (Please share more) 4 responses 18%

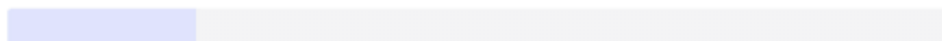


2. What was the range of independent smallholder volume in your supply base to EU in the last 2 years (in percentage)? 30

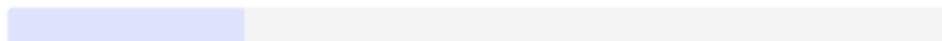
a. Below 5% 11 responses 55%



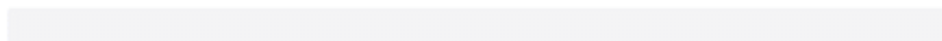
b. 5-25% 4 responses 20%



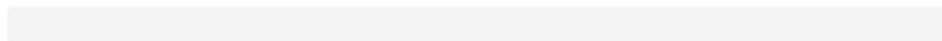
c. 26-50% 5 responses 25%



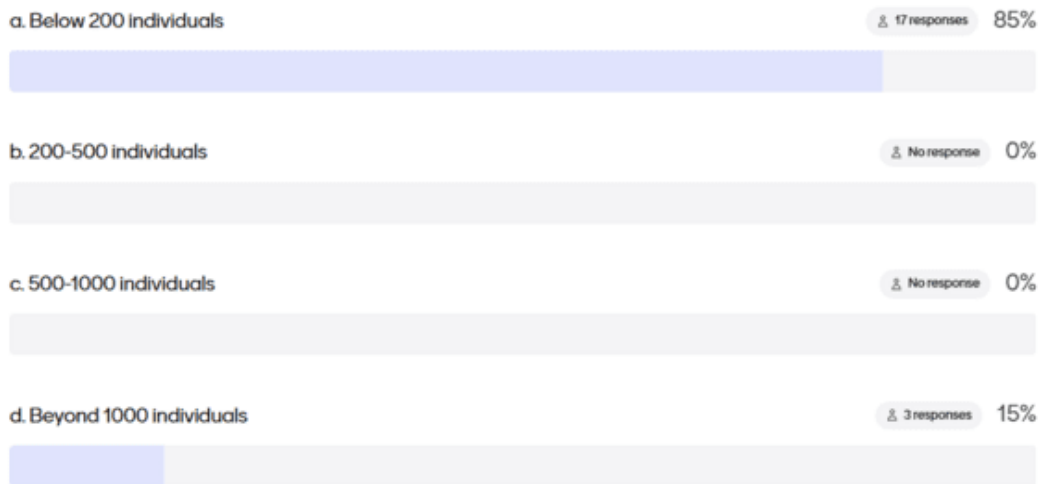
d. 51-75% No response 0%



e. 75-100% No response 0%



3. How many smallholders were in your supply base to EU within the last 2 years? 30



4. What proportion of the farms in your supply base is less than 4 ha? 30 23

Most of our smallholders are less than 4Ha	Around 30%
roughly 30%	30%
Roughly 30%	roughly 30%
More than 1000 suppliers	20%
None	Average about 2.5ha per farmers. The smallest is about 0.2023 ha
40% based on number of smallholders. not volume	0
Estimated 40-45%	40% based on no of smallholders (not volume)
Most of them is less than 4ha	Roughly 40% based on number of smallholders not volume
30%	Yes
Less than 4 ha	0
None	Most of them is less than 4ha.
Approximately about 30% of proportion that less than 4ha.	

5. What do you think will be the impact of the EUDR on smallholders' access to palm oil markets?

30 29

Limited	Exclusion of smallholders to EU market?
Explore other markets other than EU	EUDR excludes smallholders from the market, especially those of NCR lands without land title
Unfair exclusion only for EU to realize that they did a mistake . Since the latest report analyzing EUDR stated that EUDR can barely prevent deforestation	1-market access 2-compliance cost 3-supply chain restructuring
It will be challenging for smallholder if developed their oil palm farm after 31 Dec 2020.	Impact on their livelihood and poverty
To send FFB to mill or dealers that can accept them	Smallholders who are MSPO and RSPO-certified or can prove deforestation-free practices may have a competitive advantage in accessing premium markets, including the EU.
No impact. As still can sell the FFB for local consumption	Market access,
The case of RSPO implementation in PNG should have been studied by EU to understand how badly exclusion of smallholder can affect a society and social change.	market access
1. Day by day, smallholders will be challenging in term of following the standard/requirement, ect. We don't know, after this what is the NEXT of "international" NEED.	If smallholders are not helped, they will supply to other mills/dealer and company lose supply from SH. If more and more company implements EUDR, SH might end up not being able to sell at all. Maybe
Smallholders who cannot meet the stringent requirements might be left to sell in local or less regulated markets, where prices are often lower.	Smallholder may look another alternative markets which do not have deforestation free requirement.
Limited	Pressure for changes - high cost for smallholders and complexities of compliance. Led smallholders to change to another crop.
If can get premium price so good la ha...but until now no premium at all.	Smallholders will face higher compliance requirements, including traceability, due diligence, and proof of non-deforestation.
Market exclusion	Limited amount of smallholders able to join EU market due to lack of facilities or tools for the traceability
Even with EUDR, Smallholders may be inclined to conduct deforestation anyway in future as it is their land rights	Political and economy pressure by polygonize the country based on their standards
1. Increased Compliance Costs. 2. Market Access Challenges. 3. Support and Incentives 4. Shift Towards Sustainable Practices	Smallholders will have to adhere to very strict compliance requirements which is unfair for them because they are just trying to make a living.
Limitation access	

6. What do you think is the role of MPSO in supporting independent smallholders to address the challenges in meeting EUDR requirements?

30 21

Awareness and Polygon	Traceability data and polygons
Ensure that SPOC continues to be MSPO certified	study the differences between MSPO requirement & EUDR requirement, then come up with a solution to fulfill all the requirements
MSPO would best be suited as the last mile solution provider for the smallholders in addressing the requirements. This is not limited to MSPO carrying out the work, it should ideally be a shared load.	awareness to the ISH
Traceability and reliable data	To assist in gathering the information required by EUDR and ensure compliance
Accurate data	Mspo help in enhance traceability, maybe help in smallholder document.
Improving traceability - land mapping, documentation, record keeping (FFB production). Maybe market recognition on responsible source	Aligning to their tagline of leave no one behind. Thus, ensuring inclusiveness of independent smallholders in EU markets by ensuring compliance.
MSPO should conduct more awareness. Some smallholders don't even know what is MSPO. They just know they need it, go to the office to ask for this cert and get it since it's group certification	Providing framework for sustainable practices ,improving traceability and ensuring compliance with env,social standards.
Reducing the Risk of Market Exclusion By ensuring that smallholders are MSPO-certified, they gain recognition for sustainable practices and have a greater chance of maintaining market access	Increase Awareness, incentive and support from govt.
Helps in the traceability and guidelines for smallholders	MPSO?
Do more research/study on how difficult the EUDR requirement to the smallholders and come up with the solutions. Hear more from smallholders feedback on that requirement.	Align with MPOB and address the discrepancies first. Be a single source of truth. Then, assist SH with all the requirements: traceability, land use, social, etc. More support to SH using SPOC
Incentive, awarenes	

■ In your opinion, what are the challenges in collecting independent smallholder information in Malaysia for EUDR compliance? 30

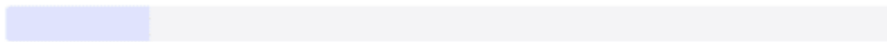
Access of information from intermediaries (such as collection centres/dealers/super dealers) 9 responses 47%



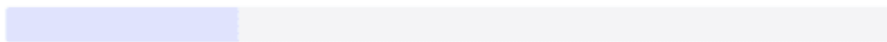
Lack of data collection systems 2 responses 11%



In the process of collecting geolocation (GPS points and/or polygons) 3 responses 16%

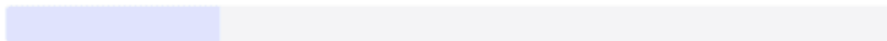


Others (please share more) 5 responses 26%

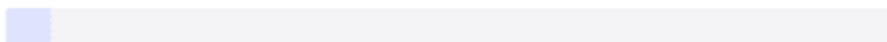


■ What are the challenges in collecting geo-location information? 30

Technical challenges 5 responses 24%



Road conditions and terrain 1 response 5%



Land ownership and tenure uncertainties 12 responses 57%



Others (please share) 3 responses 14%

