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Promoting sustainable oil palm production by independent smallholders in Indonesia:

Perspectives from non-state actors

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1. INTRODUCTION

The importance of the smallholder palm oil sector in Indonesia

Indonesia is the world's largest producer of palm oil, responsible for 60% of global production.¹ Almost 70% of Indonesian palm oil is exported, representing up to USD18 billion or 10% of the country's total exports.² China (18%), India (16%) and the European Union (EU) (12%) absorb almost half of Indonesia's palm oil exports.³

The commodity has contributed to economic growth in Indonesia, but also presents high environmental and social costs.⁴ The expansion of oil palm drives deforestation and was responsible for 23% of forest loss between 2001 and 2016.⁵ The clearing and, in many cases, burning of forests and peatlands have also led to a substantial loss in biodiversity^{6,7} and have exacerbated greenhouse gas emissions^{8,9}, while smoke and haze hazards^{10,11} affect not only Indonesia but also neighboring countries. In addition, the sector has struggled with weak governance, resulting in conflicts over land, contested labor rights and corruption.^{12,13,14,15,16}

Smallholder producers are playing an essential role in the sector, especially in Sumatra (see Figure 1).¹⁷ Indonesian smallholders¹ currently supply 38% of palm oil production, while covering nearly half (45%) of the country's area of oil palm cultivation.¹⁸ The area cultivated by smallholders has seen a massive expansion in the last two decades, from less than 1.6 to 5.8 million hectares between 2001-18, reflecting an annual growth rate of almost 8%.¹⁷ If this growth rate continues, the area under smallholder production will double in less than 9 years.¹⁹

Most deforestation linked to palm oil has historically been driven by large-scale producers. Smallholders are however increasingly identified as important actors in relation to clearing of forests and peatlands in Indonesia.^{20,21,20} Their role is expected to grow as they are pushed into ecologically sensitive areas.^{24, 25} A large proportion of smallholder plantations, representing 1.2 million hectares, were established illegally in the Forest Estate.²⁰

While often lumped together in one group, smallholder farms in the Indonesian palm oil sector vary widely in terms of size and organizational model. Some farmers have entered contracts with larger companies under so-called plasma and company-managed schemes.²¹ These smallholders typically receive upfront contracts and technical support from companies in exchange for selling their products to them. There is also a large and growing group of independent farmers that sell to local intermediary traders in the context of a more fluid relationship. In some cases they receive support from the government and palm oil companies.²¹

Zero-deforestation efforts and their relevance for the smallholder sector

There are a wide range of initiatives put forward by companies and non-governmental organizations (NGOs) in the context of pledges and commitments to reduce deforestation from the palm oil supply chain. Some of these initiatives directly target smallholders, providing incentives or disincentives to promote sustainable practices. Incentives include programs such as trainings for good agricultural practices (GAP) and farm management, or programs to improve the security of tenure, which is a major barrier to farm investments.

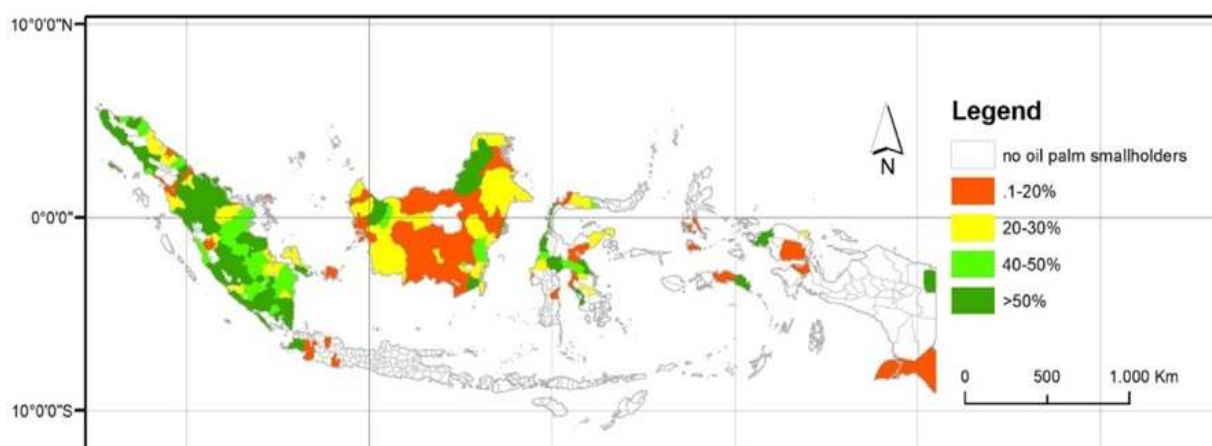


Figure 1: Share of smallholders as percentage of total palm oil area. Left to right, Sumatra, Kalimantan, Sulawesi and Papua. Source: DJP, 2019

¹ These smallholder plantations have an average size of 2-5 hectares, however with a maximum size of 50 hectares

Disincentives include improved law enforcement by government in forest areas or company policies that exclude suppliers if they fail to comply with their conservation standards.

Recognizing the need for comprehensive solutions to address the problem of deforestation, stakeholders are also exploring collective action through public-private sector partnerships and collaborations with civil society, Indigenous Peoples and Local Communities (see for example, the [Tropical Forest Alliance's Collective Action Agenda](#) framework and [The Consumer Goods Forum's Forest Positive Coalition of Action's Theory of Change](#)).

As part of these arrangements, industry and civil society advocate for a mix of voluntary and regulatory measures on both the supply and demand sides as well as in the finance sector. While still in the early stages, integrated approaches at the landscape and jurisdictional scale aim to better coordinate the various incentives and disincentives for sustainable land use, including by smallholders.

In the meantime, several importing countries of palm oil have adopted or initiated regulations of relevance to the palm oil sector.²² For example, the EU is considering measures which would require European companies and companies operating in the EU to undertake mandatory human rights and environmental due diligence in their global operations and supply chains.²³ At the individual country level, France introduced a Vigilance Act in 2017, Germany plans to pass a Supply Chain Law and the United Kingdom (UK) is proposing due diligence legislation that would prohibit large companies from importing commodities grown on illegally converted forest land.²⁴ It is still unclear how standards set by these policies will affect smallholders. Meanwhile, the EU has adopted a new Renewable Energy Directive that includes provisions to ensure palm oil used for biofuels is not sourced from deforested areas or peatland, though smallholders with plantations of up to two hectares are exempt.²⁵

A large and rapidly growing group of palm oil smallholders in Indonesia are small-scale independent farmers (in the following referred to as "independent smallholders"), who mostly remain outside sustainability initiatives in the sector. Engaging with this group of

This briefing paper seeks to explore the challenges and opportunities to address deforestation among palm oil smallholders in Indonesia, with a particular focus on independent smallholders.

independent smallholders is a crucial part of efforts to build a sustainable palm oil sector.

For our analysis, we reviewed available literature on challenges these independent smallholders face and interviewed 20 non-state actors from 14 relevant organizations, including three multinational palm oil traders, five NGOs, five investors and donors and one roundtable organization. We asked for their views on policies and programs with the potential to address these challenges, promote sustainable practices and prevent deforestation by these farmers.

In the following section, we present five key challenges identified in these interviews for integrating smallholders into sustainable and zero-deforestation supply chains. The third and final section presents recommendations by stakeholders to address these challenges.

2. CHALLENGES TO INTEGRATING SMALLHOLDERS INTO SUSTAINABLE SUPPLY CHAINS

Strategies implemented to reduce deforestation and encourage more sustainable agricultural practices among independent smallholders include interventions designed to boost productivity; reforms to strengthen land rights, tenure and documentation; projects that support institutions such as farmer organizations; programs that facilitate entrepreneurship; and interventions that enhance market access for sustainably produced products.

Lack of access to finance and technical support remains a key barrier to smallholder productivity, a major factor driving the expansion into forests.

On average, smallholder yields reach only 75% of those present in large plantations.ⁱⁱ Low productivity of smallholders is hypothesized to be driving expansion into peatlands, forests and other marginal lands that are not effectively protected by the government.^{M,N} While inefficient land use can lead to unnecessary expansion, many smallholders are unable to invest in replanting of aging plantations and may perceive clearing new land or forest as a more realistic strategy.^{21,26 – FS,N} Improving productivity through farmer support programs therefore represents a dominant narrative of interventions targeted at the smallholder palm oil sector.^{27–29}

ⁱⁱ Climate Focus calculations based on data from BPS – Statistics Indonesia

Independent smallholders suffer from the greatest yield gap as many lack access to technical and financial support and use poor-quality inputs and poor land management practices. A majority of them have limited financial resources^{30,31} and depend largely on informal sources of finance such as loans from local traders who purchase their fruits. They often cannot afford to purchase from certified seed traders³² and therefore rely on low quality planting materials from unauthorized nurseries, or fruits taken from larger plantations.^{33,34} High quality inputs, such as fertilizers, represent a major expenditure.

Few independent smallholders have access to information on GAP for plantation establishment, soil and weed management, canopy management, harvesting, fertilizer management and pest and disease control,³⁵ and instead rely on knowledge from their peers and fertilizer distributors.^{35,30,31,34,36,37}

Since the late 1990s, funding to government extension services has decreased, reducing their capacity to provide effective support. Therefore, most independent smallholders have received little or no extension support³⁸. Local government extension services are perceived to play an important role in disseminating knowledge on GAPs among farmers.^N Training and knowledge exchanges on sustainable land use practices can create awareness and favorable conditions to improve productivity.^{PF - 39}

In addition to technical support programs, the Indonesia Government has established the Palm Oil Plantation Fund (BPDP-KS), which is financed by the collection of levies from palm oil exports. This fund seeks to incentivize smallholder replanting, and other measures to support productivity, capacity development, research and development in palm oil sector. However, disbursement to smallholders has been slow and those disbursements have been limited mostly for capacity building and training.⁴⁰ It is difficult for smallholders to access the funds, partly because they require approval at many governmental levels.^{PF}

Palm oil companies are also engaging with smallholders to improve agricultural practices, to provide technical support to improve the quality and stability of production and to assess their deforestation risks.ⁱⁱⁱ Most of these programs are focused on smallholders that have entered contractual arrangements with these companies. In contrast, engagement with independent smallholders has been limited. Musim Mas is implementing a support program that seeks to improve

yield and income of independent smallholders by teaching GAP.⁴¹ Similarly, Asian Agri works with independent smallholders that cultivate an area of 41,000 hectares with the aim to build long-term partnerships.^{42,43} As part of this program, the company also provides training to access financing and support to obtain land registration documents and certification.⁴³ Several NGOs such as the Indonesia Sustainable Oil Palm Smallholder Forum (Forum Petani Kelapa Sawit Berkelanjutan Indonesia, FORTASBI), the Indonesia Oil Palm Farmers Union (Serikat Petani Kelapa Sawit, SPKS) and Daemeter report good results from their smallholder programs, although they have not yet been scaled up. For example, FORTASBI implements trainings and has helped form 32 independent smallholders' groups covering 7,000 smallholders who manage 16,000 hectares of plantations.^{FF} Similarly, SPKS has projects in more than seven provinces across Indonesia to provide long-term assistance that target the formation of smallholder organizations.^N Daemeter, in collaboration with Widya Erti Indonesia, conducted three cycles of Farmer Field Schools to strengthen smallholder knowledge about sustainability, while training local farmer facilitators to provide continuous support for smallholders.⁴⁴

Lack of tenure documentation continues to be a major obstacle for independent smallholders to access finance for intensification.

While informal rights or titles may be recognized within local communities, lack of documentation for land ownership or titles is widespread among independent smallholders and hinders investments in farm improvements and better practices. In Indonesia, many areas have not been covered by land registration processes, and obtaining official titles is a difficult, lengthy and costly procedure. In addition, oil palm originating from the establishment of plantations in the Forest Estate is illegal and generally not eligible for land titling.

Insecurity of land rights and titles presents a major barrier for smallholders to invest in GAP or to join sustainability efforts. Farmers without official and secure land titles tend to manage their land less intensively, as they cannot collateralize their land for obtaining agricultural inputs required for intensive cultivation or for credit applications to financial institutions.^{45,46} Many farmers are also unable to join certification schemes such as the Roundtable on Sustainable Palm Oil (RSPO) – the largest voluntary certification scheme in the sector

ⁱⁱⁱ Based on an analysis of smallholder support programs of 11 palm oil companies operating in Indonesia

– because they fail to meet entry requirements for legal land titles and organization membership. The lack of land titles also impairs the implementation of government initiatives for smallholder financing and oil palm replanting to address deforestation.⁴⁷

Interventions to formalize and register rights, by both government and NGOs, have either not been significant in reach or have lacked effective implementation. The government has several policies and programs in place to advance land registration and formalization, including the Agrarian Reform Program (Tanah Objek Reformasi Agraria, TORA) launched in 2015, which aims to certify 4.5 million hectares of lands controlled by individual farmers without formal land documentation and the Systematic and Complete Land Registration (Pendaftaran Tanah Sistematis Lengkap) launched in 2017 with the goal of registering all unregistered lands by 2025.^{48,49} So far, however, these programs had limited success. Registration efforts have tended to exclude areas with tenurial conflicts or uncertainties, for example in cases when rights are disputed.^{48,49} In addition, local governments lack the capacity to survey and map independent smallholders,⁴⁹ which is an essential first step for land registration.^F

With the support of palm oil companies, NGOs such as Institut Penelitian Inovasi Bumi (INOBU)⁴⁵ and SPKS have been working with smallholders and local governments to map smallholders' plots and simplify land registration to help local governments learn lessons from other successful districts^{SFO} and create awareness among smallholders about the importance of registration. However, these initiatives cover a very small share of independent smallholder plantations.

Indonesia's Ministry of Environment and Forestry has limited means to monitor and sanction oil palm plantations established illegally in the Forest Estate, and provincial and district authorities lack jurisdiction over this area.⁵⁰ In some provinces such as Riau and Central Kalimantan, this is further complicated by a lack of agreement between central and local government regarding the definition and boundaries of non-forest (Areal Penggunaan Lain or APL) and the Forest Estate.⁵¹ The National Action Plan for Sustainable Palm Oil Plantations (RAN KSB) 2019-2024 seeks to "finalize" the status of plantations⁵² established illegally in the Forest Estate, but it remains unclear what implications this may have for smallholders.⁵³ The government could either grant these plantations legal status or shut them down. A third option proposed is to allow smallholders to continue farming inside forest areas under the government's social forestry program, which would require them to shift from palm oil to agroforestry crops.⁵³

Lack of organization among independent smallholders hinders collective action to improve productivity and environmental practices.

Only a small proportion of independent smallholders are members of formal organizations such as cooperatives. These organizations can provide advantages of scale in accessing finance, information and inputs needed to improve agricultural practices. They can facilitate access to subsidized loans from government for long-term investments such as replanting and provide opportunities to develop guarantee or access arrangements with mills.^{N,PF}

There are examples of NGOs, companies and local governments working together to help smallholders form organizations and cooperatives. Evidence shows this support can lead to improved smallholder practices, for example, in the case of the NES Ophir Plantation (see Box 1). Membership in a farmer organization is also increasingly becoming a requirement to receive technical and financial support from companies and NGOs.³⁸ Organizations can help smallholders access certification schemes by reducing costs and providing technical support^{N,FS} that can help them to adopt sustainable practices to prevent expansion into forests. For example, FORTASBI provides trainings on how to form and run cooperatives as part of the process to become eligible for certification.^{SFF} However, to date, efforts by companies and NGOs to support the certification of smallholders tend to be in areas where farmer organizations have already been established.^{PF}

These initiatives are not rolling out at a significant pace. SPKS works with local governments to establish farmer cooperatives, however such efforts are challenging.^{SFO} Many smallholders rely on informal social networks and are unaware of, or unconvinced by, the benefits of formal farmer groups and cooperatives³⁶, partly due to the length of time it takes to establish cooperatives and to deliver benefits.^{PF,M - 54,55} Intensification and long-term investments in better practices or replanting are perceived as a low priority. To date there has been a need for external assistance to form and finance these organizations.^{FS}

Box 1: NES Ophir Plantation³⁸

Established in 1981, the Ophir NES plantation in West Pasaman, West Sumatra Province, is one of the first smallholder oil palm plantations in Indonesia. It covers 4,800 hectares managed by 2,400 smallholders and their organizations, as well as a 3,200 hectares nucleus estate managed by the state-owned plantation company PT Perkebunan Nusantara 6 (Persero, abbreviated PTPN 6).

Over a ten-year period, the plantation grew to 102 farmer groups, five cooperatives and one supra-cooperative. Favorable natural conditions and close coordination between government institutions, the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) and clear agreements between farmers, their organizations and partners made the plantation a success.

Twenty-five years after the first plantations were planted, yields and oil content in the fruits started to decline, while labor costs for harvesting increased. Farmers had to replant their palm oil plantations. While cooperatives and farmer groups had saved money for replanting, farmers needed to cover their reducing incomes and spending patterns. One cooperative, which was managed well and had maintained land certificates collectively, was able to use them as collateral for loans to replant and ensure the highest yield over that period.

Other cooperatives, which had returned the land certificates to smallholders, were unable to support their members in a similar fashion as there was insufficient collateral and savings. Significant numbers of farmers were unable or unwilling to repay their loans to cooperatives, which subsequently led to the partial or complete dissolution of several cooperatives and their technical support to the farmers.

Companies face challenges in establishing smallholder traceability and helping them to comply with sustainability requirements.

According to our interviews, companies recognize the advantage of engaging with independent smallholders by providing supplies^{FS} such as fertilizer and training^N. However, for two key reasons this has proven to be a challenge.

First, companies struggle with tracing smallholder supply chains and associated deforestation risks in a market structure that includes many intermediaries. Independent smallholders rarely have direct relationships with mills, but instead tend to pay fees to intermediary agents to buy their produce.¹⁸ This is because independent smallholders do not want to be bound by contractual commitments to mills – mainly due to fixed prices under such contracts – while the mills do not want to commit to provide any services without a contractual commitment from the smallholders.^N Therefore, often companies will only be able to trace their products to the mill, rather than to the farmer.^{FS,N} They find it difficult to track intermediary agents that tend to lack official registration.

A review of the 11 companies listed in the Sustainability Policy Transparency Toolkit (SPOTT) database operating smallholder programs in Indonesia shows that most of them collaborate with mills to identify and map smallholder suppliers, yet most have mapped only direct suppliers and scheme smallholders.^{PF} Companies work with mills and intermediary agents within their supply chains to collect information on names, GPS coordinates, planting areas, certification status and volume sourced.^{iv} Due to high costs and competitive concerns over data sharing, some companies are only aiming for full traceability in 'high risk' areas such as national park surroundings, where they face higher pressure to provide proof of legality.^{PF,C}

Second, many independent smallholders may not be interested in establishing more long-term contracts with companies and being tied into contractual relationships such as off-take agreements, since they want to be able to take advantage of short-term changes in prices.^{FS,N,C} Companies, in contrast, may be wary to over-commit to independent smallholders over whom they have minimal quality control.^{FS,N}

^{iv} Based on publicly available information of 11 palm oil traders and processors

Independent smallholders face barriers and lack incentives to join certification schemes.

Some interview respondents consider certification as the main path available to bring smallholders into sustainable supply chains, as well as a way to help to increase yields and stabilize raw material supply.^{PF} However, the certification of independent smallholders is limited to date. Only 17% of all palm oil produced in Indonesia is certified under RSPO and only 5,130 independent smallholders – a small fraction of the total – have obtained RSPO certification.^{54,54} Similarly, farmers are likely to struggle to meet the new mandatory smallholder requirements under the Indonesian Sustainable Palm Oil (ISPO) certification standard, which requires them to prove ownership of their lands and adopt GAPs.²⁰ Only 12,200 hectares of smallholder oil palm production areas have been certified under ISPO so far.^{20,57}

It is challenging to 'sell' the benefits of certification to smallholders.^{N,C} Many perceive certification as incapable of addressing key challenges such as covering the cost of replanting and farm management, or the challenges associated with plantation distance from mills.⁵⁸ There is an expectation by mills that the smallholders will cover these costs of certification themselves.^{FS,N} However, this is unrealistic and they often rely on support from NGOs.^{FS,SFF} To encourage certification among independent smallholders, RSPO has adopted certification guidelines and specific requirements for smallholders⁵⁶ and established the Smallholders Support Fund to fund the costs of smallholder certification.^M

Given the complexity of the smallholder sector and its potential to alleviate poverty and improve livelihoods, collaboration is not only needed along the supply chain, but also across the whole sector.

In addition, interventions such as certification are perceived to be driven by foreign interests that impose restrictions.^{SFF} There are no premiums except loyalty payments by buyers to encourage farmers who are producing at the highest standard of RSPO.^{26,C} Companies are also worried about a potential flooding of the market with certificates for which there is no demand, as there are many companies who pay good prices for non-certified palm oil.^{C,N} In 2019, only half of RSPO certified palm oil was sold as certified palm oil globally while the rest was sold as conventional palm oil.⁵⁹ Some companies fear that certification does not provide a long-term, large-scale solution.^C

3. OPPORTUNITIES FOR GREENING THE INDONESIAN SMALLHOLDER PALM OIL SECTOR

The palm oil supply chain in Indonesia is complex and the independent smallholder landscape is particularly diverse, encompassing farmers with different characteristics, levels of market integration, needs and capacities. Stakeholder interviews and the literature review for this paper identified important challenges in engaging smallholders.

So far, efforts to address deforestation have failed to reach smallholders at scale. Most independent smallholders cannot meet certification nor procurement sustainability standards of certain companies due to the informality of the sector, poor production practices and a lack of access to the necessary financial support, training and inputs.⁵⁴ In a growing market, these smallholders continue to find buyers that either do not require any sustainability standards or that fail to trace and enforce them in a complex supply chain.

As a result, there is a risk that the palm oil market bifurcates into 'sustainable' and 'business-as-usual' markets, which may be pronounced if demand-side regulations by the EU or others do not set any provisions for smallholders.

Current interventions are often one-dimensional – focusing on a single barrier to smallholder sustainability – and not reaching beyond pilot programs. It is also still unclear how programs will be scaled and funded. A single stakeholder group – whether a company, NGO or local government – cannot effectively engage with smallholders alone.^C Rather, each of these actors play a distinct role in the smallholder palm oil supply chain, roles which can be leveraged to facilitate more sustainable practices across smallholders. Most interview respondents emphasized the benefit of multi-stakeholder collaboration at a landscape or jurisdictional level. These approaches help to map out interests and actors^{FS}, and encourage addressing the complexity^{PF} by acknowledging the local context, including players and existing expertise^N. Involving local governments is crucial since fundamental aspects, such as land registration and extension services related to smallholders, are managed by local governments.^N

At the same time, regulatory measures by palm oil importing countries such as those being considered in the EU need to recognize the peculiarities of the smallholder sector and include support packages that help them integrate into sustainable supply chains.

Above all, given the complexity of the smallholder sector and its potential to alleviate poverty and improve livelihoods, collaboration is not only needed along the supply chain, but also across the whole sector^N by taking a multidimensional approach with a smart mix of voluntary and regulatory measures.

The following recommendations present potential solutions for integrating independent smallholders in sustainable and zero-deforestation supply chains. These are expected to help in transforming the sector by bringing independent smallholders into inclusive sustainable supply chains.

Recommendations for organizations working directly with smallholders

- Making explicit to smallholders the benefits (such as market access) of engaging with sustainable palm oil initiatives^{FS}
- Recognizing the village level as an effective entry point to engage with smallholders around awareness raising on sustainable land use practices and forest protection
- Enhancing the capacity and sustainability of farmer organizations to avoid dependence on external support.^N This might include strengthening the governance and Standard Operating Protocols of organizations and assisting with internal control systems such as checks on deforestation.^N
- Financing the costs of land registration and titling to enhance credit worthiness of independent smallholders to access finance
- Working with local government to identify the value of sustainability actions for livelihoods, the local economy and public budgets^{N,SFO,F} and thus encouraging political support
- Helping smallholders improve practices in both palm oil production and in the production of other agricultural commodities^F, and creating opportunities for alternative sources of income for families who are dependent on palm oil

Recommendations for companies

- Collaborating with independent smallholders through long-term programs to support them to adopt sustainable practices.^N Success is higher where companies have long-term relationships with the farmers.^C
- Mobilizing funding for field-level support and making longer-term buying commitments and support to independent smallholders^{FS,N,C,N} to encourage trust through the provision of incentives.
- Working directly with independent smallholders and, by cutting out the intermediary agent, providing increased prices to guarantee high

quality supply^{PF,SFO} or as a premium for certified supply.^{FS}

- Mapping suppliers (both local traders and smallholders) to help build fully traceable supply chains to increase visibility into the supply chain and the legality of individual smallholders^N
- Supporting smallholders in their pursuit of financing as a catalyst to de-risking and to ensure the financial structure for opportunities like CPO Fund can work
- Working with government to help increase the scale of operations.^{C,N} For example, local extension officers^N could act as important disseminators both on GAP and forest protection, and as a bridge between companies and smallholders.
- Monitoring commitments to ensure a system of accountability. Reporting regularly on their progress of engagement with smallholders and their use of existing guidance help to ensure inclusive and sustainable smallholder supply chains (see Box 2).

Box 2: The **Accountability Framework** Guidance on Smallholder Inclusion in Ethical Supply Chains

The Core Principles of the Accountability Framework and its Operational Guidance elaborate how company commitments can be adapted to smallholder contexts and how companies can effectively engage smallholders in a mutually beneficial manner by providing benefits and positive incentives to smallholders, which can enable companies to fulfil their supply chain commitments and secure adequate volumes of responsibly produced commodities. It also provides guidance on how to implement risk assessment and traceability systems in smallholder supply chains, clarifies the role of smallholder groups, and provides guidance on supporting smallholders to address non-compliance and retention of smallholder producers.

Recommendations for governments

- Strengthening the implementation of land use planning^C and ensuring better law enforcement and monitoring to reduce illegal expansion. Addressing potential deforestation leakage from areas where monitoring and traceability has been encouraged^{PF}.
- Scaling and creating easier ways for land registration and legalizing of land status,^{PF,SFF} and addressing land disputes and taking remedial action
- Assisting with the collation of shared information on individual farmers and their plantations needed by banks for the provision of loans^{PF}
- Prioritizing mapping and traceability of smallholders in priority (high risk) areas^N

- Facilitating the interaction between companies and smallholders^{SFO} to enable access to market and logistics that companies cannot support to scale^C
- Providing smallholders access to government finance^F for large costs that cannot be otherwise funded, such as replanting^{FS}
- Developing training centers and digital solutions like mobile phone applications to provide reliable information to smallholders on how to improve their farming practices
- Regulating due diligence and reporting for financial actors to steer finance away from unsustainable land use
- Creating loan guarantees for the repayment of loans of independent smallholders to boost lender confidence, and arranging easier requirements for smallholders to access CPO Fund
- Targeting national budget processes to incentivize district support to smallholders^{SFO}

Recommendations for finance institutions

- Understanding the differentiated financial needs of independent smallholders for finance
- Opening the opportunity for blended finance to de-risking smallholder engagement projects and to ensure the financial structure for opportunities like CPO Fund can work^N
- Providing loans and lowering interest rates to independent smallholders engaging in sustainability actions
- Including support to smallholders as a condition for investment in the palm oil sector

KEY TO INTERVIEWS

C	Multinational palm oil company
M	Multi-stakeholder initiative on sustainable palm oil
PF	Private sector funders investing in commercial projects in agricultural value chains
FS	Financial services firm
N	NGO both non-profit and for-profit working on sustainable palm oil in Indonesia
SFF	A sustainable palm oil farmers forum to improve smallholder capacities
F	Private philanthropic foundation
SFO	Small-scale oil palm farmer organization based in Indonesia

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