



Global
Landscapes
Forum

White Paper

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How can the financial services sector strengthen the sustainability and inclusivity of smallholder farming in the supply of global commodity crops?

Exploring the challenges facing the Indonesian oil palm sector and learning lessons from around the world

What do participants need to know about the topic?

Smallholder farmers play a key role in the production of agricultural crops for local, national and, increasingly, international markets, including high-value tree crops.¹ As commercial-scale agriculture has expanded and markets have seen greater integration, smallholders are forced to compete with agribusiness to meet a rising demand for food, fiber and fuel.² But smallholders remain disenfranchised, often facing economic, financial and institutional constraints that make the adoption of more efficient practices and technologies more difficult and limit productivity and local livelihoods.³

A good example of this are oil palm smallholders in Indonesia, whose participation in the sector is growing rapidly. Despite their important contribution to national production, oil palm smallholders risk exclusion from global markets as agricultural standards evolve, and they struggle to adopt improved production practices.⁴ Finance has the potential to play a significant role in supporting the upgrading of production systems and delivering more effective resource management⁵, as well as helping to fulfill a growing demand for agricultural and tree-crops that meet sustainability standards.

1 Byerlee D. 2014. The Fall and Rise Again of Plantations in Tropical Asia: History Repeated? *Land* 3:574-587.

2 [FAO] Food and Agriculture Organization of the United Nations. 2014. *The State of Food and Agriculture: Innovation in family farming*. Rome, Italy: FAO.

3 Arias P, Hallam D, Krivonos E and Morrison J. 2013. *Smallholder integration in changing food markets*. Rome, Italy: FAO.

4 Brandi C, Cabani T, Hosang C, Schirmbeck S, Westermann L and Wiese H. 2015. Sustainability Standards for Palm Oil: Challenges for Smallholder Certification Under the RSPO. *Journal of Environment & Development* 24:292-314.

5 Barbier EB, Lopez RE and Hochard JP. 2016. Debt, Poverty and Resource Management in a Rural Smallholder Economy. *Environmental & Resource Economics* 63:411-427.

Smallholders and their role in global production

Smallholders and small- and medium-scale enterprises (SMEs) play a fundamental role in global agricultural production.⁶ Millions of people rely on smallholder farming for both their access to foodstuffs and their livelihoods. When they are given formal recognition and firmly integrated into local and national economies – through policies that support local businesses, infrastructure and social services – smallholders and SMEs contribute in important ways to rural economic and social development. However, smallholders across diverse economic and institutional contexts face significant challenges in formalizing their tenure rights, accessing capital and financial services to upgrade their production and connecting to competitive value chains. This affects their ability to benefit from their productive efforts.

These challenges become even more acute when smallholders shift from relatively diversified subsistence and cash crop systems to more specialized, monocrop farming systems that demand greater capital and inputs. Oil palm smallholders in Indonesia are a perfect example of this transition. Smallholders now account for over 44 percent of the oil palm agricultural area in Indonesia, but only 34 percent of production.⁷ This 44 percent is made up of both plasma smallholders who are tied contractually to specific nucleus estates and mills, and independent smallholders.⁸ The latter tend to make use of the markets, networks, logistics and processing capacity built by agribusiness companies in expanding production zones, which results in the expansion of the supply base.

6 [FAO] Food and Agriculture Organization of the United Nations. 2014. *The State of Food and Agriculture: Innovation in family farming*. Rome, Italy: FAO.

7 Potter L. 2015. *Managing oil palm landscapes: A seven-country survey of the modern palm oil industry in Southeast Asia, Latin America and West Africa*. Bogor, Indonesia: CIFOR.

8 [IFC] International Finance Corporation. 2013. *Diagnostic study on Indonesian oil palm smallholders*. Washington, DC: IFC.

Environmental impacts and the upgrading of production practices

Smallholder agriculture is often associated with significant negative environmental impacts, particularly in the context of fast growing monocrop systems such as palm oil. Examples include inappropriate use of fertilizer and pesticides, illegal encroachment on forestlands, conversion of peatlands (as is the case of oil palm in Indonesia) and irresponsible clearing practices (e.g. uncontrolled use of fire for forest clearing). These practices are often attributable to limited access to technology and training, a lack of cheap and flexible credit, poor incentives for making improvements and reinvesting savings.⁹

Government policy and regulation (and importantly enforcement) have an important role to play in enabling (or preventing) smallholders from improving their production practices and increasing the benefits that they can capture from getting involved in crop commodity supply chains. On the one hand, policies can work against smallholder interests, for example in failing to secure tenure rights or providing the mechanisms to reduce or mediate risks (e.g. from price fluctuations or climatic events). But policies can also work in their favor when they provide the right incentives and facilitate access to inputs that enable greater productivity and sustainability. Yet, once smallholders have expanded their production informally and outside government regulatory frameworks, it can be challenging to change established trade networks, agricultural practices and financial expectations.

9 Lee JSH, Rist L, Obidzinski K, Ghazoul J and Koh LP. 2011. No farmer left behind in sustainable biofuel production. *Biological Conservation* 144(10):2512-2516.

Vulnerability to international markets and state regulations

Smallholders are vulnerable to power imbalances in both international and local markets for agricultural and tree products. Their heterogeneity and lack of unification limits their ability to speak collectively and influence policy-making, which means they are more often than not price takers rather than price makers. In addition, smallholders that become more integrated to markets are often largely exposed to price variations and lack the means to mitigate the associated effects, and may also suffer more from climatic variations. This effect is particularly significant when they have chosen to focus their activities on a single crop (e.g. palm oil) while moving away from diversified farming systems. Expanding markets along with expectations for increasing incomes tend to drive these decisions.¹⁰

The palm oil sector has become dominated by a handful of conglomerates involved in production, processing and trade (i.e. Wilmar, Musim Mas, GAR, Cargill and Asian Agri in Indonesia and Sime Darby, IOI, KLK and FELDA in Malaysia). These groups source from their own plantations as well as from a large number of third-party suppliers, and intermediaries who aggregate the supply from smallholders. Many local markets for smallholder produce remain informal, unregulated and tied to other services (for example local buyers may also be providing credit, or agricultural inputs such as seedlings and fertilizers), which can distort local markets. Smallholder access to international markets very much depends on local infrastructure and information sources, as well as the relatively complex intermediary trade networks that have developed.¹¹

10 McCullough EB, Pingali PL and Stamoulis KG. 2008. *The Transformation of Agri-Food Systems: Globalization, Supply Chains and Smallholder Farmers* Paperback – August 30, 2008. Rome, Italy: FAO.

11 Budidarsono S, Susanti A and Zoomers A. 2013. Oil palm plantations in Indonesia: The implications for migration, settlement/resettlement and local economic development. In Fang Z, ed. *Biofuels - Economy, Environment and Sustainability*. Rijeka, Croatia: InTech.

The dominance of developing country markets for palm oil also affects its pricing. According to the ITC¹², about 40 million tons of Crude Palm Oil (CPO), and its derivatives, were traded on the international market in 2014, the majority of which came from Malaysia and Indonesia. The main importing countries include India, China and the European Union, as well other Asian markets. Interestingly, due to the slowdown of the Chinese and Indian markets, the Malaysian and Indonesian industries are trying to diversify their markets to the Middle East and Africa, as well as boosting the domestic biodiesel market in Indonesia.¹³ Diversifying markets may also lead to increasing market segmentation, and it is not yet clear what implications this will have for smallholder growers.

The potential of finance to tackle sustainability and inclusivity, examples from around the world

The financial sector plays an important role in shaping land-based investments, especially for perennial crops such as palm oil. Private banks, multilateral banks, other public banks, pension funds and other investors, collectively described as Financial Service Providers (FSP), have an important role in financing and facilitating production and processing and other services along the value chain.¹⁴ When they apply Environmental and Social Governance (ESG) conditions to the financial services they provide, or see

positive social and environmental impacts as returns on their investment, FSPs have the potential to leverage and support sustainability commitments related to land use, commodity production practices, social inclusion policies and trade.

The growing uptake of ESG criteria among FSPs is largely due to the increased understanding of the reputational, financial and compliance risks associated with financing socially and environmentally unsustainable projects, and the weak corporate governance that goes hand-in-hand with such activities.¹⁵ Increasingly, FSPs are acknowledging the business case for responsible investments, with ESG performance often correlating positively with financial returns.¹⁶ ESG integration, however, instead of leading to improved corporate social and environmental performance, may also stimulate a bifurcation of the financial sector since businesses that already exhibit good social and environmental performance are able to secure ESG-conditional financing, while others become more dependent on FSPs that do not demand compliance with ESG. In addition, the existence of more responsible FSPs does not necessarily lead to increased finance for smallholders.

Improved access to finance has, for a long time, been advocated as a way to upgrade smallholder production, improve local livelihoods, strengthen the rural economy and alleviate poverty. A number of institutions have focused on delivering appropriate financial services to smallholders in the

12 [ITC] International Trade Center. 2016. *Trade statistics for international business development*. Geneva, Switzerland: ITC.

13 [USDA] United States Department of Agriculture. 2014. *Oil Seeds: World Markets and Trade*. Washington, DC: USDA.

14 Dalberg Global Development Advisors. 2016. *Inflection point: Unlocking growth in the era of farmer finance*. New York: Dalberg.

15 [GSIA] Global Sustainable Investment Alliance. 2014. *Global Sustainable Investment Review 2014*. Washington, DC: GSIA.

16 [WWF] World Wide Fund for Nature. *Sustainable finance in Singapore, Indonesia and Malaysia: A review of financiers' ESG practices disclosure standards and regulations*. Singapore: WWF.

form of microcredit loans through aggregator institutions. In recent years, a subsection of agricultural finance has been attempting to address some of the barriers and structural challenges of smallholder finance, stimulating the development of new approaches to farmer finance. These approaches include providing financial products and services along with non-financial support services to meet the parallel needs of smallholders. They leverage local value chain actors to link informal and formal finance providers, and make increasing use of technologies that could attend to the needs of smallholders in more flexible ways.¹⁷ Despite considerable success, these interventions often remain small-scale, pilot projects.

This panel will discuss:

- the interventions needed to improve sustainable practices among smallholder farmers
- how finance can remove current barriers and support such interventions for greater sustainability
- what changes are needed to increase (conditional) access to credit for smallholders that supports more sustainable land use and production practices
- what needs to happen so that these activities can be mobilized at a broader scale than pilot projects and boutique funds (policy, regulation, subsidies/incentives, training, among others).

17 Dalberg Global Development Advisors. 2016. *Inflection point: Unlocking growth in the era of farmer finance*. New York: Dalberg.

What are the current challenges in relation to smallholder finance?

1. Lack of technical capacity and access to good quality services and inputs

The rapid expansion of smallholder oil palm farmers, in Indonesia in particular, occurred without sufficient access to high quality services (e.g. seedlings, fertilizers) or technical training in good agricultural and financial practices. Therefore, many smallholder plantations tend to underperform due to inefficient management and insufficient inputs.

As a perennial crop, the oil palm provides both year-round oil production and income generation, which makes it highly suitable for smallholders. The crop has an economic lifespan of around 25 to 30 years¹⁸ and produces roughly 3.8 tons per hectare (t/ha) per year as a global average, six t/ha in the best plantations in Southeast Asia and 10 t/ha in genetic field trials.¹⁹ Throughout Indonesia, palm oil productivity varies significantly. These variations can be attributed to agronomic constraints, but are also related to the type and scale of plantations. Smallholder yields per hectare are 11 to 14 percent lower than the average yields on large private or government plantations in Indonesia.²⁰

18 Barcelos E, de Almeida Rios S, Cunha RNV, Lopes R, Motoike SY, Babiychuk E, Skirycz A and Kushnir S. 2015. Oil palm natural diversity and the potential for yield improvement. *Frontiers in Plant Science* 6.

19 Rival A and Levang P. 2014. *Palms of controversies: Oil palm and development challenges*. Bogor, Indonesia: CIFOR.

20 [IFC] International Finance Corporation. 2013. *Diagnostic study on Indonesian oil palm smallholders*. Washington, DC: IFC.

Realistically, smallholders will struggle to obtain similar yields to large-scale plantations. However, their potential for yield improvement is still high if the correct investments are made and services are put in place. But all actors, including local-level traders, mills, suppliers of seedlings and financial service providers must play a role in upgrading production practices.

2. Inability to meet requests from sustainability standards – legality, monitoring, reporting, traceability, certification – and threat of exclusion from certain markets

Many large-scale producers, traders, manufacturers and retailers have adopted certification standards such as the Roundtable on Sustainable Palm Oil (RSPO) or International Sustainability and Carbon Certification (ISCC), and have committed to “zero-deforestation” in their supply chains. They are also making efforts to buy sustainably produced palm oil from smallholders who can meet such standards. However, many of the smallholders able to meet more stringent production standards will be those associated with, and supported by, large plantations, while independent smallholders are unlikely to be able to cover the costs and take the risks associated with necessary upgrades.²¹

In some cases, incentives are already in place for smallholders to improve their production systems. But these incentives may not translate into direct benefits due to smallholders’ dependence on Crude Palm Oil (CPO) mills and the market conditions that they impose. Government policies and credit programs have often favored large-scale monocrop systems of agricultural production, which indirectly has limited the production choices of smallholders. This has increased

the dependency of smallholders on nearby plantations and CPO mills to buy and process their Fresh Fruit Bunches (FFB), and transport CPO to the market. This puts the mills and plantations in control of smallholders’ main source of cash income.

Plasma smallholders have no choice at all – they are contractually obliged to sell to the nucleus plantation for a price that in practice is determined unilaterally by the buyer. But “independent” smallholders also have limited choice, as their FFB need to be processed immediately after the harvest to minimize the increase in Free Fatty Acids that determine palm oil quality.²² This means that independent smallholders can only sell to CPO mills in their immediate proximity, which undermines their bargaining position. The reliance on a single crop also exposes them to the volatility of global market prices, while the dependency on a few nearby CPO mills results in a big gap between market prices and the prices actually paid to smallholders.

3. Financial inflexibility and limited potential to access inexpensive credit

It is often assumed that more sustainable practices will improve the yields and livelihoods of independent smallholders, but under current production systems and incentive structures, this is not the case. Smallholders in particular often lack the investment capital and financial flexibility to not only comply with higher standards of sustainability, but more importantly to reduce the risks of their operations. For independent smallholders, an absence of legal documentation (and therefore collateral), limited technical and managerial capacity to document and report performance, issues of trust and established informal but expensive credit markets limit their access to formal credit and opportunities to invest.

21 Brandi C, Cabani T, Hosang C, Schirmbeck S, Westermann L and Wiese H. 2015. Sustainability Standards for Palm Oil: Challenges for Smallholder Certification Under the RSPO. *Journal of Environment & Development* 24:292-314.

22 Lai OM, Tan CP and Akoh CC. 2012. *Palm Oil: Production, Processing, Characterization, and Uses*. Urbana, Illinois: AOCS Press.

Smallholders in partnership agreements with companies (for example the Nucleus Estate and Smallholder Scheme (NES) set up in 1979, the PIR-trans program (1986–1994) and the KKPA scheme (1995–1998)) often have access to formal credit. During initial land clearing and plantation development, plasma smallholders are provided with government loans disbursed through several state-owned banks.²³ The loans are provided to the nucleus plantation company, which then lends these sums to plasma shareholders to finance the planting of oil palms. The interest on these long-term loans is repaid by a deduction of the price the smallholders get for their FFB, thus reinforcing their dependence on the nucleus plantation company.²⁴ Independent smallholders tend to access this credit through a variety of informal lenders at often exorbitant interest rates.

In addition, there is concern that rapidly and indiscriminately increasing the ESG criteria and standards imposed on lenders by financial service providers, without also building capacity and improving access to competitively priced, high-quality services for smallholders will only add to the burden on small producers, reducing their ability to access formal credit and upgrade their production practices, thus pushing them to maintain their reliance on informal lenders.

4. Heterogeneity of smallholders/supply base and contexts

Smallholders and the contexts in which they operate vary dramatically, even within Indonesia. As markets develop in certain areas and smallholders integrate into the value chain, social and economic differentiation between the most

23 Caroko W, Komarudin H, Obidzinski K and Gunarso P. 2011. Policy and institutional frameworks for the development of palm oil-based biodiesel in Indonesia. In *CIFOR Working Paper*. Jakarta: Center for International Forestry Research (CIFOR).

24 Cramb R and McCarthy JF. 2016. *The Oil Palm Complex: Smallholders, Agribusiness and the State in Indonesia and Malaysia*. Singapore: NUS Press.

capitalized and less-endowed farmers tends to increase.²⁵ Comprehensive and reliable data on the composition and diversity of oil palm growers in Indonesia is lacking, especially concerning ownership, financing, plantation boundaries and locations and yields. The majority of the total area managed by smallholders in Indonesia is in Sumatra. This is in contrast to frontier regions such as East Kalimantan and Central Kalimantan where large-scale firms tend to dominate the landscape. This diversity presents a challenge for any international or national-level policy or regulatory intervention.

5. A lack of persuasive incentives to change practices

Many smallholder decisions go beyond rational economic choices. Therefore, policies that assume rational decision-making may miss opportunities for low-cost and high efficiency interventions. Social, cultural and historical contexts matter, and decisions over land use go beyond the palm oil sector itself, including issues of local and national-level governance and land mafias, immigration and emigration, established local markets, diversity and flexibility of income, skill sets and family traditions. These need to be considered when developing persuasive incentives.

6. Lack of clarity and security over land tenure, spatial planning and environmental regulations

Smallholder land tenure is a historically complex issue in Indonesia and around the world. In many regions, smallholders claim customary rights to the land they have lived and worked on for many generations, but this conflicts with formal, post-colonial law, which has entrusted much of the land to be owned and managed by

25 Arias P, Hallam D, Krivosos E and Morrison J. 2013. *Smallholder integration in changing food markets*. Rome, Italy: FAO.

the state. In addition, different ministries and levels of government claim control over land, resulting in overlapping licenses, insecure investments and weak long-term economic and spatial planning in rural areas. These insecurities and risks can limit the willingness and potential of the financial services industry to support long-term sustainable land-based investments.

In addition to existing ministerial regulations relating to land use, the Indonesian government is attempting to reduce the negative social and environmental impacts of oil palm agriculture through a range of national and sub-national policies. This includes the Indonesian Sustainable Palm Oil Standard (ISPO), peatland restoration programs and a moratorium on oil palm plantation licenses. But it is not clear yet how the government's environmental policies will align with their economic and rural development policies related to palm oil as a key export commodity.

The previous administration installed a number of policies to protect primary forests and peatlands, the most prominent of which was a presidential moratorium on the issuance of new plantation licenses on forest and peatland in 2011. Yet its effectiveness has been called into question.²⁶ Additional efforts include regulations on land use planning, the protection and restoration of peatlands and the One Map initiative, which aims to develop a unified map of land use agreed upon by all ministries. In addition, in reaction to the fire and haze crisis of 2015, the government issued a presidential instruction banning the clearance and exploitation of peatlands and new planting in burned areas.

26 Busch J, Ferretti-Gallon K, Engelmann J, Wright M, Austin KG, Stolle F, Turubanova S, Potapov PV, Margono B, Hansen MC and Baccini A. 2015. Reductions in emissions from deforestation from Indonesia's moratorium on new oil palm, timber, and logging concessions. *Proceedings of the National Academy of Sciences* 112:1328-1333.

All of these interventions have faced considerable barriers to implementation, including tensions among different levels and sectors of government, the intertwined interests of local politicians and investors, uneven law enforcement and government reliance on revenues from concession permits.²⁷

7. Inability to scale interventions beyond pilot projects and boutique funds

Many of the national and subnational FSPs that cater to smallholders and SMEs in Southeast Asia have yet to include responsible lending practices in their straight-to-farmer financial services, and it is currently only the large international banks that have begun to develop the policies and internal systems necessary to evaluate ESG risks, including the various indicators and metrics needed to measure ESG risk among a diversity of systems and suppliers.

ESG integration may also stimulate the bifurcation of the financial services sector. Anecdotal evidence suggests that both formal and informal access to credit for the development of oil palm plantations is available with little or no conditionality or consideration of sustainability. Oil palm businesses that already exhibit good social and environmental performance may be able to secure ESG-conditional financing, while others can still access financial services free from ESG requirements. This highlights the importance of widespread uptake of ESG standards among FSPs to drive change throughout the value chain.

Another challenge, therefore, is to find more effective ways to link responsible financing by FSPs with improvements in access to finance among smallholders and SMEs, through mechanisms that can build on conventional lending practices

27 Brockhaus M, Obidzinski K, Dermawan A, Laumonier Y and Luttrell C. 2012. An overview of forest and land allocation policies in Indonesia: Is the current framework sufficient to meet the needs of REDD+? *Forest Policy and Economics* 18:30-37.

(e.g. through nucleus estates and mills) and compete with informal lending. Many formal FSPs still see smallholders as financially risky and inefficient. Pilot projects that have worked to remove barriers to formal finance, offer attractive risk return propositions for FSPs and facilitate the adoption of sustainable production practices already exist. However, they face challenges in scaling up.

8. Lack of smallholder organization

A key element to improving production practices and increasing productivity, reaching sustainable markets, delivering economies of scale and accessing finance is to aggregate. This can be delivered through existing systems in which the plantation or mill coordinates. Alternatively it may be dependent on the ability of smallholders to organize themselves into cooperatives, producer associations or private companies. A good example of this is the coffee sector in Latin America, where smallholder farmers have worked to successfully develop cooperatives for commercial and financing purposes.

Which concrete measures do you propose to overcome these challenges?

In order to overcome the challenges and barriers discussed, smallholders must be supported and empowered. Upgrading smallholder production retroactively is difficult, as it will mean challenging and changing established beliefs and practices, as well as existing informal infrastructure and services.

However, it is essential that smallholders are given access to:

- **Quality service provision.** This includes technical assistance and training in good agricultural practices as well as financial literacy. It also includes reliable and affordable access to good quality fertilizers and seedlings that increase yields. The provision of these services may be made conditional to the maintenance of higher environmental and social standards. Conditionality will require greater transparency from smallholders and other stakeholders within the industry, including monitoring, reporting and third party auditing of standards. This should be accompanied by a fair and transparent pricing mechanism for high quality FFB from local traders, which must be delivered through a financially viable and scalable business model rather than a development program. Part of this is also the inclusion of smallholders in sustainable and fair supply chains.
- **Access to affordable credit.** In order to make the initial investments necessary to upgrade and, in many instances replant, smallholders will require credit conditions that are more flexible and have longer maturity periods tailored to their needs. The traditional smallholder credit schemes,

(such as PIR and KKPA), can be evaluated to see which mechanisms may be suitable for upgrading the practices of smallholders while reducing their dependency on the plantation companies and associated mills. Alternative income sources and livelihood strategies should also be considered during this period, or phased replanting programs that limit the income shortfall. Any source of credit should be conditional on meeting basic/minimal sustainability criteria and legality. A lack of clarity on what those sustainability criteria consist of is a current barrier to action.

- **Access to agricultural insurance and other instruments to reduce risk.** Smallholders would benefit from financial safety nets in times of lower yields, fire risk and other market shocks. Given smallholders' high risk exposure, financial services, such as insurance, can act as an additional incentive for the adoption and maintenance of certain agricultural and sustainability practices, which would also contribute to greater smallholder resilience.
- **National bank ESG commitments.** Banks and other national-level FSPs have the potential to leverage changes in practices among a wide variety of local-level actors. In the Indonesian palm oil sector this includes mills, traders and manufacturers, as well as plantations. By demanding higher standards on their corporate and project finance, FSPs can provide additional incentives to uphold national regulations. Indonesia's eight largest commercial banks have already committed to adopt responsible lending practices in the context of a "Sustainable Finance Roadmap" driven by the Indonesia Financial Service Authority (OJK). More needs to be done to include smallholders in these commitments and ensure that ESG is providing more equal opportunities for all producers.
- **Increasing FSP knowledge about the sector.** In order for more FSPs to move forward in financing smallholders in the palm oil sector it is necessary for them to be informed about the opportunities available, the challenges they may face, where and how investments can be made, and how to

manage the associated risks. It will be necessary for FSPs to tailor their services to the needs of smallholders in the sector.²⁸

- **Government subsidies/incentives.** Government regulations and policies can go a long way to shifting the balance in favor of more sustainable businesses, and ensuring that there is a more meaningful integration of smallholders in supply chains. Government policies, in the fields of agriculture, economic development, finance and ministerial collaboration, can be structured to ensure that sourcing from sustainably run smallholder plantations is more financially competitive than business as usual. OJK's "Sustainable Finance Roadmap" offers opportunities to embed this integrated set of policies in regulatory frameworks. Governments can also go beyond incentives based purely on immediate financial rewards or penalties. Rethinking the incentives needed for smallholders and SMEs to transition to more sustainable practices (such as speeding up the process of land titling or subsidizing access to inputs) is essential.
- **Smallholder organization.** In order to improve the prospects for smallholders to increase their productivity and access to markets and finance, they must become more organized. One way of approaching smallholder organization is to use existing structures and networks around mills and large plantations. FSPs could incentivize their customers (plantations and trading companies) to support these efforts as part of broader attempts to enhance sustainability performance. This links to two common practices in the Indonesian palm oil sector: 1) national banks already provide targeted loans to plantation companies on a large scale, who then on-lend to the plasma smallholders; and 2) international

28 To address this challenge, the Finance Alliance for Sustainable Trade (FAST) has developed several Guides to Investing in the Sustainable Forestry Sector and has facilitated finance for smallholders in this sector.

banks do their best to engage with plantation companies to help them improve their sustainability practices, which includes conditions for procurement from smallholders.

This strategy may lead to more realistic and feasible solutions to the question of smallholder organization, as the structures and supply chains already exist and there is ample experience with both practices. Therefore, improvements could be made in schemes through which plantation companies are strongly incentivized and supported by other stakeholders (FSPs, governments, civil society organizations) to ensure that they offer the smallholders they already work with the credits, inputs, prices and other support they need to adopt sustainable practices and improve their livelihoods. This, however, does not solve all issues faced by independent smallholders. Complex and embedded relationships with local networks of traders and intermediaries, tied to existing loans, may slow or prevent uptake of formal service provision. A new role for existing intermediaries is not yet clear.

- **Government resolution of tenure and land use planning issues.** Clarity of land tenure, and the integration of sustainability factors into land use planning decisions and activities, are key steps to delivering sustainable land use. It may also provide local smallholders and businesses with greater security for investments in upgrading, and reduce risks for FSPs. Much of this work must take place at the sub-national level. Resolving land use planning in sub-national jurisdictions – using better maps and data collection, clearer and more tailored long- and short-term economic plans for the regions that factor in local contexts and cultures (infrastructure and existing knowledge) – could contribute to the sustainability of all sectors.

What are the remaining open questions?

The discussion panel at the Global Landscapes Forum: The Investment Case in London will explore existing challenges and remaining questions, including:

- What examples are there of self-sustaining service provision for smallholders and what is needed to get these off the ground?
- What conditions and incentives do smallholders need to invest in more sustainable practices and improved livelihoods?
- Are there any key alliances within the supply chain that could support smallholders to increase their productivity, enter new markets and access finance?
- What steps can FSPs take to support greater sustainability performance and improved livelihoods among smallholders? This includes incentivizing existing customers – plantation and trading companies – to support smallholders. Are these steps different for international and national FSPs?
- What do banks need to do/change internally (representing sustainability at the management or Board of Directors level, training, Standard Operating Procedures, Key Performance Indicators, etc.) in order to ensure that they can support greater sustainability performance and improved livelihoods of smallholders?
- What inputs and support do FSPs need from other stakeholders (such as government, knowledge providers and civil society organizations) to play this incentivizing role with their customers?
- How can the present role of plantation companies, in facilitating access to finance and good quality services of plasma smallholders, be improved (ensuring sustainable practices and improved livelihoods) and extended to “independent” smallholders?
- What prevents governments from creating the enabling conditions (tenure security, financial regulations, landscape-level planning, education programs, subsidies) to support smallholder development?

What are your proposed activities and milestones for implementation?

CIFOR and partners will work to develop a more nuanced understanding of smallholder production in Indonesia and Malaysia and the barriers to upgrading of agricultural practices. This will include:

- A study to better understand the role of smallholders in the dynamics of the palm oil markets in Indonesia and Malaysia, and the potential impact of sustainability standards on fiscal earnings as well as social and economic policy targets.
- An assessment of the financial, regulatory, cultural and other barriers and trade-offs, which inhibit different groups of palm oil smallholders from adopting more sustainable practices and improving their livelihoods.
- An evaluation of the lessons learned by national banks when providing credit to smallholders under existing partnership models, i.e. NES, PIR, PPKA and other schemes, which may be relevant to those developing novel smallholder financing structures for more inclusive business models.
- An evaluation of public and private ESG standards and instruments (such as loan conditions and engagement) across banks in Indonesia and Malaysia and their potential to incentivize their customers to support the inclusion and upgrading of oil palm smallholders in sustainable markets.
- Develop and compare case studies of innovative smallholder business models and key policy, market, infrastructure and service interventions. This will include identifying the roles played by different stakeholders – smallholders, plantation and trading companies, FSPs, governments and civil society organizations.
- Assess the barriers (as well as the opportunities for their removal) and potential for scaling up innovative financial approaches to provide accessible and affordable financial services for smallholders.
- Given the limited human and financial resources available to government at the local level, it may be advisable to distill and simplify recommendations into key, targeted interventions to deliver maximum change for minimum input.

FAST International is working to develop multiple tools to support improved access to financing for smallholders including:

- Financial Literacy Toolboxes, tailored to specific countries and agricultural sectors, to increase credit readiness of smallholders
- Networks of local financial advisors, to provide coaching to smallholders, assess their credit readiness and/or increase their credit readiness, and upload their profile in the FAST Online Financial Access Platform
- Guides on how to invest in sustainable palm oil could be developed to increase the number of FSPs actively investing in the sector
- FSPs actively financing palm oil could be included in the FAST Online Financial Access Platform to connect FSPs with credit-ready organized smallholders
- Specific impact indicators to measure social, environmental and financial impact of investments in palm oil could be developed
- Assess the organizational capacity of oil palm smallholders for production, markets and finance.

As part of a project funded by the **Millennium Challenge Account Indonesia**, **SNV is working with Financial Access** to help farmers obtain the finance needed for replanting. This program will address the replanting needs of the palm oil smallholder population in the Berbak region of Sumatra. By financing the replanting of trees in combination with tailored technical assistance, leading to more efficient and sustainable production, the program enables increased productivity in existing plantations and therefore provides an alternative to expansion into forested areas.

Between the end of 2016 and October 2017, SNV aims to attract impact investors who will provide funding for roughly 500 replanting loans, with a total portfolio size of approximately USD 4.3 million. Replanting costs are approximately IDR 115 million (approximately USD 8,600 for two ha of land). Replanted trees will generate, on average, 20 percent higher yields after year three. SNV aims for the first tranche to limit financing to approximately 500 farmers with the best credit profiles, grouped in one to two-farmer cooperatives, who would act as loan agents to distribute and service the loans to the farmers. Taking into account an average loan tenor of eight years, SNV expects investors to be able to exit their investment when the farmers are generating positive cash flows after five years. Investors may be selling their portfolio on the secondary market to other investors or local financial institutions that would not be willing to invest during the replanting stage.

Investment considerations include:

- economic returns: The estimated risk adjusted annual return on committed capital is forecasted to be above 10 percent.
 - deforestation: Indonesia's absolute rate of deforestation is considered among the highest on the planet with palm oil production being one of the largest drivers. The envisaged financing allows increases in productivity on planted land, providing an alternative to further expansion into the forest area.
 - biodiversity loss and land degradation: By avoiding further deforestation, the smallholder finance model avoids the biodiversity loss of forest-dependent species (such as orangutans, tigers, elephants) as well as plant species diversity.
 - greenhouse gas emissions: Deforestation due to the conversion of peatlands has made Indonesia the third largest source of greenhouse gas emissions.
 - exploitative treatment of smallholder farmers: By enabling independent smallholders to access affordable finance, we hope to diminish the dominance of large oil palm producers who often monopolize the most productive land.
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Who carries responsibility for/can support implementation?

Broadly, responsibility falls on government, the private sector and civil society, as well as microfinance organizations and multilateral banks. The organizations and institutions listed below have worked extensively on these topics.

Profundo – The role of FSPs in incentivizing smallholder development.

A Dutch economic research consultancy that analyzes commodity chains, financial institutions and Corporate Social Responsibility issues, Profundo has carried out extensive analyses of Indonesia's financial sector, with emphasis on the palm oil sector.

Profundo researches which financial institutions are involved with specific corporations, sectors and corporate responsibility themes. We analyze how financial institutions can effectively disguise investments that are harmful to humans and the environment, but also what financial institutions currently do to create sustainable economic development. We advise financial institutions about responsible investments and financing, and research the possible role of the government within this issue. In addition, Profundo analyzes the trade and investment relations in commodity chains and brings the balance of power to the surface. Based on such research, Profundo advises about possibilities to make commodity chains ever more sustainable.

SNV – Understanding, rural credit, capacity building, risk profiles, access to markets, infrastructure. A Dutch development organization that works with smallholders to collectively meet social and environmental sustainability standards and access credit, leveraging the demand for sustainably produced commodities in global markets, SNV are non-profit intermediaries linking responsible finance with smallholder sustainable supply.

In partnership, Financial Access and SNV have developed a credit scoring tool for smallholder farmers. The tool uses cash flow models based on a wide range of actual and historical data to predict future farmer income levels and assess bankability of farmers on an individual and portfolio basis. The advantage of the credit scoring tool is that an immediate evaluation of the farmers' potential for access to finance can be made. It will also provide detailed information on the gaps that prevent access for farmers to (affordable) finance. The information provides valuable input on the interventions (knowledge and skills gaps, farm conditions and others) that will have to be addressed to make these farmers bankable in the future. For those with positive credit scores, loans provided will be based on detailed and dependable cash flow forecasts and not on land titles as collateral, hence overcoming a major barrier for access to finance for smallholders.

Financial Access Capital Partners (FA) is a social enterprise (taken private from the ING Group in 2007), based in The Netherlands. FA provides advisory services, financing support and solutions to financial institutions in emerging markets, with offices in East Africa (Kenya, Uganda) and Southeast Asia (Indonesia, Thailand). FA has a dedicated focus on developing and implementing innovative, sustainable and practical agrifinance and supply chain finance solutions. In smallholder finance, FA has developed a systematic and holistic approach to data collection and information gathering to be able to assess the financial strengths of smallholder farmers at individual, farm and aggregate (cooperative, farmer group, mill) levels. In many developing economies a comprehensive system of agri-data collection, management and use, for the benefit of smallholder farmers, is missing. The strength of FA, in combination with tailored financial technology, lies in the ability to collect, manage, analyze and apply different types of data to be used by banks, microfinance institutions, impact investors and other financial institutions to expand lending to (portfolios of) smallholder farmers while improving internal credit decision processes and reducing credit default risk and operating costs.

The Finance Alliance for Sustainable Trade (FAST) – Increasing access to finance for Small and Medium Enterprises (SMEs), including cooperatives, producer organizations or private companies. Founded in 2008 with the support of USAID, Root Capital, IISD, Rabobank, Cordaid, ForesTrade and Montreal International, FAST was the first organization to bring financial service providers together to support and grow sustainable trade finance, focusing on agriculture and forestry. With the support of their key partners, FAST has grown to represent over 150 member organizations including FSPs and key stakeholders in sustainable agriculture and forestry worldwide.

SMEs are critical for the economic and social development of emerging markets. They play a major role in creating jobs and generating income for low-income people. SMEs foster economic growth and social stability and contribute to the development of a dynamic private sector. From lack of access to capital and financial services to access to fair market prices for their products, small-scale farmers face many challenges. They need an estimated USD 450 billion in finance every year. FAST works with its member network to scale up the quality and availability of SME finance and close the ‘financing gap’. It targets those that are too big to be serviced by microfinance institutions and too small to go to large banks, thus servicing the ‘missing middle’. FAST provides three main services: (1) **training** to build the financial literacy of SMEs and improve their credit readiness

and helping FSPs to develop financial products and services tailored to the specific needs of the sectors; (2) **analytics**, tracking and analyzing key data in order to advance the SME finance sector; and (3) **matchmaking**, by connecting FAST’s financial institutions with credit-ready SMEs.

OLAM International (TBC). Olam International was established in 1989 with one product in one country, trading cashew from Nigeria into India. Today they are a leading agri-business, operating from seed to shelf in 70 countries, supplying food and industrial raw materials to over 16,200 customers worldwide, with 62,500 full-time, seasonal, contract and temporary employees, operating in cocoa, coffee, cashew, rice and cotton.

IFC Indonesia – Public-private partnerships and smallholder capacity building. IFC fosters sustainable economic growth in Indonesia by financing private sector investment, mobilizing capital and advising businesses and the government on projects that generate returns for investors and provide lasting benefits to the economy and communities. IFC helps to improve Indonesia’s investment climate and attract private sector investors to a wide range of industries such as infrastructure, manufacturing, commodities-based supply chains and financial services.



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Coordinating partners



Strategic partners



Funding partners



Authors

