Highlights

• Oil palm (*Elaeis guineensis*) is one of the more visible and profitable agricultural commodities driving the expansion of industrial- and small-scale plantations into forest areas, particularly in Southeast Asia.

• Between 2000 and 2010, around 4.5 million hectares (ha) of forests were lost in Indonesia with others estimating that the total amount could be over 7 million ha. Around 20% of this deforestation occurred on oil palm plantations.

• In Indonesia, initiatives that mitigate and manage deforestation due to palm oil production include standards and certification, zero-deforestation pledges, improvements to smallholder productivity, and jurisdictional management. This policy brief examines how well these initiatives address the causes deforestation and environmental degradation and their acceptability among stakeholders.

• Palm oil production in Africa and Asia has as of yet to cause large scale deforestation of primary forest as much of the land being used for plantations was previously cleared for agriculture.

• Development partners can further mitigate palm oil’s impact on deforestation by identifying financially viable and sustainable small-scale models, improving the taxation models for plantations and supply chains, strengthening the legality of jurisdictional approaches, and improving traceability in the palm oil supply chain.
Introduction

Globally, tropical deforestation, forest fires, and peatland degradation are a major cause of greenhouse gas emissions and biodiversity loss. The expansion of industrial-scale plantations and small-scale farms contributes significantly to tropical deforestation.

Oil palm (Elaeis guineensis) is one of the more visible and profitable agricultural commodities driving the expansion of industrial-and small-scale plantations into forest areas, particularly in Southeast Asia. Between 2000 and 2010, around 4.5 million hectares (ha) of forests were lost in Indonesia with others estimating that the total amount could be over 7 million ha. Around 20% of this deforestation occurred on oil palm plantations. (Figure 1) Industrial estate plantations were the main causes of this deforestation with smallholders responsible for only 10.7% of the deforestation caused by oil palm expansion.

Although they are not the primary driver of deforestation, oil palm plantations are the last and most profitable phase of a land governance system that incentivises the degradation and eventual conversion of natural forests and peatland beginning with forestry concessions. In Southeast Asia, oil palm cultivation has become synonymous with tropical deforestation and subject to numerous environmental campaigns including calls for boycotts and other measures to discourage its use.

Free from deforestation and social conflicts, sustainably-produced palm oil has become the aspired goal for many consumers, buyers, and governments and has been reinforced through zero-deforestation commodity supply chain pledges. The most effective path for ensuring the sustainability of palm oil that will trigger a broad-scale reduction in the rates of deforestation remains elusive.

This policy note focuses on the largest palm oil producing country, Indonesia, and discusses six supply-side initiatives for ensuring the sustainability of palm oil production. The note then briefly discusses patterns of palm oil production in Africa and Americas, and the most effective strategies to reduce deforestation globally.

FIGURE 1. FOREST COVER IN 2015 AND HISTORICAL LAND USE INCLUDING OIL PALM CHANGE IN CENTRAL KALIMANTAN*

![Forest Cover and Oil Palm Central Kalimantan 2015](Image)

Source: Ministry of Environment and Forestry (deforestation data), CIFOR’s industrial plantation data map by INOBU

*Note: Although the immediate cause of deforestation is usually the clearing and degradation for timber and pulp, oil palm plantations have now been established on most cleared land.
Sustainable Palm Oil: Six Approaches in Southeast Asia

The note evaluates six initiatives by examining how well they addressed the causes of deforestation and environmental degradation as well as their acceptability among different stakeholders.

Roundtable on Sustainable Palm Oil (RSPO) certification: RSPO was the first major voluntary palm oil certification scheme that remains the industry standard today and that is accepted globally by most nongovernmental organizations and consumers. Although there is limited explicit public-sector involvement, the Indonesian government implicitly ensures the legality of production including the provision of certificates and legal documents. The system provides independently-monitored environmental (High Conservation Value (HCV) and High Carbon Stock (HCS) Area approaches) and social (Free, Prior and Informed Consent (FPIC)) safeguards. The scalability of the system is limited by the costs of certification and the challenges of certifying smallholders, especially independent smallholders.

Indonesian Sustainable Palm Oil (ISPO) certification: The official Indonesian government palm oil certification system, ISPO, is based on compliance with government laws and regulations enforced through a Presidential regulation. In its current form, ISPO certification is granted on per farm, per plantation, and per mill bases and compliance is mandatory for companies. The new Presidential regulation under development might include stricter environmental and social safeguards, might mandate compliance for smallholders, and might increase the scope of monitoring the compliance of jurisdictions in conformity with ISPO standards.

Corporate zero-deforestation pledges: The Indonesian Palm Oil Pledge (IPOP), which was a short-lived association of palm oil producing companies, sought to realise companies’ zero-deforestation commitments through voluntary and collective action. Initially, public sector involvement was limited although IPOP collaborated with government across certain jurisdictional initiatives. IPOP was dissolved in mid-2016 as the companies involved returned to their individual supply chain initiatives including improving traceability and the performance of third-party suppliers. Other companies have since focused on improving the productivity and sustainability of smallholders with the support of nongovernmental organizations.

Government policy and regulations: The failure of many initiatives to achieve the desired reductions in deforestation and environmental degradation has been attributed to shortcomings in the laws and regulations governing land use in Indonesia. The Indonesian government has introduced many laws and regulations in recent years to reduce deforestation and environmental degradation using a strict regulatory approach. These regulations include a moratorium on concessions in primary forests and peatland, protecting peatlands, and banning fires and combustibles. Unfortunately, there are few positive incentives for compliance. Further, the regulations are difficult to enforce in under-resourced rural areas and may disproportionately disadvantage smallholders.

Smallholder productivity and intensification: Smallholders play an increasingly significant role in palm oil production. Although their actual contribution to deforestation and environmental degradation remains uncertain, smallholders often replace biologically diverse forest gardens with monocultures such as oil palm. Improving the productivity of oil palm smallholders has been highlighted as one of the main targets for achieving sustainable and inclusive palm oil production. The main focus for achieving productivity has been on improving access to finance,
especially for replanting, to sustain smallholders through the early, unproductive phases of oil palm cultivation. The obstacles facing smallholders, in particular independent smallholders, are far more systemic and finance alone will not solve these challenges.

**Jurisdictional approaches/certification**: Jurisdictional approaches explicitly work with local governments, often through multi-stakeholder engagement. Jurisdictional approaches, including certification, theoretically offer a simplified and larger-scale process for reducing deforestation, improving productivity, and promoting smallholders and sustainable commodity sourcing. There are RSPO pilot initiatives in the State of Sabah in Malaysia, Seruyan District, in the province of Central Kalimantan, in Indonesia, and in Ecuador. What differentiates jurisdictional certification from other approaches is the scale and the importance of government regulations, policies, and instruments. A jurisdictional approach ensures that sustainability, including deforestation and peatland degradation, as well as inclusion, such as improving the productivity of smallholders, can be achieved systematically across the entire jurisdiction and progress can be measured against a district-wide baseline.

**Oil Palm Beyond Southeast Asia: Africa and Latin America**

**Africa**: Although oil palm cultivation in Southeast Asia is dominated by large estates, oil palm cultivation in West and Central Africa is dominated by small-scale producers, many of whom cultivate oil palm in diverse swidden systems. However, this situation is changing as larger multinational and Southeast Asian palm oil producers look to expand their production in Africa. For the most part, the expansion of plantations is occurring on lands that have historically cultivated oil palm and is leading to social conflicts rather than driving deforestation. The expansion of oil palm cultivation into forest frontiers in the Congo Basin represents the greatest threats to tropical forests in Africa.

**Latin America**: Colombia began cultivating oil palm in the 1960s and is now the largest palm oil producing country outside of Asia. With an abundance of pasture land, oil palm could feasibly expand in the near future without contributing to tropical deforestation. In Brazil, although oil palm was introduced to the State of Pará in 1942, the planted area of oil palm remained only around 210,000 ha in 2014. Major palm oil producers such as Agropalma are RSPO-certified and are not expanding into forest areas. In Peru, which contributes to less than 0.1% of world production of palm oil, small and medium scale producers make up 52% of the total production that mainly converts unproductive pastures into oil palm plantations.

**Recommendations**

There are six mechanisms through which the multilateral and bilateral donors and development partners can promote sustainable oil palm that are free from deforestation and social conflicts as outlined below. First, development partners can identify incentives and financially viable models for small-scale, sustainable palm oil production including mills as well as identify the obstacles to a broad-scale adoption of these models. Second, partners can investigate appropriate mechanisms for taxing plantations as well as the palm oil supply chain that adequately reflect their value as well as their environmental and social effects. Third, environmental and social safeguards that compromise between government, HCV/HCS, and FPIC methodology can be sought and promoted.

Fourth, governments can strengthen the legality of jurisdictional certification and sourcing by investigating the legal barriers to jurisdictional certification and sourcing both in terms of national laws and bi-lateral and multi-lateral trade agreements. Fifth, governments and international partners can identify the most effective ways to source traceable produce from sustainable jurisdictions considering the complexities of the palm oil supply chain and the needs of producers and buyers as well as identify the simplest and most effective ways for investors to invest in sustainable jurisdictions through reduced investor risk. Finally, stakeholders can invest in mechanisms for financing low emission development through the simplest and most transparent channels for resources to local government and jurisdiction to enable them to develop a governance infrastructure for sustainability.

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