



# Towards the development of a feasible EU action plan against deforestation

*Insights from the Indonesian palm oil sector*

Briefing paper

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## Highlights

- Existing certification schemes and voluntary private sector commitments have improved awareness, sustainability and transparency in palm oil supply chains, but alone, are insufficient to stop all oil palm related deforestation due to the scope for leakage. The EU legal framework aims to counter these shortcomings. However, ample opportunity for leakage of non-compliant palm oil into other value chains severely complicates achieving a completely deforestation free palm oil sector and additional efforts are therefore needed.
- Existing sustainability frameworks are generally not inclusive of the millions of smallholders involved in the oil palm sector. An EU framework must focus on smallholder needs and ensure that they have increased opportunities, to allow advances towards reducing poverty and achieving several other SDGs.
- Palm oil production and consumption is dominated by Southern countries, where economic development is more prominent in sustainability discussions compared to Northern perspectives. A shift from aiming for zero deforestation, to protecting forests while also supporting rural development offers a more realistic pathway for reducing deforestation, but requires considerable investments.
- Depending on legal frameworks alone is unlikely to prevent deforestation. Partnerships, negotiations, better land use planning, local capacity building and improved awareness of the importance of deforestation and sustainability, are all also required for the Indonesian oil palm sector to ensure sustainability source of vegetable oil globally.



## Background to EU policy on reducing deforestation

In line with the Paris Agreement on Climate Change, and Agenda 2030 for Sustainable Development, the EU is stepping up efforts to improve human rights and reduce deforestation and forest degradation (EC, 2019). As commercial agriculture is a key driver of tropical deforestation and the EU is a large importer of agrocommodities from these regions, developing deforestation-free supply chains is an important component of the EU action plan (COWI et al., 2018). To guide EU objectives, the European Commission identified five priorities; reducing the EU consumption footprint, working in partnership with producing countries, strengthening international cooperation, redirecting finance to support more sustainable land-use practices, and supporting the quality and availability of information on forests and supply chains (EC, 2019).

Underwriting the EU’s ambitions, draft recommendations regarding an EU legal framework to halt and reverse EU-driven global deforestation (further referred to as the Burkhardt report) were sent to the EU parliament in June 2020. Such a framework must consist of a smart mix of binding and voluntary measures that impact demand, supply and finance (van Dam, 2019). To avoid a patchworks of measures, likely to create loopholes and administrative burdens for companies, governments and other implementing agencies, there is a preference for cross-sectoral and cross-commodity regulations at EU level (Client Earth et al., 2019; Lise Smit and Tobed, 2020). However, such a framework also needs to accommodate commodity characteristics and landscape contexts to avoid becoming ‘catch all’ mechanisms that override local realities and are thus destined to fail.

This brief focuses on the Indonesian oil palm sector and highlights key characteristics that must be considered when developing the EU legislative framework. While human rights also deserve attention, this Infobrief focuses on environmental impacts of proposed measures and other social issues. It describes the oil palm sector, initiatives that are shaping sustainability, and lessons learned, based on literature and experiences from Tropenbos Indonesia’s ongoing work (see Box 1 & 2) in its Green Livelihood Alliance programme in West Kalimantan, leading to key considerations that EU policymakers should take on board when developing their ambitious plans for more sustainable agrocommodity supply chains.

## The relevance of palm oil

Palm oil is the world’s most traded vegetable oil and Indonesia is by far the largest producer with nearly 60% of global output. Europe is an important export destination, but the bulk is consumed in Southern countries including Indonesia itself, China and India (Figure 1). The increase in Indonesian production in only 40 years has been massive, with less than 300,000 hectares of plantations in 1980, to an estimated 15 million hectares in 2020, or 8% of its entire land area. Oil palm is largely concentrated on Sumatra (56%) where it initially took off, and Kalimantan (39%) where it massively expanded from 2000 onwards (DJP, 2020). Oil palm has significantly changed rural landscapes and its rapid expansion (Figure 2) made palm oil one of the most controversial and scrutinised agrocommodities globally (Noordwijk et al., 2017).

### Environmental relevance

Nine million hectares of forests were lost in Indonesia in 15 years up to 2016, of which 2.3 million hectares or 23% of total deforestation attributed to oil palm plantations,

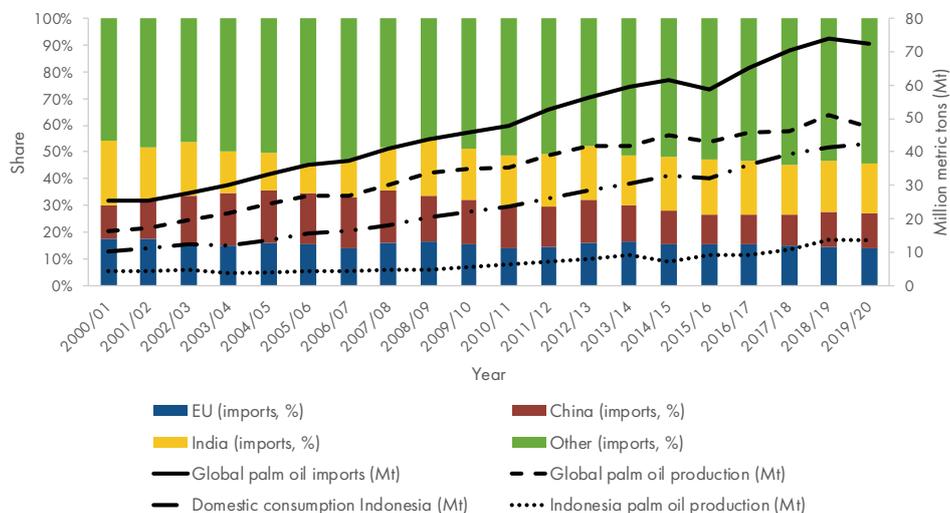


Figure 1. Global and Indonesian palm oil production and main importing countries/blocks (USDA 2005, 2007, 2011, 2015, 2019, 2020). The main importers of Indonesian palm oil in 2018 were India (23%), the EU (14%) and China (13%) (Trademap, 2020).

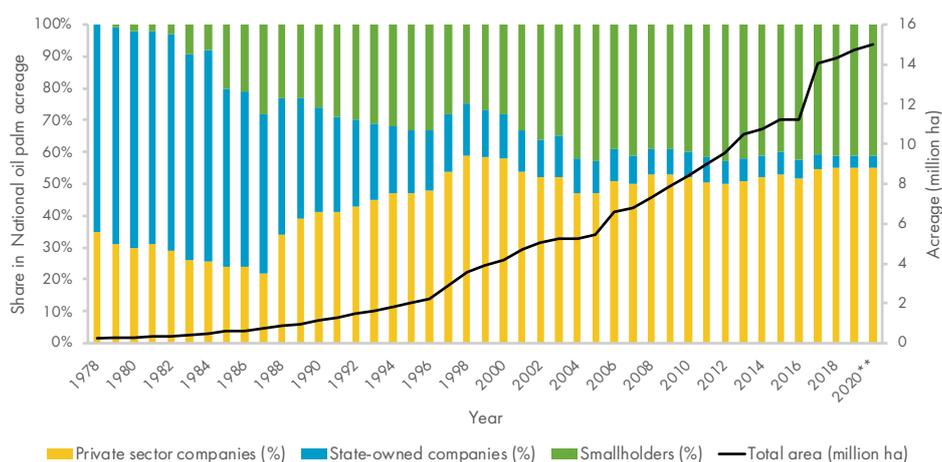


Figure 2. Growth of oil palm acreage in Indonesia (DJP, 2020) \*\* preliminary data for 2019 and expected data for 2020.

making it the single largest contributor (Austin et al., 2019). This is also likely to be a conservative estimate, as small-scale plantations were categorised differently and some large-scale plantations were still immature so could not be identified from aerial images. Analysis of land use patterns are complex and different methods and definitions also lead to variable results (Abood et al., 2015), but it is clear that oil palm has driven deforestation, resulting in substantial losses in biodiversity (Qaim et al., 2020). Oil palm plantations also expanded into peatlands, where associated peat fires (Gaveau et al., 2014) and peat subsidence (Hooijer et al., 2012) are responsible for huge GHG emissions and health hazards.

Advocates of palm oil, however, emphasize the crop's potential for 'land sparing' due to its unmatched land-to-oil ratio of 3.82 Mt ha<sup>-1</sup>, compared to 0.44 Mt ha<sup>-1</sup> for soybean and 0.76 Mt ha<sup>-1</sup> for rapeseed (from USDA oil yield data and FAOSTAT acreage data, 2018), and considerable potential for further yield increases per hectare (Woittiez et al., 2017). With demand for vegetable oils expected to increase, oil palm is well positioned to supply an affordable vegetable oil with minimal additional land requirements (Corley, 2009). Some also note its potential for carbon capture on degraded lands (Fairhurst and Mc Laughlin, 2009), or when used as a biofuel (Purba and Sipayung, 2017).

### Socio-economic relevance

The oil palm sector in Indonesia provides 4.2 million direct jobs and 12 million indirect jobs, and with export earnings above US\$ 21 billion, palm oil has become a cornerstone in the national economy (ISPO, 2019) and the government is keen to protect its interests. Millions of smallholders began to plant and now account for 41% of total plantation area (DJP, 2020). Due to its relatively high labour demand compared to other oilseed crops, e.g. oil palm requires one worker per 10 ha, whereas soybean requires one worker per 160-200 ha (Corley & Tinker, 2016), it contributes significantly to job creation in areas where

employment opportunities are generally limited. Research shows that smallholder producers (Euler et al., 2017) and those otherwise employed in the sector (Bou Dib et al., 2018) have significantly improved livelihoods compared to those that do not participate.

However, benefits from oil palm production are shared unequally, with smallholders often included only on the most adverse terms (Cramb and McCarthy, 2016). Oil palm improved the wellbeing of communities already more connected to modern markets as is often the case in Sumatra, but forest-dependent communities common in Kalimantan and Papua generally experienced a decline in wellbeing following the arrival of oil palm (Santika et al., 2019).

### Key issues for developing a feasible legal framework

To prevent further deforestation, the EU framework must define minimum requirements for 'deforestation-free' commodities, how 'deforestation-free' and 'forest' are defined, and the 'cut-off date', i.e. after which point is conversion of forest to oil palm deemed unacceptable.

#### Definitions

How a 'forest' is defined and to what extent this aligns with national legislation will determine how feasible the EU requirements are and whether an area meets them or not. The Burkhardt report (2020) proposes a definition of deforestation from the Accountability Framework as "... the loss of natural forest as a result of: i) conversion to agriculture or other non-forest land use; ii) conversion to a tree plantation; or iii) severe and sustained degradation." Compensation through reforestation is not mentioned, and the definition pertains to gross deforestation. This section provides several insights on the existing legal frameworks and key sustainability initiatives in the Indonesian context, and lessons learned from them.

Discussions on definitions of forests, deforestation and attributing deforestation to actors have been ongoing in Indonesia for decades (e.g. Sunderlin and Resosudarmo, 1996) and are unlikely to be settled soon. A key issue is that all land in Indonesia is classified as either forestry (*Kawasan Hutan*; KW) or land for other uses (*Areal Penggunaan Lain*; APL).

- The forestry domain (KW) covers roughly 124 million ha, under the Ministry of Environment and Forestry. Although supposed to consist of forests and protected areas, 25% was not covered by forests in 2011 (Ardiansyah et al., 2017), a percentage that has since increased due to massive forest fires in recent years and increasing smallholder encroachment. Furthermore, an estimated 20 million ha (16% of the forestry domain) is classified as 'conversion forest', meaning that they can be legally cleared.
- Land for other uses (APL) covers an estimated 67 million ha, overseen by the Ministry of Agrarian Affairs and Spatial Planning, whilst actual land use allocation is commonly determined at regional level. Some 7 million ha of APL is still forested, with primary forests on 1.3 million ha and secondary forests on 5.7 million ha (Purwanto and Kusters, 2019). APL forests are prone to deforestation, and prove difficult to protect due to other development priorities.

Tropenbos Indonesia was successful in protecting APL forest and demonstrated that diverging interests can be overcome through landscape approaches (see Box 1).

### Legal compliance as a minimum standard

Minimum requirements for deforestation-free commodities in an EU legal framework could build on laws and policies of producer countries, or set minimum requirements defined by the EU. Legal compliance appears a

straightforward minimum baseline criterion (next to other criteria) for deforestation free supply chains (Hombergh, 2020), but realities prove much more complex.

### Legal ambiguity

Decentralization laws in 1999 made regional authorities responsible for local development and revenue generation, but lack of clarity led to different interpretations. Oil palm cultivation is classified as agriculture and thus falls under regional heads who handed out large numbers of legally dubious permits for oil palm plantations in the forest domain to develop revenue streams (Naylor et al., 2019). At the same time the Ministry of Forestry introduced new laws and reasserted its claims on forests covering the customary land of more than 40,000 villages (Siscawati et al., 2017). Although companies initially benefitted from this opaque legal framework, with increasing requirements for certification and due diligence many now face difficulties in demonstrating all legal requirements. These struggles between regional and national authorities over their mandates also affected many smallholders, with customary lands given to companies whilst their agricultural land was classified as illegal.

In addition, poor coordination between line ministries on regulations and laws has further complicated development of a coherent legal framework and subsequent legal compliance. The two moratoria on oil palm development for example, are Presidential Instructions (No 10/2011 on the postponement of issuance of new licences and improving governance of primary natural forest and peatland, extended since first introduced in 2011; and No 8/2018 on the delay and evaluation of permits and elevated productivity of oil palm plantations, issued in 2018). Some interpret a Presidential Instruction as overriding ministry regulations, but others interpret them as mere recommendations and choose not to comply (Murdiyarto et al., 2011) as local authorities may be hesitant to jeopardize good relations with the private sector. The government is

### Box 1: Overlapping concessions and high conservation value areas: Lessons from landscape approaches in West Kalimantan

Recognising the ecosystems within production forest (*Hutan Produksi*) and non-state forest (APL), the Indonesian Ministry of Environment and Forestry introduced a new conservation category called the Essential Ecosystem Area (*Kawasan Ekosistem Esensial*; KEE). Two oil palm companies in Ketapang had not developed all of their concession as a certain area was a natural corridor for wildlife between a national park and a protected forest perceived a high conservation value area. Following negotiations between companies, government and CSOs, including Tropenbos Indonesia, this area was reclassified as a KEE by the Governor of West Kalimantan. However, in 2018 a mining company with an overlapping concession expanded activities and started building a road, being legally allowed as the area was APL. Following discussion, the governor and the mining company agreed to restore the function of the KEE. Key lessons were the need to include all relevant stakeholders and acknowledge that these processes are time consuming (see Purwanto and Kusters, 2019).

improving coordination and is involved in various initiatives to improve oil palm sustainability, but competing legal frameworks, diverting interests and associated struggles over authority and revenue streams undermine the effectiveness of current laws. This is further complicated by frequent lack of capacity, funds and availability and transparency of data at the local level (Langston et al., 2019) and especially relevant in remote forest frontiers.

### Cut-off dates

The cut-off date is that time after which deforestation or conversion renders a given area or production unit non-compliant with no-deforestation or no-conversion commitments. The Burkhardt report proposes 1 January 2008 (Burkhardt, 2020).

With the Indonesian oil palm acreage already covering 7.4 million hectares in 2008 (DJP, 2020) this cut-off date could easily cover the EU's palm oil imports, certainly considering that palm oil imports for biofuels are likely to be phased out in the EU. With most Indonesian palm oil being consumed in Southern countries, this cut-off date and other criteria are likely to lead to a bifurcation into sustainable supply chains for the EU, and business-as-usual supply chains for others. Obviously, this will not halt deforestation, and a single strict cut-off date and minimum requirements with no flexibility to adapt to regional contexts and challenges will hamper efficient land use. For example, heavily degraded areas from massive forest fires in 2015 cannot be planted with oil palm or other crops, and it remains unclear what should be done with such land. Within Indonesia, a 2008 cut-off date is likely to benefit the older established plantation areas predominantly in Sumatra, and reward the more established plantation companies that played key roles in earlier deforestation. Smallholder expansion also only takes off once companies procure their produce and basic infrastructure is in place (Jelsma, 2019), their expansion in frontiers is usually delayed. In more recent frontiers like Kalimantan smallholders comprise less than 20% of total area compared to more than 50% in Sumatra, and are likely to be disadvantaged compared to companies who converted

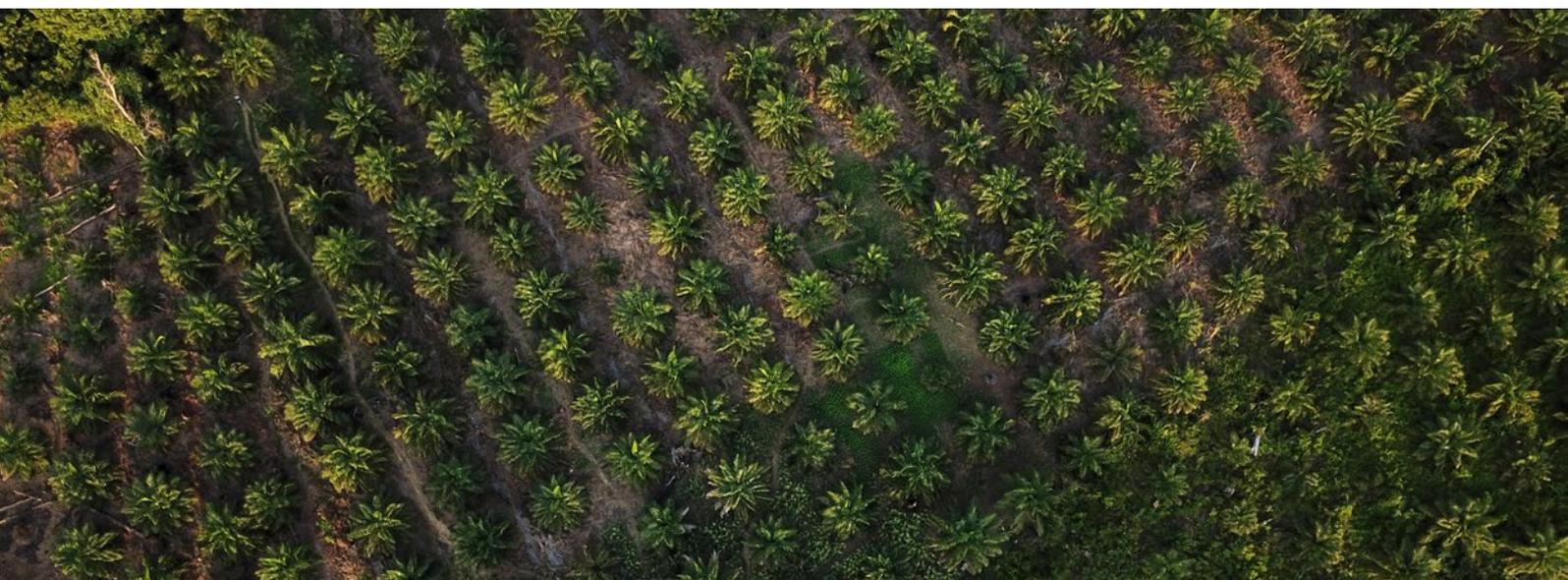
the forests these communities were dependent on. Besides losing access to forests, these communities now risk being forbidden to intensify land use on the land that is left.

### Due diligence and experiences from other sustainability initiatives

Besides defining the minimum requirements and cut-off date, the EU Proposal recommends a mechanism to ensure compliance (or a low risk of non-compliance) with these requirements. Certification or due diligence are examples of such mechanisms; each with its own characteristics. The 2020 Burkhardt report to the European Parliament stresses that voluntary certification has not been sufficient to stop deforestation, and recommends all companies that supply forest-risk and ecosystem-risk commodities, or derived products, to the EU to perform due diligence (Burkhardt, 2020). Certification can be complementary to due diligence processes that demonstrate reasonable steps towards improvement to prevent and mitigate risk, for example by providing support to suppliers to change their practices. Traceability is an important aspect of due diligence and therefore the structure of the palm oil supply chain is important. Also, the achievements and shortcomings of sustainability initiatives help to understand the feasibility of implementing due diligence, and what is needed to make it work in practice.

### Characteristics of the palm oil supply chain

Starting upstream, the palm oil sector has vast numbers of palm oil producers. On one side, there are a few fully integrated conglomerates involved in all stages of supply, managing hundreds of thousands of hectares of oil palm. On the other extreme there are millions of independent smallholders who each own a few hectares or less and sell to intermediaries who supply other traders or directly sell to mills. Based on spot market prices, independent smallholders receive relatively little due to long supply chains and poor quality of produce due to lack of proper inputs and implementation of good agricultural practices (Jelsma, 2019). In between are vast numbers of smaller conglomerates, stand-alone plantations, organised



smallholders and farmers with vast landholdings, who together supply to over 1,000 mills (Global Forest Watch, 2020). These mills supply only a few dozen companies who are involved in palm oil refining and trading. Most of these also own plantations, but the majority of palm oil comes from third-party suppliers (ten Kate et al., 2020). Refiners and traders then sell to large numbers of retailers and consumer goods manufacturers again. For example, a key purchaser of palm oil as Unilever procured a million tons of crude palm oil in 2016, which is an estimated 1.5% of global palm oil production in 2016.

### Lessons from 'no deforestation, no peat, no exploitation' policies

With about 80% of refining capacity in Indonesia and Malaysia under 'no deforestation, no peat, no exploitation' (NDPE) commitments (ten Kate et al., 2020), these are amongst the most widely adopted sustainability policies in the Indonesian oil palm sector. These commitments cover free, prior and informed consent (FPIC) for indigenous and other local communities, zero burning, preventing poor working conditions, and preserving high conservation value (HCV) areas, high carbon stock (HCS) areas and peatlands. Guidelines on NDPE implementation have been provided by the Accountability Framework.

Whereas uptake appears promising, experiences in NDPE implementation highlight at least four critical issues that require resolution. Firstly, though only a small share of total oil palm acreage, recently deforested lands could leak into the 20% of refiners that have not made NDPE commitments. Secondly, due to compounding palm oil at storage facilities and spot market trading, non-compliant palm oil can still enter NDPE supply chains (Wiggs et al., 2020). Thirdly, the government does not have sustainability requirements for palm oil used for its extensive biodiesel programme, creating more leakage opportunities (ten Kate et al., 2020). And finally, NDPE commitments focus on traceability of corporate plantations, mills and downstream (ten Kate et al., 2020), whereas the vast upstream independent smallholder supply chains proves the most complex to trace, monitor and support.

### Lessons from certification initiatives

As certification may facilitate demonstrating thorough due diligence processes of companies, it is worthwhile to reflect on two key certification standards for palm oil; the Round Table for Sustainable Palm Oil (RSPO) and the Indonesian Sustainable Palm Oil initiative (ISPO).

The RSPO is a private sector lead initiative established in 2004, which in Indonesia covered 1.9 million ha in 2019 or 13.4% of the total oil palm acreage, but with limited growth over the past five years (RSPO, 2019b). Audits and certification prove expensive and RSPO-certified

plantations in Indonesia are significantly larger than non-certified plantations (8,000 ha vs. 2,500 ha) (Santika et al., 2020). The RSPO supply chain has four options ranging from 'Identity Preserved' certified palm oil being completely traceable to the plantation, and the 'Book and Claim' system which allows trading of sustainably produced palm oil certificates. Although RSPO has a separate standard for smallholders updated in 2019 (RSPO, 2019a), and engages in many smallholder support programmes (RSPO, 2017), uptake by smallholders and medium-sized enterprises remains difficult (RSPO, 2019b). RSPO certification is dominated by corporate plantations, but there are smallholder groups who receive payments through the book and claim system, though initial steps were sponsored by external parties and if smallholders have to pay all costs, certification is not profitable (Hutabarat et al., 2018). Only 50% of certified palm oil is currently sold as such, and the lack of demand for certified palm oil remains a key challenge. RSPO has shaped discussions on sustainability and a recent IUCN report (Tinhout and Hombergh, 2019) concludes that RSPO shows best results in relation to both biodiversity protection and level of assurance. Still, RSPO appears unable to attain the critical mass to change the sector as a whole.

In reaction to private sector initiatives such as RSPO and retaking the initiative on shaping the sustainability agenda, the Indonesian government established the ISPO in 2011. This certification standard is based on national legislation, not explicitly including human rights, generally less stringent than RSPO, and leaves space for interpretation (Jensen et al., 2016). The authority and capacity of ISPO to implement or enforce sanctions have been limited, and solutions for conflicting laws and regulations are yet to be developed (Hidayat et al., 2018). However, ISPO is mandatory for all companies since 2014 and will also become mandatory for smallholders. ISPO is being strengthened (e.g. in Presidential Regulation No. 44/2020) but under current conditions is unlikely to provide the level of assurance demanded by the EU. In 2019, ISPO certification covered 63% of company-managed plantations, whilst smallholder certification covered a mere 0.1% of smallholder oil palm acreage (ISPO, 2019). Although 2022 has been mentioned as the year when all smallholders must be ISPO certified, a recent study on eligibility for certification in Kalimantan indicates that most smallholders cannot comply with the requirements (Schoneveld et al., 2019), a finding in-line with Tropenbos Indonesia's experience (see Box 2). These realities highlight that unless considerable investments are made in formalising and upgrading the sector, even the less stringent ISPO is likely to lead to smallholder marginalisation.

## Supply side measures: support through partnerships

The EU commission (2019) states it is committed to forming partnerships with producing countries, strengthening international cooperation, and redirecting finance to support more sustainable land-use practices. Next are initiatives that the EU may want to align with.

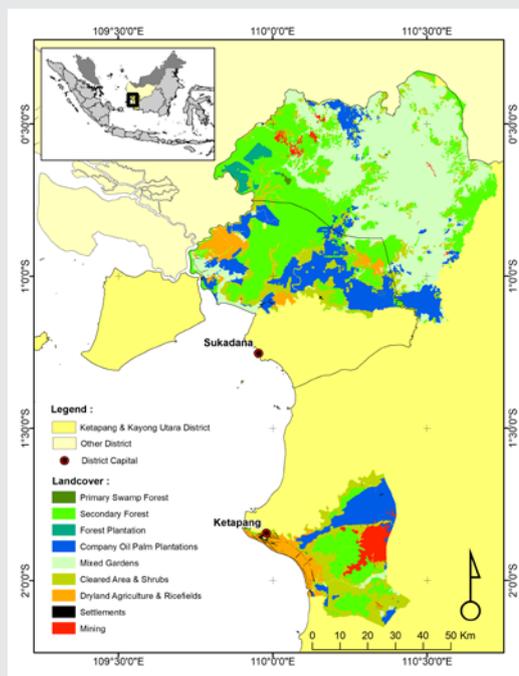
### Partnering with producer country

ISPO provides an alternative to sustainability initiatives that are perceived to be dominated by Northern perspectives. The EU could support and strengthen ISPO and subsequently acknowledge it as a robust system. Joint efforts could also reduce perceptions of antagonistic positions, develop trust, and a mechanism that combines

key priorities of Indonesia and the EU. Other government programmes involve land legality, reclassification and redistribution such as Tanah Objek Reformasi Agraria (TORA), countering overlapping land use claims through its One Map policy, peat restoration, and moratoria on further oil palm developments. Technical and financial support could improve the effectiveness of these programs. Legal frameworks must facilitate sustainable development, but forests eventually need to be protected at local level. Partnerships therefore need to support local authorities, extension services, forest management units and other services to improve sector compliance with legal frameworks and demonstrate benefits from protecting forests (see Box 2). Landscape approaches and multi-stakeholder platforms can foster these and deserve assistance.

## Box 2: Oil palm smallholders in West Kalimantan

Since 2017, Tropenbos Indonesia has engaged with independent oil palm smallholders in two separate landscapes in Ketapang and Kayung Utara districts, West Kalimantan. The Simpang Dua landscape is dominated by indigenous Dayaks, now surrounded by oil palm plantations, largely dependent on agroforestry and only recently engaging in oil palm cultivation themselves. The Pematang Gadung landscape covers a deep peat forest area close to the district capital, with an influx of migrants depending less on agroforestry and more interested in converting forests into oil palm. To halt forest encroachment, Tropenbos Indonesia has assessed the potential and challenges of developing a REDD+ result-based payment scheme in the Pematang Gadung area. Results highlight that under a business as usual scenario, smallholder oil palm is likely to be a cause of huge carbon emissions. Estimated amounts highlight that if local authorities tap into REDD+ funding, considerable resources could become available for protecting forests, huge carbon stocks, and for local development (see Purwanto et al., 2020).



Both suffer from a lack of information regarding land use, concessions, demarcation of forests and APL; with negotiated land use planning largely absent. Tropenbos Indonesia provided assistance in developing village maps through participatory land use planning, and supported initiatives legalising village forests. This provides locals with data that strengthens their position in discussions with other stakeholders. A further challenge is the absence of nationally recognised land documentation (SHM, Surat Hak Milik) and other official documents required for legally growing palm oil (e.g. STD-B, Surat Tanda Daftar Budidaya). Discussions with the local plantation office showed that whereas the government should assist smallholders in obtaining STD-Bs, there was no allocated budget for this. Similarly, much land ownership documentation provided by local authorities as traditional land titles, and conversion to SHM is prohibitively expensive for most smallholders. Furthermore, certification is almost unknown and implementation of good agricultural practices is limited (see Purwanto and Jelsma, 2020). Most oil palm smallholders in project areas operate individually with poor access to knowledge, finance and company support. Farmer organisations are a requirement for sustainability initiatives and can certainly provide farmers with benefits of scale, improving access

to inputs and markets. Tropenbos Indonesia supports this, and the establishment of BUM-Des, or village companies as intermediaries, suppliers and distributors of farm inputs, and to improve bargaining power. Such enterprises must be geared towards local development, can be partially financed through central government annual village funds since 2016, and profits can benefit the villages (see also Jezeer and Pasiecznik, 2019).

## Improving land use practices

Oil palm yields are far below potential and especially amongst smallholders due to little availability of quality planting material, poor knowledge about and money for balanced fertilizer inputs, and limited access to markets (Jelsma, 2019). Improving performance is vital for the sustainability of the sector, but besides a focus on intensive monoculture systems there is increasing attention on intercropping systems (Khasanah et al., 2020). Smallholders have different priorities and concerns than companies, and considerable differences between smallholders and

between landscapes require different solutions. Supporting smallholder access to knowledge and inputs is a basic necessity for improving performance, there is also a need for a concerted effort by academia, the private sector and government to investigate and make them available to farmers. Besides Tropenbos Indonesia (see Box 1 & 2), there are many worthwhile efforts by CSOs, actively training in good agricultural practices, preparing for certification, and lobbying for smallholder interests, and support to such organisations would increase their reach.

## Considerations

An EU Deforestation Action Plan is a unique opportunity for strong, legislative and other measures to help combat deforestation in the EU's importation, production and consumption of agrocommodities. Its effectiveness is determined by how smart these measures are developed. Based on the context and characteristics of the Indonesian oil palm sector, this analysis identifies the following considerations to be taken into account in developing a framework that will effectively halt deforestation.

1. EU requirements define a set of minimum requirements, that ideally, are aligned with national interests and frameworks. However, meeting minimum legal requirements is already proving complicated due to legal ambiguity and struggles over authority and related revenue streams within Indonesia. It is therefore uncertain how additional measures from 'outside' can be implemented, monitored and enforced. Equivalent issues are present in most producer countries and must be dealt with for any legal framework to become effective.
2. Due diligence is expected to be a critical component in an EU legal framework, requiring companies who trade with the EU to prove a low risk of deforestation, amongst other criteria, through full traceability of the supply chain. But experiences from voluntary sustainability initiatives show that this is complex, with considerable risks of leakage. Whereas traceability has improved over the last years, it remains to be seen whether the complete sector can, or wants to become fully traceable.
3. Sustainability initiatives have not been able to include the millions of oil palm producing smallholders to date, and a strict EU legal framework may further marginalise them as they receive little for the raw material but suffer high costs of compliance and certification. The huge independent smallholder oil palm sector in Indonesia developed informally with little support, and poses major risks to companies that need to prove due diligence. These are thus likely to avoid risky supply chains, leading to further marginalisation of independent smallholders.
4. A cut-off date of 2008, as currently recommended, will allow the EU to source palm oil from land deforested earlier, therefore meeting EU requirements. However, palm oil from more recently deforested land will still very likely find other markets, so the EU framework may fail its own *raison d'être* of moving beyond voluntary certification schemes to ensure an end to oil palm driven deforestation.
5. The main palm oil producing and consuming countries are in the global South, and this is fundamental to the role the EU can play. Whereas sustainability perspectives in the North emphasize environmental and human rights concerns, these are often perceived as limiting economic development opportunities in the South. In Indonesia, the oil palm sector is a key economic pillar and palm oil is likely to remain a key source of vegetable oil for the EU. As palm oil may well be more sustainable in multiple respects compared to its alternatives, it is essential that producing and consuming countries engage in institutional strengthening and developing partnerships, ranging from Voluntary Partnership Agreements to supporting organizations that deliver services at the local level.
6. The EU Commission appears committed to international collaboration to achieve this. Although Burkhardt (2020) states that EU operational costs for implementing a legal framework will be minimal, considerable investments must be made in building capacity and compensating lost opportunity costs in producer countries if the EU wants to truly halt deforestation. These collaborations should also involve other major palm oil destinations, promote responsible palm oil consumption, and stimulate the financial sector to invest in deforestation free supply chains.

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