Reaching zero deforestation in supply chains – why we need a jurisdictional approach

Many global companies have committed to eliminate deforestation from their supply chains by 2020. But as increasing global deforestation rates indicate, most of them are not on track to meet that goal. One reason could be that approaches are too narrowly defined. Taking the example of Indonesia, our authors demonstrate how an overarching approach could help implement these corporate zero-deforestation commitments and supply chain initiatives together with all involved stakeholders in a manner beneficial to forests, the overall environment and human beings – and at scale.

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The world's forests are under pressure. Despite the considerable efforts of the global community, the tropics lost 15 million hectares of tree cover on average in the last three years according to Global Forest Watch, including almost 5 million hectares of primary forest. The expansion of agriculture – both for commodity production and by smallholder agriculture – is responsible for up to 80 per cent of tropical deforestation. Notably soy, palm oil, cattle, pulp and paper but also natural rubber, cocoa, coffee and other agricultural commodities drive deforestation. Demand for agricultural land is projected to increase at the expense of forests – indirectly partly driven by the growing global population and related production and consumption patterns world-wide.

A major share of commodities produced on recently deforested lands is exported. The European Union (EU) alone accounts for 36 per cent of deforestation related to international commodity trade of crop and livestock products. Between 1990 and 2008, this corresponded to nine million hectares and about seven per cent of overall commodity-driven deforestation. Thus, the European market is also responsible for a significant share of biodiversity loss and greenhouse gas emissions. According to a recent publication in the journal Global Environmental Change, up to nearly 40 per cent of emissions from deforestation across the tropics is induced by international trade.

International commitments – well-meant, but insufficient

The private sector recognised its responsibility for deforestation in its supply chains in 2010, when the Consumer Goods Forum (CGF), an association of the world's largest consumer goods manufacturers and retailers, committed to eliminate deforestation from their soy, palm oil, beef and pulp and paper supply chains by 2020. In 2012, the Tropical Forest Alliance (TFA) 2020, convening governments, companies and civil society, was founded to implement the zero-deforestation goal defined by the CGF. The endorsement of the New York Declaration on Forests in September 2014 was another landmark signal. Governments, companies, civil society and indigenous people's organisations jointly committed to halve deforestation by 2020, to end it by 2030 and to support the private sector goals on zero deforestation. Since then, companies all along global supply chains have published more than 1,200 commitments to sustainable commodities, mostly for palm oil.

The zero-deforestation goals set by individual company pledges and collective aspirations such as the TFA 2020 are carried out through various supply chain instruments, ranging from codes of conduct to sustainability standard systems and moratoria. Most companies implement their commitments through the sourcing of products certified by sustainability standards. Relevant sustainability standards such as The Roundtable on Sustainable Palm Oil (RSPO) or the Roundtable on Responsible Soy (RTRS) have continuously strengthened their forest protection criteria. Following the adoption of the latest RSPO standard in November 2018, the RSPO now requires no deforestation by additionally integrating the High Carbon Stock (HCS) approach in the High Conservation Value (HCV) concept (see lower Box on page 11). The Soy Moratorium in the Amazon, a commitment by major soy traders not to source soy from lands in the Amazon deforested after 2006, is the first voluntary zero-deforestation agreement implemented at regional level. Over the last years, several transparency initiatives supporting supply chain instruments have been developed, such as TRASE, mapping links between production sites and consuming countries via trading companies, or Global Forest Watch, monitoring deforestation and restoration rates.

Photo: GIZ/ Thomas Heinen

Halimah Deny Sofian from Mentebah is one of the rubber farmers participating in the pilot project in Kapuas Hulu in West-Kalimantan/Indonesia. Photo: GIZ/ Canopy Indonesia

To end commodity-driven deforestation by 2020, companies would have to eliminate five million hectares of conversion from supply chains each year. However, they will fall short of this target. The impact assessment of the New York Declaration on Forests reveals that the rate of both annual global tree cover loss and tropical primary forest loss has increased rather than decreased since its endorsement. One reason why companies are not on track to implement their zero-deforestation goals might be a lack of ambition, for many company commitments cover only parts of their supply chains and lack time-bound, measurable targets. Besides, most focus on their production site and neglect the surrounding area, thereby potentially leading to leakage effects.

Why holistic approaches are needed

The pressure for zero deforestation from global supply chains has to be implemented at scale if forests are to be preserved. This is why a landscape approach is needed. With its support, sustainability and, notably, deforestation risks are addressed at landscape scale instead at farm level only – across commodities and together with stakeholders from governments, companies, civil society and, notably, smallholders. This is different to the certification of individual concessions, creating i.e. a sustainable palm oil plantation, however, lacking the impact on the surrounding landscape.

Depending on the definition of the project region, one refers to a "landscape" or a "jurisdictional" approach: "landscape approach" in the case of a project area defined by geographical characteristics and "jurisdictional approach" in the case of political or administrative boundaries. In both cases, the basis is formed by a multi-stakeholder platform, with ownership of all stakeholders being a crucial aspect of forest protection.

The jurisdictional approach put to the test in Indonesia

Kapuas Hulu is a district the size of Belgium located in the mountainous part of West-Kalimantan/Indonesia, bordering Malaysia. It hosts two national parks and, with the lake and peat region around Lake Sentarum, the upper course of Kapuas River, Borneo's largest river system. Seasonal outflows of Kapuas River into the surrounding lakes and peatlands prevent massive floodings at the lower stream around Pontianak, the provincial capital. More than 70 per cent of Kapuas Hulu is classified as forest, providing habitat for numerous species, among them Orang-Utans. This unique ecosystem must be preserved.

> Landscape [or jurisdictional] approaches seek to provide tools and concepts for allocating and managing land to achieve social, economic, and environmental objectives in areas where agriculture, mining, and other productive land uses compete with environmental and biodiversity goals.
> (Sayer et al., 2013)

Subsistence agriculture and rubber production were the most common use of arable land in the region until oil palms arrived in the 2000s. In order to support sustainable development while protecting ecosystems in Kapuas Hulu, in 2016, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), on behalf of the German Development Ministry (BMZ), initiated a jurisdictional approach in order to build up deforestation-free supply chains of various commodities from Kapuas Hulu to Germany. Here, instruments are to be piloted that could also be suitable for other project regions. Since the project is being implemented in the administrative entity of the district, its approach is referred to as jurisdictional.

> Landscape and jurisdictional approaches encompass a variety of mechanisms but, at their core, they bring regional stakeholders together to agree on and implement a shared approach to a more sustainable use of natural resources and land use management.
> (ISEAL 2019)

In 2017, the partnership started with the local government of Kapuas Hulu and GIZ signing a Memorandum of Understanding to jointly work for balancing agriculture and forest protection. As a next step, a local multi-stakeholder platform has been convened to identify local sustainability risks and to jointly develop strategies that take into consideration both ecosystem protection, agricultural production and economic development of the district. International sustainability goals are thereby translated into locally adapted and, most importantly, accepted sustainability goals. It is of crucial importance that every member has its value proposition for being in the platform, be it a smallholder, the private sector or the local government. To adequately represent the often diverging interests of all stakeholders is a major task. The conflict resolution desk provides support with land tenure issues. In order to ensure that people and forests will co-exist in the long-term, incentives have to be created, in order to win over the support of the local

inhabitants in protecting the forest. Therefore, the platform supports sustainable agricultural intensification to increase the income of local smallholders.

A preferred sourcing region for companies and a biosphere reserve

The jurisdictional approach is an important step on the road to a preferred sourcing region for companies with zero-deforestation targets. In the long run, local producers enjoy preferred market access to buying companies committed to forest protection and sustainable, certified products. Companies trading in verifiable sustainable products may enjoy better access to critical markets as well as preferential credit lines from banks supporting enterprises which intend to de-risk their supply chains. Moreover, their supply with raw material might also be better secured in the long run, as it is coming from a sustainably managed region.

To reduce the costs of certification, the sustainability requirements of internationally recognised standard systems are integrated into land-use planning. The High Conservation Value Resource Network – a coalition of organisations based on an initiative by the Forest Stewardship Council (FSC) – developed a new guidance to identify high conservation value (HCV) areas on a jurisdictional scale, and not only on the individual farm. The concept (see lower Box) is piloted in Kapuas Hulu. Biodiversity benefits from this as well: Zooming out to the jurisdictional scale, biodiversity corridors connecting habitats can be identified as HCVs that were neglected in previous assessments at farm level.

The next step is guidance on identifying both HCV and High Carbon Stock (HCS) areas on a jurisdictional scale at the same time. Together with partners, monitoring and transparency instruments that observe deforestation frontiers and ensure the traceability of products from Kapuas Hulu to Germany are developed. In a public-private partnership with a global German tyre manufacturer, GIZ supports local farmers with the sustainable production of natural rubber. The first shipment of sustainable and traceable rubber from Kapuas Hulu arrived in Germany in 2019, proving that the concept is implementable.

All these processes have inspired the district government to revive its goal as a conservation district as proclaimed in 2003. The appointment of Kapuas Hulu as a UNESCO biosphere reserve called Danau Sentarum/Betung Kerihun in 2018 confirmed the vision for the district as outlined in the jurisdictional approach: a sustainable agricultural development protecting forests and beneficial for people.

References: **www.rural21.com**

DEFINITIONS: WHAT IS A FOREST? WHAT IS DEFORESTATION?

The identification of **deforestation** requires a clear understanding and definition of the term 'forest'. There is common understanding that a forest is composed of trees, ecologically characterised by a microclimate of its own and specific nutrient flows, providing a variety of habitats and ecological niches and thus being home to a respective forest flora and fauna. The UN Food and Agriculture Organization (FAO) gives a globally accepted definition which is applied in its Global Forest Resources Assessments.

Forest definition by FAO (2018)

- Extent (surface area): > 0.5 ha
- Size (vegetation height): trees > 5 m tall
- Canopy cover (horizontal projection of tree canopy): > 10 %
- Management: exclusion of agricultural or urban land use as agroforestry, palm oil plantations or olive orchards

These figures refer to 'potentials'. Hence, an area recently logged but intended to be reforested formally is considered as forest.

Deforestation is the act of converting forest permanently to another land-use or to reduce the canopy cover permanently below a given minimum value. Since agricultural usage generally disqualifies the classification of tree stands as forests, even if they dominate the landscape as in home gardens or other agroforestry systems, their clearance would not be deforestation according to FAO terminology.

FAO defines a **forest area net change** as the difference in forest area between two Forest Resource Assessments. The net change can be either positive (gain), negative (loss) or zero (no change).

Zero net deforestation means that the total forest cover within a given landscape did not change over a certain period. This does not preclude local (legal) deforestation as long as it is compensated by reforestation elsewhere in the respective landscape. Thus, theoretically, natural forest can be compensated for by a pulp and paper or rubber plantation.

Zero gross deforestation, on the other hand, refers to the loss of forest area over a given period, without considering any reforestation or afforestation.

Source: FAO, 2018: Global Forest Resources Assessment 2020

The **High Conservation Value (HCV)** concept is an internationally accepted instrument to identify ecosystems deserving protection by six natural and social values:

- HCV 1: Species diversity significant at global, regional or national levels
- HCV 2: Landscape-level ecosystems, ecosystem mosaics and intact forest landscapes (IFL) significant at global, regional or national levels
- HCV 3: Rare, threatened or endangered ecosystems and habitats
- HCV 4: Ecosystem services in critical situations
- HCV 5: Community needs satisfied by sites and resources, identified through engagement with the community
- HCV 6: Cultural values of importance for the traditional cultures of local communities or indigenous people

The concept is applied by governments, companies and civil society and is integrated in several sustainability standards.

The **High Carbon Stock (HCS)** approach is a methodology to distinguish landscapes of high protective value thanks to their considerable carbon stocks from degraded landscapes with low carbon stocks and few biodiversity values which might be converted. The methodology was developed with the aim to ensure a practical, transparent, robust, and scientifically credible approach that is widely accepted to implement commitments to halt deforestation in the tropics while ensuring that the rights and livelihoods of local peoples are respected. The HCS approach stratifies the vegetation into six classes by using satellite data and ground survey measures.

Source: https://hcvnetwork.org; http://highcarbonstock.org

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