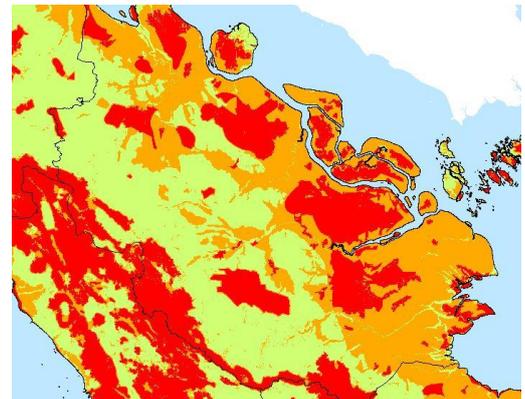# Smallholder risk assessment and mapping tools

Goal

To develop innovative, appropriate and accessible technologies that help smallholders minimise deforestation and other environmental impacts, and better understand how doing this can benefit them and other land users.

Proforest programmes create the enabling environment and capacity needed for the private sector, working with governments and civil society, to deliver agricultural and forest commodities sustainably at scale.

Recent highlights

- Established in April 2016, the programme builds on substantial work of the SHARP partnership, in particular, the development of a simplified High Conservation Value (HCV) approach for smallholders and a Smallholder Risk Assessment Model, SHRAM.

Mapping probability of HCV 1-3 presence in Indonesia

Context

Smallholders produce a significant proportion of agricultural commodities, for example, 40% of global palm oil. Such smallholdings are often a critical source of income. However, they are also often drivers of deforestation and other adverse environmental and social impacts. Such negative impacts increasingly risk the wellbeing of smallholders, both directly in terms of issues such as water quality, but also financially because access to markets increasingly requires smallholders to demonstrate their practices are aligned with the responsible sourcing policies of many global supply chain actors, policies that include the elimination of deforestation from their sourcing. Smallholders struggle to meet and demonstrate responsible production practices due to their limited technical and / or financial capacities.

Technology and data, when made accessible, can make it feasible for smallholders to meet responsible production requirements of downstream supply chain actors and hence to access associated markets.

In particular, numerous remote sensing datasets now exist that can support improved, cheaper and more timely land use management decision making and conservation planning. However, often these datasets are not used by the land users that would benefit most, particularly smallholders, due to a lack of awareness, technical know-how or cost.

Approaches

As one of Proforest's smallholder programmes, the niche of this programme is to enable smallholders to meet and demonstrate responsible production practices. To do so the programme:

1. **Develops robust tools for smallholders and support organisations to use for mapping environmentally important areas.** The tools will use high resolution remote sensing datasets to produce maps, such as environmentally important areas or areas of High Conservation Value probability, that are closely aligned with requirements of certification schemes and private sector commitments across supply chains.

2. **Uses mobile technology**, such as apps that provide a simplified, user-friendly, widely accessible and affordable way to view and interact with maps and risk assessment tools.

3. **Creates tools for companies to simplify the assessment of risks to HCVs,** or other potential environmental impacts of production, across supply bases. Companies then use the risk assessment to prioritise where and how they support smallholders to improve environmental practices and productivity. For example, this includes building on the Responsible Sourcing from Smallholders (RSS) framework as developed by the SHARP partnership. The aim is to incorporate RSS and HCV components into simplified online tools and platforms.

Sharing maps with community stakeholders

Access and awareness are major limits to the uptake of technological solutions, and so a key feature of this programme is to raise awareness through targeted webinars and capacity building, with local partner organisations that work with smallholders or their organisations directly.

Priorities

• Development of a simplified HCV approach for new plantings in RSPO Group Certification

• Reducing deforestation in smallholder supply bases with Global Forest Watch (GFW): capacity building and tool development

• Conduct a proof of concept field trial of a smallholder-targeted mobile app to use GFW data and trial new data collection methods. Specifically, the app will support smallholders in conducting simplified HCV assessments and RSS risk assessments

Proforest International Office| T: +44 (0)1865 243439| info@proforest.net | www.proforest.net/programmes
V1.2 | SEPTEMBER 2016

2