NATURAL PRODUCTION FORESTS

Their economic and ecological value in Indonesia

Natural production forests (or *hutan alam produksi*) cover 57 million hectares or 48% of the total forest area in Indonesia, roughly 1.5 times the size of Norway. More than 60 million people in the country depend on them for their income and daily needs.

Beyond providing timber, watershed, recreational and other social, cultural and economic benefits, these forests also have a critical role to play in fighting climate change. They do this by acting both as carbon sinks and sources.



Higher levels of carbon dioxide and nitrogen in the atmosphere make it impossible to say with certainty whether one saves more carbon by harvesting trees or preserving them to their full maturity.

However, it remains clear that the way timber is taken from and allowed to regenerate within natural production forests, significantly affects the degree to which a forest both stores and emits carbon dioxide.

Indonesia hosts one of the largest forest areas in the world. The quality of forest management plays a critical part in fulfilling Indonesia's carbon emissions reductions commitment under the Paris Agreement.



What is the value of a vibrant and successful natural production forest?

Trees can be cut and removed from a forest in different ways. When this is done sustainably, natural production forests can provide a wide range of economic and ecological benefits:



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TIMBER PRODUCTS



NON-TIMBER PRODUCTS



FOOD



BIO PRODUCTS



CARBON STORAGE



BIODIVERSITY CONSERVATION



SOCIAL AND CULTURAL BENEFITS



RESOLUTION OF SOCIAL CONFLICTS



WATER AND AIR PURIFICATION

NATURAL PRODUCTION FORESTS

Reduced Impact Logging Carbon (RIL-C)

Work by The Nature Conservancy and the Tropical Forest Foundation in East Kalimantan province has shown that carbon emissions from timber extraction can be reduced by as much as 50% when RIL-C practices are used.

RIL-C offers:

- 1. A set of cost-effective targeted actions to reduce carbon emissions from the logging practice.
- 2. A methodology to credibly quantify the carbon emissions from logging activities.

Conflict Resolution

Sustainable forest management certification in Indonesia routinely requires timber companies to assess and manage conflict both with and among communities living in and near natural production forests.

In West Kutai District, East Kalimantan, years of dispute over unclear village boundaries among 13 villages was brought to an end through forest certification process of two logging concessions.

Biodiversity Conservation



In Indonesia, natural production forests are home to the highest levels of biological diversity in the world. The country is often referred to as the most species rich country on Earth.

Companies licensed to manage natural production forests have indeed a major role to play in employing sustainable management techniques that will enable these forests to deliver a wide range of ecosystem services and products.

What are the current challenges facing Indonesia's forestry sector?

The area of natural production forests in Indonesia is rapidly declining due to strong pressures to convert these forests to monoculture timber plantations or non-forest land use, such as oil palm.

Licensed logging concessions occupy only 35% of the total natural forest area allocated for production, and only half of these are in operation due to financial constraints.

The Nature Conservancy commissioned a study to look at why this is happening. What we found is that most logging concessions experience a combination of high production costs and low prices for logs, with a typical logging concession losing approximately USD 60,000 per year.

Causes:

- \$ Low prices of logs on the domestic market.
- 33-years total ban on the export of logs to markets offering higher prices.
- The absence of policies and regulations enabling logging concessions to generate additional income from waste wood, ecotourism and other forest related business.

What will happen if we don't take action?

If this trend continues, the end is in sight for Indonesia's natural production forests and the animals and people whose lives depend on them. We will not be able to enjoy anymore the wide range of benefits that forest ecosystems provide when managed sustainably. This includes the ability of forests and peatlands to deliver an expected 60% of Indonesia's carbon emissions reduction target in its Nationally Determined Contribution (NDC) under the Paris Agreement.

We can't allow this to happen. This is why, together with the government and businesses in East Kalimantan, we are preparing to test new models to improve the profitability and sustainability of natural production forest management. If successful, these initiatives may also provide incentives to support:

- 1. The implementation of the Ministry of Forestry and Environment's mandatory sustainable forest management standard.
- 2. An expected regulation requiring all concessions to practice RIL-C.







