

Supported by:



Implemented by



based on a decision of the German Bundestag

# Piloting nature-positive economic recovery in Indonesia

**Improving framework conditions and measures to contribute to the conservation of biodiversity, functioning ecosystems and pandemic prevention.**

## Framework conditions

Indonesia is a megadiverse country with two of the world's 25 biodiversity hotspots. Its ecosystems host large numbers of endemic, often threatened species. Rainforests are still widespread in Indonesia, however, not many 'primary' rainforest areas are left as most have already been altered by human activities. Apart from providing environmental services, rainforests often serve as a wildlife corridor connecting national parks, which is particularly important for endemic species such as the orangutan.

The COVID-19 pandemic has negatively impacted Indonesia's economy throughout 2020 and 2021, which increased the risk for communities to choose unsustainable land use to secure their short-term financial needs. Therefore, the Indonesian Ministry of National Development Planning (BAPPENAS) has developed a roadmap that sets out a framework to prioritize green recovery initiatives in the Indonesian national planning and budgeting processes. It intends to sustain and generate more than 300,000 jobs and avoid further biodiversity loss and emissions of more than 400 million tCO<sub>2</sub>e over the next 25 years.

## Project approach

The pilot project on nature-positive recovery and sustainable supply chains in Indonesia, supported by the global project "Design and first implementation steps of the Global Biodiversity Framework" (BioFrame), funded through the International Climate Initiative (IKI) of the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV), is carried out in Kapuas Hulu district, West Kalimantan province.

It aims to create practical evidence for the benefits and functionality of nature-positive recovery measures by implementing activities that can add value to the Tengkwang value chain. Thereby offering alternative incomes and sustainable economic improvements for local communities while reducing the pressure associated with timber extraction on Tengkwang trees and the forest ecosystem. Tengkwang trees (*Shorea stenoptera*) are endemic to West-Kalimantan and Borneo. The oil which can be extracted from the Tengkwang fruits, has been used by the indigenous Dayak people for centuries for cooking, skin care, and ceremonial purposes. It has properties similar with cacao butter and can be used as a substitute for cacao butter in the cosmetics industry. The potential of Tengkwang butter has been known for many years, but mostly for cosmetics purposes.





As a commodity, it can contribute to generating incomes for the local population and to ensuring equal participation rights and benefits, for women, indigenous peoples, and other marginalized groups.

The pilot in Kapuas Hulu district, West Kalimantan province focuses on local economic development, improved livelihoods, conservation of species and restoration of forest ecosystems in production landscapes, thereby enhancing overall biodiversity. This is pursued through adding value locally to the Tengkwang value chain in Kapuas Hulu and the gradual cultivation of the tree. Experiences and lessons learned will be documented in knowledge products, and fur-


ther conceptualized for exchange with other countries and for general replication and upscaling in Indonesia. In this way it will make a contribution to the implementation of the Global Biodiversity Framework.

### Activities

Local communities in four villages of the Labian Leboyan watershed are supported to increase their capacities for adding value to the Tengkwang value chain locally. This is done by propagating and planting Tengkwang trees on community and private land, collecting, pre-processing, and



**1,299** households in 7 villages depend on the forest and its biodiversity.



**94** people, of which 46 are women, joined the **Tengkwang Network**.




Positive impact on **human and environmental health** and **economic development**.



Increased **awareness** and use of **traditional knowledge**.



An endemic species with cultural value is restored and contributes to increased biodiversity and **intact forest ecosystems**.



Around **60 kg of Tengkwang nuts** can be collected daily per household during the harvest season.

Four kg of Tengkwang nuts can produce **one kg of Tengkwang butter**.



The market price for **Tengkwang nuts** is around **6,000 Indonesian rupiah** (equivalent to **USD 0,40**) per kg. **Tengkwang butter** fetches prices up to **120,000 Indonesian rupiah** (equivalent to **USD 7.85**) per kg.





processing Tengkawang nuts into Tengkawang oil and its derivatives. Furthermore, the communities are supported to organize themselves in Tengkawang community groups, to engage with industry stakeholders and market actors and participate in district- and province wide Tengkawang networks for outreach, knowledge exchange, and dissemination of lessons learned. These activities are carried out in close cooperation with the NGO Riak Bumi as the local implementation partner.

Other interventions include trainings, workshops, market studies, tree surveys and policy advice to the Directorate of Agriculture and Food in BAPPENAS as the political partner, to influence and improve the Tengkawang value chain holistically.

## Results

Since implementation began in October 2021 the farmers in the target area have been supported to plant some 12,000 seedlings of *Shorea stenoptera* on village and private land. Moreover, Standard Operating Procedure have been developed for nurseries and planting. Two Tengkawang agroforestry demonstration plots, four community collector groups and a Tengkawang Network called “Simpul Jaringan Tengkawang Kabupaten Kapuas Hulu” at district level,



comprising non-governmental organisations, collector groups, and government stakeholders, have been established. An annual meeting in the provincial Tengkawang Network was supported and facilitated contacts between the target community groups and private sector entities.

Conceptual and ‘lessons learned’ studies shall contribute to national planning processes and support the implementation of the Kunming-Montreal Global Biodiversity Framework (GBF). This shall contribute to scaling up long-term results, such as securing people’s livelihoods through the sustainable use of Tengkawang nuts.

## Sources

- [Nature-positive Recovery | Internationale Klimaschutzinitiative \(IKI\) \(international-climate-initiative.com\)](#)
- [Biodiversity relevant jobs | Internationale Klimaschutzinitiative \(IKI\) \(international-climate-initiative.com\)](#)



## CONTACT

IKI Support Project for the Design and Implementation of the New Global Biodiversity Framework (BioFrame)  
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Friedrich-Ebert-Allee 32+36 • 53113 Bonn • Germany  
Ifiran Destianto Imanda ([ifiran.imanda@giz.de](mailto:ifiran.imanda@giz.de))  
Sylvia Wicander ([sylvia.wicander@giz.de](mailto:sylvia.wicander@giz.de))  
Mathias Bertram ([mathias.bertram@giz.de](mailto:mathias.bertram@giz.de))  
Per Rasmussen ([per.rasmussen@giz.de](mailto:per.rasmussen@giz.de))

Design: kipconcept gmbh, Bonn

Photo credits:

Benedikt Ibele (p. 1); Reinhard Hilliger (p. 2, p. 3 above);  
Per Rasmussen (p. 3 below)



[twitter.com/iki\\_germany](https://twitter.com/iki_germany)



[international-climate-initiative.com](https://international-climate-initiative.com)