



# Developing a regional action plan for sustainable palm oil in Pulang Pisau Regency

This document is part of the research project “Strengthening Jurisdictional Approaches in the Indonesian Palm Oil Sector” by CIFOR-ICRAF and University of Palangka Raya in Pulang Pisau Regency, with support of Walmart Foundation

## Introduction

Palm oil is Indonesia’s main commodity in both international trade and industry. It contributes significantly, with oil palm smallholders playing an important role. Oil palm plantation development contributes to deforestation, and is a major cause of biodiversity loss, greenhouse gas emissions, land degradation, forest and land fires, and other impacts.

Palm oil is also relevant to, and has huge implications for women, allowing them to play important roles in cultivation and post-harvest processes. However, there are a variety of gender challenges in the sector, one of which is a lack of women’s representation in oil palm farmer group organizations. Efforts have been made to encourage the realization of a sustainable and inclusive palm oil sector, for instance through certification and the formulation of national and regional action plans for sustainable palm oil (RAN KSB and RAD KSB, respectively).

Strong intersectoral links in the palm oil sector make synchronization and collaboration between sectors important in developing a shared vision for achieving sustainability. These are made possible and encouraged in Jurisdictional Approaches (JAs), which are increasingly seen as pathways for achieving a sustainability transformation. An example of a palm oil sector JA in Pulang Pisau Regency is the multistakeholder process used for developing the region’s RAD KSB.

This contributory document is part of research to facilitate the development of a shared vision for strengthening jurisdictional sustainable palm oil initiatives in Pulang Pisau Regency. It contains the results of trade, supply chain, value chain, risk and deforestation analyses, and is supplemented with a Theory of Change, a Theory of Action and a Monitoring and Evaluation Framework. We also model sustainable palm oil policy scenarios through the Jurisdictional Approach for Palm Oil Sustainability (JAPOS) simulation tool.

## Forest and land cover change dynamics and palm oil developments

Pulang Pisau Regency had 50% natural forest and peat forest land cover in 2000. By 2019, this forest cover had shrunk to only 36% of the regency's total area. Over the nineteen years, significant expanses of natural forest cover, including mangroves, were converted to agricultural land, scrub, plantation forests and oil palm plantations. Natural forests converted for agricultural land, later became scrub, plantation forest and oil palm plantation land. A similar trend occurred with peat forests. Results of a multitemporal spatial analysis showed most forest loss in Pulang Pisau Regency being linked to oil palm plantation expansion, much of which occurred in the southern part of the regency.

## Palm oil production

Along with rubber, palm oil is a major commodity in Pulang Pisau. The total area of registered oil palm plantations in the regency is 46,064 ha, 93.4% of which is controlled by companies. Total crude palm oil (CPO) production from company and smallholder plantations reached 124,064 metric tons in 2017, with productivity being slightly higher in company than smallholder plantations at 4.99 tons of CPO ha<sup>-1</sup>.

## Palm oil trade

Total palm oil trade volume from Pulang Pisau Regency was recorded at 285,876 tons for 2020. This was less than 1% of total national palm oil trade volume. Around 85% of this palm oil was sold in domestic markets, while the remainder was exported to 126 countries, including China, India, Malaysia, Pakistan and other Asian countries. Total palm oil trade value in Pulang Pisau reached USD 44 million in 2020.

## Value chain and supply chain traceability

In 2019, around 96% of palm oil produced in Pulang Pisau came from large plantations, with the remaining 4% coming from smallholder estates. Fresh fruit bunches (FFBs) from these plantations were supplied to palm oil

mills to produce CPO. Most palm oil produced in Pulang Pisau was traded in the form of CPO (87% of production volume), 85% of which was traded in domestic markets, with the remaining 15% being processed in domestic refineries to produce refined palm oil (RPO) for export.

In terms of traceability, affiliations to certain corporate groups' trade chains could only be identified for 1% of palm oil produced in Pulang Pisau. Of 95 value chain case studies in 2020, only 4% could be traced.

## Risks and problems in achieving sustainable palm oil

Outcomes of a hypothetical risk analysis showed Pulang Pisau Regency having a high-risk score of 0.76 out of 1.00. Reviewed based its indicators, the greatest risks for Pulang Pisau came from mills in the regency not having sustainability certification, and stagnation in jurisdictional approaches in the sustainable palm oil sector. During discussions, stakeholders identified major problems, grouping them into legality, productivity, social and environmental issues.

## Palm oil actors and social networks

There were 119 actors forming 209 networks in the palm oil sector. Actors at the regency level in Pulang Pisau had links to others at the national and Central Kalimantan provincial levels. Important actors, in no particular order, were the Central Kalimantan Provincial Government, the Central Kalimantan Plantations Office, the Central Kalimantan Cooperatives and Micro, Small and Medium Enterprises Office, the Central Kalimantan Regional Secretary, the Central Kalimantan Indonesian Palm Oil Association (GAPKI), the Pulang Pisau Regency Agriculture Office, oil palm companies, the Oil Palm Plantation Fund Management Agency (BPDPKS), the Roundtable on Sustainable Palm Oil (RSPO), communities, independent smallholders, and development partners (NGOs). These stakeholders and their functions were identified further in the context of a Theory of Change logical framework.

## Gender roles

The Pulang Pisau Regency Government's commitment to supporting central government policy on gender mainstreaming was laid out in Regent Regulation No. 12/2020. This gender mainstreaming policy is carried out in Pulang Pisau to accelerate the realization of gender equality in accordance with national policy stipulated in Presidential Instruction No. 9/2000 on Gender Mainstreaming in Development, and Minister of Home Affairs Regulation No. 67/2011 on General Guidelines for Gender Mainstreaming in Regions.

The population of Pulang Pisau comprises various ethnicities, predominantly Dayak, Banjarese and Javanese. Patriarchies dominate, have been formed by cultural values and past experiences, and are ingrained in family and community life. In the palm oil sector, female workers play important roles in production processes as they are more thorough and cautious in their work. Women's involvement is vital in land clearing, nursery and seeding processes, and in spraying, crop maintenance and gathering loose fruit. Many women working in oil palm plantations have a double burden, with jobs to do at home as well as in plantations.

## Policy support for sustainable palm oil

Jurisdictional approaches in Pulang Pisau Regency are designated through the Green Growth Strategy (GGS) for land development, which includes oil palm. The strategy identifies green growth interventions by focusing on four main sectors, one of which is the plantations sector. The GGS has also been integrated into the Regional Medium-term Development Plan (RPJMD), the Central Kalimantan Regional Action Plan for Sustainable Palm Oil (RAD GRK) and the Regional Strategy for Reducing Emissions from Deforestation and Forest Degradation (STRADA REDD+). Palm oil is a new commodity in Pulang Pisau Regency, which has a replanting programme for community smallholders. Pulang Pisau has also established a multistakeholder forum called Forum Hapakat Lestari.

## Strengthening the sustainable palm oil vision and RAD KSB through TTM

The Theory of Change (ToC), Theory of Action (ToA) and Monitoring and Evaluation Framework (MEF), referred to collectively as TTM, are tools for determining shared visions in a participatory manner. Stakeholders in Pulang Pisau Regency have a vision to Realize reduced deforestation, increased biodiversity and enhanced community livelihood resilience in Pulang Pisau Regency, Central Kalimantan Province by 2030. Through a TTM workshop, stakeholders formulated indicators for gauging the achievement of this vision, including a 50% reduction in deforestation; the conservation of 240,377 ha of protection forest and 4,675,105 ha of peatlands; and the establishment of 216,595 ha of nature reserves. Based on study outcomes, the research team recommended more progressive indicators, by targeting forest protection and no deforestation on 356,228 ha; reducing deforestation by 80% in other land use or *Areal Penggunaan Lain* (APL) areas; and balancing these by increasing intensification by 20% to increase smallholder growers' incomes by 20%. These goals or impacts would be achieved in Pulang Pisau Regency through three change pathways: data, regulation and legal compliance; biodiversity and ecosystem conservation; and economic empowerment and enhancement of sustainable enterprises. Already developed change pathways also have the potential to encourage gender transformation.

## Modelling sustainable palm oil policy impacts through JAPOS

JAPOS, or Jurisdictional Approach for Palm Oil Sustainability, is a tool for modelling impacts of sustainable oil palm policy scenarios, which policymakers can use to understand synergies and trade-offs between economic, social and environmental factors. It models policy interventions elaborated in the RAD KSB, where models project future impacts of implementing interventions to achieve sustainable palm oil. In this study we developed three scenarios: Business As Usual (BAU); No Deforestation and No Peat (NDP); and a scenario combining NDP with intensification, certification and incentives (premium prices, a carbon tax and ecological fiscal transfers).

JAPOs simulation outcomes showed the NDP scenario combined with intensification, certification and incentives reducing cumulative deforestation by 100% of the BAU scenario, and greenhouse gas emissions by 85%–86% of the BAU scenario. However, there would be reductions in crude palm kernel oil (CPKO) production, plantation area development and trade value.

## Key recommendations for Pulang Pisau Regency's RAD KSB

Key recommendations generated from TTM and JAPOs formulae were a shared vision and recommendation points, which were then outlined in a matrix comprising five components: strengthening data, coordination and infrastructure; capacity building and accelerated replanting for growers; environmental management and monitoring; governance and handling disputes; and Indonesia Sustainable Palm Oil (ISPO) certification implementation and market access for palm oil products.

The shared vision established for Pulang Pisau Regency is to Realize reduced deforestation, increased biodiversity and enhanced community livelihood resilience in Pulang Pisau Regency, Central Kalimantan Province

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JAPOs simulations showed the scenario with an NDP policy in combination with intensification, certification and various incentive and disincentive schemes could reduce cumulative deforestation by 29,300 ha, or 100% of the BAU scenario, and annual emissions by 5.2 MtCO<sub>2</sub>e, or 86% of the BAU scenario. Even though implementing this scenario would have impacts in reduced crude palm kernel oil (CPKO) production and palm oil trade value, these could be overcome by increasing intensification and incentives to achieve a balance between economic and environmental factors for the attainment of a sustainable palm oil sector.