

OIL PALM IN INDONESIA

GOVERNANCE, DECISION MAKING, & IMPLICATIONS FOR **SUSTAINABLE DEVELOPMENT**

SUMMARY FOR POLICY MAKERS & PRACTITIONERS

Gary D. Paoli | Piers Gillespie | Philip L. Wells | Lex Hovani Aisyah Sileuw | Neil Franklin | James Schweithelm









OIL PALM IN INDONESIA GOVERNANCE, DECISION MAKING, AND IMPLICATIONS FOR SUSTAINABLE DEVELOPMENT Summary for Policy Makers & Practitioners

By Gary D. Paoli , Piers Gillespie, Philip L. Wells , Lex Hovani, Aisyah Sileuw, Neil Franklin, and James Schweithelm

Published by: The Nature Conservancy Indonesia Program, Jakarta

This research and analysis was conducted by Daemeter Consulting and The Nature Conservancy (TNC) with funding provided from the people of United Stated of America through the United States Agency for International Development (USAID) and Responsible Asia Forestry and Trade (RAFT).

Responsibility for content of this report is attributable to the authors and does not necessarily reflect the views of TNC or supporting donors.

All material contained within this document may be freely copied and distributed provided such copies are made in full without modification, and proper citation is made to the original source.

Recommended citation: Paoli G.D., P. Gillespie, P.L. Wells, L. Hovani, A.E. Sileuw, N. Franklin and J. Schweithelm (2013) Oil Palm in Indonesia: Governance, Decision Making and Implications for Sustainable Development. The Nature Conservancy, Jakarta, Indonesia.

Cover photo credits: Gary D. Paoli, Piers Gillespie, R. Harjanthi.

Acknowledgements

The authors acknowledge The Nature Conservancy (TNC) for its foresight to commission this study. The authors also wish to thank the people of United States of America through the United States Agency for International Development (USAID) and RAFT whose funding made this work possible. The authors wish to acknowledge contributions from Andiko, Rahayu Harjanthi, Rendi Dharma, Ciska, Dr Yohannes Samosir, Elinor Benami, Elizabeth Yaap and Erik Meijaard. The authors also gratefully acknowledge participants in a one-day seminar held in Jakarta in July 2011, but make no claims that content presented in the report is endorsed by them.

TABLE OF CONTENTS

4

EXECUTIVE SUMMARY	6
Context And Rationale For The Study	6
Analytical Approach	6
Key Recommendations	7

 EL IE	001	ITEVT	
I HE	CUN	ITEXT	

1.1	Palm Oil: A Strategic Development Opportunity And Challenge	12
1.2	Palm Oil Governance In Indonesia	13
1.3	Purpose And Rationale	16

12

17

21

2 RESEARCH **APPROACH**

2.1	Identify Key Decision Points And Actors Involved	17
2.2	Describe Expected Outcomes Of Decisions	18
2.3	Develop Recommendations To Promote Green Growth Outcomes	19
2.4	Overview Of The Full Report	19

3 SUMMARY OF FINDINGS

3.1	Decisions That Determine Where Oil Palm Licenses Are Issued	21
3.2	Decisions Affecting Environmental Impacts Of Plantations And Mills	27
3.3	Decisions That Influence Company-Community Relations In Palm Oil	30
3.4	Cross-Cutting Findings	33

4 KEY RE	ECOMMENDATIONS	35
4.1	Strengthen And Improve Local Government Systems For Management Of The Palm Oil Sector	36
4.2	Support A Multi-Stakeholder Process To Strengthen And Promote Ispo As A Valuable And Internationally Recognized Part Of Indonesia's Green Development Strategy	36
4.3	Update And Fully Operationalize Suitability Criteria Consistent With Indonesia's Green Growth Objectives To Ensure That Unsuitable Land Is Not Brought Under Cultivation	38
4.4	Increase The Availability Of Suitable, Low Impact Land For Oil Palm Development	39
4.5	Promote Investments In Yield Enhancement And Reward Good Performance To Optimize Production On Existing And Future Plantations	40
4.6	Develop Legal Tools And Build Implementation Capacity To Strengthen Management Of Areas With High Conservation Value In Land Zoned For Agricultural Use	40
4.7	Ensure Communities Are Well- Informed And Able To Participate Effectively In Negotiations With Oil Palm Companies From Earliest Phases Of Development, Including Pre-Licensing Consultations	42
4.8	Develop Measures To Ensure Levels Of Community Benefit During Implementation Of Smallholder Partnership Agreements Are In Accordance With Negotiated Terms And Conditions	44

4.9	Develop Innovative Policy	
	Measures And Fiscal Tools	
	To Promote And Reward	
	Investments In Zero Waste	
	Technologies To Maximize	
	Net Positive Impacts Of Mill	
	Operations	45
4.10	Increase The Probability	
	That Land Is Allocated To	
	Responsible Companies	46

47

ANNEX 1 - LEGAL FRAMEWORK FOR OIL PALM DEVELOPMENT

1.	State Control Of Land	47
2.	Regional Autonomy And The Division Of Authority Between Central And Local Authorities	48
3.	Law On Plantations: UU No.18/2004	48
4.	Spatial Planning	49
	4.1 National Spatial Plan (RTRWN)	50
	4.2 Provincial, Regency And Mof Spatial Planning	50
5.	Oil Palm Licensing	52
5. 6.		52 54
6.	Management Of Environmental	
6.	Management Of Environmental Impacts Plantation Performance And Legal	54

ANNEX 2 - SUMMARY OF DECISIONS 60 Evaluated In The Full Report 1. Where Licenses Are Issued For Oil 60 **Palm Development** 1.1 Power Relations Of The State, 60 Companies And Individuals 1.2 Boundaries And Management Of 60 The Forest Zone (Kawasan Hutan) 1.3 Authority And Procedures For Issuance Of A Location Permit 60 (Ijin Lokasi) 1.4 Required Procedures Following 61 Issuance Of A Location Permit 1.5 Approaches To Monitor Decision Making About Where OP Licenses Are Issued 62 2. Environmental Impacts Of **Plantations And Mills** 62 2.1 Decision Making On Plantation 62 Development 2.2 Decision Making On Plantation 63 Management 2.3 Decisions Making On Mill 63 Operations 63 3. Community-Company Relationships 3.1 Defining Roles Of Communities And 63 Companies 3.2 Community Consultation Before Issuing A Location Permit (Ijin 63 Lokasi) 3.3 Community Consultation For Awareness Raising ('Sosialisasi') After A Location Permit Has Been 64 Issued 3.4 Key Terms Of Partnership 64 Agreements 3.5 Negotiation Of Partnership 65 Agreements 3.6 Plantation Operations And Smallholder Benefits 65

5

EXECUTIVE SUMMARY

Context and Rationale for the Study Palm oil is a critical part of Indonesia's national development strategy and a source of significant local development benefits. At the same time, past social and environmental impacts have drawn criticism from inside and outside Indonesia. The economic, social, and environmental benefits and costs of palm oil are determined by a wide range of decisions made by many different actors across the supply chain. The purpose of this analysis is to describe Indonesian oil palm decision-making processes in terms that are understandable to a range of audiences, including government officials, the private sector, civil society, international consumers, and donors. This report aims to (a) **provide a balanced perspective to help bridge between proponents and critics of oil palm,** and (b) **highlight opportunities to align decision-making more closely with Indonesia's Green Growth objectives.**

This study organizes a selection of key decisions made by different actors involved in palm oil development, explains how decisions affect development outcomes, and recommends ways to support ongoing improvements in performance. This information provides a basis for a more informed policy dialogue, drawing attention to concrete means for improving decisions, and giving actors a better sense of their role and how they might collaborate more effectively to achieve particular outcomes.

Analytical

Approach

The study identifies key decision points and actors involved in key oil palm decision processes, grouping decision points based on those that determine: (a) where oil palm licenses are issued; (b) how plantation and mill management practices determine the environmental impact of operations; and (c) how company-community partnerships, including smallholder agreements, are formed and operate over time. The study qualitatively describes expected outcomes of decisions, focusing on the five different types of development outcomes from oil palm commonly highlighted in government planning documents and elsewhere: local (District) economic benefits, community benefits, improved district oil palm governance, impacts on the natural environment, and carbon emissions from oil palm development. The study provides recommendations to promote Green Growth outcomes with respect to those five dimensions. Since conditions vary widely across Indonesia and among plantations, many of our recommendations should be seen as working hypotheses that merit further investigation through research, policy dialogue, or pilot programs.

Key Recommendations

The report provides a number of key recommendations for strengthening palm oil governance, practices and development outcomes. These include:

Summary of key recommendations for strengthening oil palm governance and optimizing development outcomes. Recommendations are organized under headings corresponding to those used below to organize key findings in Section 3. Recommendations are elaborated in Section 4. (Note: MoA= Ministry of Agriculture, MoF=Ministry of Forestry, MoE=Ministry of Environment, MoFn=Ministry of Finance).

MAIN Recommendations	SUB RECOMMENDATIONS	MAIN AUDIENCE	IMMEDIACY & Potential impact
	CROSS-CUTTING ISSUES		
Collaborate on making ISPO a valuable and internationally recognized part of	Broad-based stakeholder support for ISPO can help markedly to ensure the standard is implemented with maximum effectiveness.	MoA, ISPO, multi-lateral programs	Short term and medium impact
Indonesia's green development strategy.	Increase leadership from the Indonesian Chamber of Commerce (KADIN), the Indonesian Business Council for Sustainable Development (IBCSD) and palm oil producers association (GAPKI) to promote and strengthen ISPO.	KADIN, IBCSD, GAPKI	Short term
Strengthen and improve local government systems for management of the	Central government agencies could strengthen guidance, training, and related support programs to district governments to develop more uniform capacity to regulate oil palm development.	MoA	Medium term
palm oil sector.	Provide districts with training, improved spatial data, and decision support tools for spatial planning and palm oil development planning.	MoA, BAPLAN	Medium term
	Encourage and support local governments to consider a fuller range of development benefits and costs when issuing oil palm licenses to maximize positive secondary benefits.	Bupatis, Dinas-level government	Medium term
DECIS	SIONS THAT DETERMINE WHERE OIL PALM LI	ICENSES ARE IS	SUED
Strengthen and improve local government systems for management of the	Develop, pilot and implement fully a transparent, on-line licensing registration system.	MoA, Dinas-level government	Medium-long term
for management of the palm oil sector.	Review and update the Joint Decree of MoA and the National Land Agency (1999) on issuance of Location Permits.	MoA, National Land Agency	Medium term and high impact

MAIN RECOMMENDATIONS	SUB RECOMMENDATIONS	MAIN AUDIENCE	IMMEDIACY & Potential Impact
Update and fully operationalize suitability criteria consistent with Indonesia's Green Growth objectives to	Develop clear, national-level land suitability criteria for oil palm development including social, physical, biodiversity, and GHG emissions considerations as a guide to local government licensing decisions on land zoned for agricultural use.	MoA, MoF, MoE	Medium term and high impact
ensure that unsuitable land is not brought under cultivation.	Improve the quality, credibility, and influence of the environmental impact assessment process.	MoE	Medium-long term
	Review and where appropriate revise regulation on oil palm development on peatland.	MoA, MoF	Short term and high impact
Increase the availability of suitable, low impact land for oil palm	Simplify and expedite mechanisms for making low- carbon, deforested areas within the Forest Zone available for agriculture.	MoF, MoA	High impact
development.	Explore opportunities for smaller mills that require a smaller planted supply base.	MoA, CEOs, district, CSOs	Medium-long term
Develop legal tools and build implementation capacity to strengthen management of areas with high conservation value in land zoned for agricultural use.	Strengthen the legal right of plantation companies to retain and manage unplanted conservation areas within the HGU for the plantation.	MoA, MoF, district, ISPO	Medium-long term and high impact
DECISIONS	AFFECTING ENVIRONMENTAL IMPACTS OF I	PLANTATIONS AN	ND MILLS
Develop legal tools and build implementation capacity to strengthen management of land with high conservation value in land zoned for agricultural use.	Create financial incentives for companies to maintain undeveloped areas in plantations.	MoA, MoFn, RSPO, ISPO, KADIN, CEOs	Short term and high impact
	Encourage local governments to enact additional requirements for oil palm plantation licenses to ensure that local environmental or social values are protected.	Local govt, Bupati, DISBUN	Medium term
	Support private sector-led efforts to make explicit, progressive goals for management of conservation areas within oil palm plantations.	CEOs, RSPO MoA, district,	Medium term
	Make plantation companies more accountable for contractors hired for land clearing and improve systems for managing contractors.	CEOs	Medium term
	To reduce encroachment pressures by local communities into conservation areas, companies should consider voluntary limits on how much community land they are prepared to place under oil palm cultivation.	CEOs, ISPO	Medium term

MAIN RECOMMENDATIONS	SUB RECOMMENDATIONS	MAIN AUDIENCE	IMMEDIACY & Potential Impact
Develop innovative policy measures and fiscal tools to promote and reward investments in Zero Waste technologies to maximize net positive impacts of mill operations.	Increase industry-wide uptake of advanced waste treatment and utilization practices and technologies, requiring that the following actors make some or all of the following decisions.	MoA, MoE, ISPO, CEOs	Medium term
	Create fiscal and financial incentives to promote (a) methane capture, (b) increased use of Land Application techniques for POME where appropriate, and (c) composting technologies toutilize soild waste by-products productively, produce electricity and reduce use of chemical fertilizers.	MoA, MoFn, ISPO, RSPO	Medium term
Increase the probability that land is allocated to responsible companies.	Link access to land for additional oil palm development to successful company performance in the past.	MoA, ISPO	Short term and potentially high impact
	Explore mechanisms to eliminate the involvement of licensing agents, companies or individuals that specialize in getting licenses, clearing land and then on-selling licenses.	MoA, district, Bupati	Medium term
Promote investments in yield enhancement and reward good performance to optimize production on existing and future plantations.	Promote industry-wide CPO yield improvements through encouraging specific actors to make some or all of the following decisions.	MoA, CEOs	Short term and high impact
DECISION	IS THAT INFLUENCE COMPANY-COMMUNITY	RELATIONS IN P	ALM OIL
Ensure communities are well-informed and able to participate effectively in	Make governments accountable for mandatory provision of accurate and readily understandable information for candidate smallholder farmers and community members.	MoA, District, bupati	Medium-long term and high impact
negotiations with oil palm companies from earliest phases of oil palm development, including pre-licensing	Develop guidelines for establishing a more structured approach for local government to support company-led sosialisasi and later negotiations.	MoA, District, bupati, CSO	Medium term
consultations	Develop a set of standard guidelines for community engagement.	MoA, ISPO, CSO	Medium term and high impact
	Review and clarify minimum requirements for land division between Company and Communities as stipulated in MoA Regulation No. 26 (2007).	MoA	Short term
	Through pilot trials, develop a mechanism for district government to provide negotiation support for all parties during the formation of benefits sharing agreements, especially smallholder partnership arrangements.	MoA, District, bupati, CSO	Medium term and high impact

MAIN RECOMMENDATIONS	SUB RECOMMENDATIONS	MAIN AUDIENCE	IMMEDIACY & Potential impact
	Develop clear, binding agreements between companies and communities regarding where and when smallholder plots will be developed.	District, CEOs, CSO, ISPO	Near term
	Develop and require use of model agreements for land release and smallholder partnership arrangements.	District, CEOs, CSO, ISPO	Medium term
	Clarify and strengthen oversight of plantation company obligations to support smallholder yields and create incentives that promote compliance with existing requirements.	MoA, ISPO, CEOs	Medium term and high impact
Develop measures to ensure levels of community benefit during implementation of smallholder	Support effective smallholder training by district government, extension support trainers, plantation companies, supported financially by users and buyers of oil palm products.	District, CEOs, ISPO, RSPO, CSO	Medium term
partnership agreements are in accordance with negotiated terms and conditions.	Job creation or other forms of community livelihoods support during the period when palms are maturing should be agreed upon between companies and communities during sosialisasi for land release.	MoA, CEOs, ISPO	Medium term
	Consider development and use of a more flexible and transparent fresh fruit bunch (FFB) price setting system that is easier for smallholders to understand and that creates opportunity for merit based pay that rewards good quality fruits.	MoA, Provinces, GAPKI	Medium term



OVERVIEW OF PALM OIL IN INDONESIA

The palm oil industry is a vital but controversial element of Indonesia's current economic growth trajectory. Discourse on economic benefits versus social and environmental costs of the industry has become increasingly polarized, a situation worsened by outspoken critics and proponents staking out extreme positions in pursuit of divergent agendas. Obscured in recent debate is the large area of common ground between opposing viewpoints where significant improvements to palm oil governance can be made in Indonesia, with direct benefits to the environment, local communities, and the industry's performance and reputation as a whole. This study is an attempt to regain some of this common ground, by providing concerned stakeholders with an improved understanding of how key actors make decisions within a complex legal framework and norms of decision making that emerge from this. We highlight key areas for improving and strengthening decision-making processes supportive of Indonesia's Green Growth commitments and recommend ways to achieve this. This document is a summary of a larger report under preparation based on research by a multi-disciplinary team of national and international researchers and practitioners working to promote sustainable palm oil in Indonesia.

¹ THE Context



Oil palm nursery in East Kalimantan. Photo: Felicia Lasmana.

1.1 Palm Oil: A Strategic Development Opportunity for Indonesia

Palm Oil is a vital component of Indonesia's present and future development strategy.

Indonesia is the world's largest producer and exporter of crude palm oil (CPO), an important component of food security for Indonesia and consumer countries. Global demand for palm oil, with yields per hectare ten times that of other oil-seed crops, is growing rapidly. Oil palm plantation area in Indonesia has more than doubled over the past ten years, now covering five percent of the country's total land area, and further expansion is underway to meet the Government targets for doubling CPO production to 40 million metric tons per annum by 2020. The nation is well positioned to achieve this target based on its favorable climate, abundance of suitable land, private sector expertise, and a large rural work force.

Palm oil exports are a key part of Indonesia's national economic growth strategy, generating billions of dollars in foreign exchange earnings annually and providing a stable base for local economies, access to commodity markets and much-needed jobs in underdeveloped parts of the archipelago. At least three million smallholder farmers cultivate oil palm, comprising an estimated 40% of total planted area, and often earning incomes significantly higher than subsistence farmers or producers of other cash crops. Private sector investment in oil palm often leads to improved public infrastructure, marketing networks, and basic services such as healthcare and education, in addition to creating employment opportunities and stimulating local economic activity.

The social and environmental impacts of palm oil can be high. Despite generating economic benefits, Indonesia's palm oil industry has attracted significant domestic and international criticism. Critics argue that benefits come at a high a cost to Indonesia's forests and rural communities who depend on them, creating significant land-based Greenhouse Gas (GHG) emissions and degrading biodiversity-rich habitat. In some cases, rural communities have been harmed by development, losing access to land and livelihood resources without adequate compensation or legal recourse. Indigenous ethnic groups can be particularly vulnerable due to higher dependence on natural ecosystems and inexperience in complex business transactions or oil palm farming. Critics also note that in many cases communities are not adequately consulted prior to issuance of palm oil licenses, putting them at a disadvantage when negotiating land compensation and business arrangements with companies.

The palm oil sector is integral to Indonesia's green development commitments. Since 1999, more than 8% of Indonesia's forests have been zoned for conversion to agriculture, including biodiversity rich tropical forest and carbon-dense peat swamps. An estimated 80% of the nation's GHG emissions originate from land use and land cover change, driven in part by oil palm expansion. President Susilo Bambang Yudhoyono has pledged dual targets of reducing national GHG emissions by 26% by 2020 while maintaining annual GDP growth of seven percent (Vision 7-26). To realize this vision, conversion of forests and peatlands to plantations and other uses will have to be reduced.

1.2 Oil Palm Governance In Indonesia

Decision-making in the oil palm sector is complex. Growth and management of palm oil plantations is guided by a multi-level, multi-agent system of governance (Figure 1). There is a complex legal framework defined by laws, regulations and ministerial decrees operating at different spatial scales and issued by different levels and ministries of government. Government, business, and community actors often have substantial discretion in designing and managing decision processes and making decisions within this framework. A decentralized, uncoordinated system of development planning reflecting diverse visions and targets for sectoral expansion further complicates efforts to guide the development process within limits of this governance framework.

As part of Indonesia's decentralized governance, substantial authority is granted to district government agencies and officials. Oil palm governance is implemented in the context of Indonesia's decentralized system of democratic government, which assigns a great deal of decision-making and regulatory authority to district (Kabupaten) governments and their elected leaders. These officials have broad knowledge of local conditions, creating opportunities to fine-tune development planning, but their decision-making processes are often constrained by inadequate technical capacity and financial resources, as well as legal ambiguities and conflicting mandates to develop and protect their region.

The legal framework is comprehensive, but not always consistent (for an overview see

Annex 1). Critical elements of the legal framework that influence development outcomes from palm oil include:

- A Constitutional provision that gives the State control over land and natural resources;¹
- **Decentralization laws** that assign authority for various service functions to different levels of government, giving districts the greatest leading authority over plantation and mill licensing, monitoring, performance evaluation and enforcement;
- A spatial planning law that establishes requirements and procedures for allocating (zoning) land to various uses at national, provincial and district levels of government;
- Land-related laws that establish conditions under which individuals, communities, and firms are granted ownership or use rights of land;¹
- **A Forestry law** and implementing regulations that provides authority and guidelines for delineation of the national Forest Zone, assigning forest use categories and management authority, and procedures for release of Forest Zone land for non-forestry uses;
- A Plantation law and implementing regulations which outline specific requirements for oil palm plantation licensing, management, and performance including community development and environmental management; and
- Environmental management laws and regulations that establish requirements for environmental assessment of plantation and mills including design, implementation, monitoring and reporting of mitigation measures.

DECISIONS, DECISIONS

In this study the word 'decision' is used in a broad sense, including decisions over:

- High level policy provisions of national laws and regulations;
- Actions taken at district levels to enforce rules and regulations through processes and procedures under their control;
- Decisions made by oil palm companies regarding corporate policy or development of individual plantations; and
- Decisions made by communities facing options to accept or reject oil palm development and, if so, under what terms.

Some decisions are made jointly through agreement of local government and companies or between local communities and companies. In some cases, actors empowered to make a specific decision elect not to, ceding authority to downstream parties, or allowing events to unfold in an ad hoc manner.

Numerous actors participate in oil palm decision-making at district, provincial and national **levels.** These actors can be divided into those functioning as Primary versus Secondary Actors. Primary Actors include:

- **Central government officials and legislators** who set national policy, develop laws and regulations, formulate development plans, oversee regulatory processes, establish the fiscal framework, and approve spatial plans;
- **District and provincial officials** who formulate spatial plans and development strategies and implement plantation licensing and monitoring for both legal compliance and performance;
- **District and provincial legislators** who formulate local regulations to supplement national law and regulations at the local level;
- **Private companies**² that influence the location, scale and terms of oil palm investments, and since 2004 lead negotiations with communities on land release for development, terms of partnership agreements with small-holder farmers and scale of community development investments; and
- Local communities that under law have power to accept or reject oil palm development on land they claim and to negotiate terms of partnership agreements with companies.

A diverse group of Secondary Actors interacts with Primary Actors to influence decisions they make. Such secondary actors include banks, research groups, standards organizations, media, international consumers, and civil society organizations, among others.



Lowland rain forest in Kalimantan. Photo: Gary Paoli.

- 1 A recent landmark Constitutional Court decision on customary forest rights (MK35/2012) modifies the Constitutional provision of State control over land by providing legal recognition of land rights to local communities that demonstrate customary rights over forested areas consistent with a legal definition of "hutan adat".
- $\ensuremath{^2}$ The terms plantation and company are used interchangeably in this report.

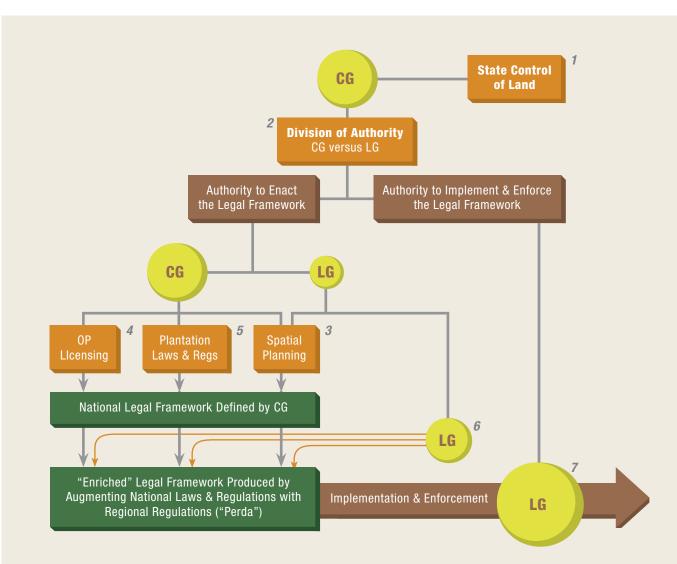


FIGURE 1. A schematic depiction of the legal framework governing palm oil development in Indonesia. The role of Central (CG) and Local (LG) government actors for enacting and enforcing national and regional laws & regulations is shown in relation to seven key features as described above. Size of circles corresponds to relative importance of actors at each step; orange indicate a set of laws or regulations related to the topic noted; dark green boxes represent discrete aggregations of the overall framework.

Visions and targets for oil palm development vary widely and are often inconsistent. Actors have diverse perspectives on sectoral expansion, reflecting institutional responsibilities and aspirations of the government, business, and civil society groups they represent. For example, government actors generally promote a vision of expanding the sector in line with a doubling of production by 2020, but they vary in their stated targets for growth, either as plantation expansion or production output, and in their emphasis on environmental and social safeguards. Overly ambitious production targets, and incongruence between provinces and constituent districts in expanding the sector, further impede efforts to optimize outcomes through careful planning.

1.3 Purpose and Rationale

The purpose of the analysis summarized in this report is to describe Indonesian oil palm decisionmaking processes in terms that are understandable to a range of audiences, including government officials, the private sector, civil society, international consumers, researchers, donors and development agencies. A recognized challenge to improving decision-making in the sector is the sheer complexity of decision processes, and interactions among them, that, in aggregate, determine palm oil development outcomes. This report aims to:

- Make oil palm decision-making processes more understandable to a range of audiences by ordering some of this complexity, thus providing a more complete basis for informed policy dialogue and national and international discourse.
- Provide a balanced perspective to help bridge between proponents and critics of oil palm by offering a diagnosis of the underlying causes of outcomes that some observers consider unreasonable, seeking to avoid generalized and subjective comments, and indicating areas for collaborationthat should find support from both proponents and critics.
- Highlight opportunities to improve the legal framework and decision-making processes and show how this can accelerate continued improvement of industry practices across the supply chain.

In pursuit of these objectives, the study organizes the many decisions made by different actors involved in palm oil development processes, explaining how decisions influence outcomes, and recommending ways to improve the outcome of individual decisions or entire decision processes. This information can help to inform ongoing policy dialogue by drawing attention to concrete means for improving decisions, and giving actors a better sense of their role and how they might work more effectively with other actors to achieve a particular outcome.

The study also provides a better understanding of the social and environmental impacts of specific decisions by palm oil firms and other actors, providing a basis for continued discussion within and among stakeholder groups to improve standards and practices, and to identify where modifications to the regulatory framework shaping norms of decision making will be required to facilitate this.

² RESEARCH**APPROACH**



Oil palm is the most productive oil seed crop in the world. Photo: Rahayu Harjanthi.

2.1 Identify Key Decision Points and Actors Involved

The report **draws attention to key decision-making processes** that influence social and environmental outcomes of oil palm. We describe processes, roles of decision makers and other actors, the legal and regulatory framework in which they operate, and factors affecting how decisions are made. The report isolates individual **decision points** embedded within a matrix of inter-related processes and actors that determine: (a) where oil palm licenses are issued; (b) how plantation mill management practices determine the environmental impact of operations; and (c) how companycommunity partnerships are formed and operate over time. The approach isolates specific decision points, but encourages readers to bear in mind that properly understanding how a specific decision is made and outcomes that result requires a more detailed consideration of the complete web of actors, related decisions and factors affecting them.

It is also recognized that in some parts of Indonesia, optimal decision-making in the palm oil sector is undermined by rent-seeking behavior in spatial planning and licensing decisions. The report does not address these constraints directly, focusing initially on providing a better understanding of decision making processes as a preliminary step to identify in future work where rational decisions are undermined by rent-seeking behaviors and how to overcome these constraints. Considerable work is being done to address these issues nationally through diverse government and non-government initiatives, and findings of this study are intended to support these efforts.

2.2 Describe Expected Outcomes of Decisions

The study shows how decisions potentially contribute to or undermine five different types of development outcomes from oil palm commonly highlighted in government planning documents and other industry materials:

- Local (District) Economic Benefits Positive local development benefits include job and wealth creation, strengthening of local markets, improvements to infrastructure and delivery of basic human services.
- **Community Benefits** Community benefits from palm oil are highest where oil palm farmers and community members capture an equitable share of financial benefits through effective consultation, well-structured agreements, strengthening of local institutions and genuine capacity building for local cooperatives and community enterprise.
- **District Oil Palm Governance** Some regulatory and enforcement decisions contribute not only to improved governance of the sector, but also catalyze other positive changes such as improved quality and transparency of government services and natural resource management more broadly.
- Impacts on the Natural Environment Reduced impacts of oil palm on biodiversity and environmental services can be achieved through improvements to spatial planning, informed licensing decisions, and conservation-oriented plantation design. Reduced impacts on water and air quality can be achieved through improved design and operation of mills and supporting infrastructure.
- Carbon Emissions from Oil Palm Development Emissions from forests and peatlands during
 the lifecycle of palm oil production can be reduced through explicit consideration of potential
 emissions in spatial planning, licensing decisions, environmental impact assessment, and the
 design and management of plantations and mills. These outcomes are facilitated by improved
 spatial information, analytical capacity, transparency of decision-making, careful design and
 operation of plantations and mills, and innovative measures (including legal tools) to maintain
 forests within lands zoned for agriculture, where appropriate.

The evaluation of outcomes arising from decisions is qualitative in the current study. In future work, quantitative approaches to describe and compare outcomes could be done with relative ease for some parameters (e.g. GHG emissions originating from development of shallow peat <3m, or avoided by plantations implementing Zero Waste management practices), whereas others cannot be easily studied quantitatively at present due to data inadequacies or wide variation in circumstances across the nation and among plantations.

2.3 Develop Recommendations to Support Green Growth Objectives

Based on the review of decisions and outcomes affected by them, the report provides recommendations for how to enhance development benefits from palm oil. We emphasize that judging outcomes and making trade-offs among them is inherently difficult in the real world. Yet, experience to date suggests outcomes more supportive of Indonesia's commitment to Green Growth and rural development can be readily achieved by improving decision-making processes through (a) strengthen procedures that are robustly implemented, (b) more inclusive participation, (c) enhanced local and national oversight, and (d) better access to information and analysis to inform decisions. Significant improvements can be achieved within the current legal framework to make incremental improvements in the near term, while more substantial adjustments in policy, especially spatial planning and boundaries of the Forest Zone (Kawasan Hutan), would vastly improve future outcomes, but will require focused, coordinated effort over a longer period of time.

Since conditions vary widely across Indonesia and among plantations, many of our recommendations should be seen as working hypotheses that merit further investigation through policy dialogue, or research and pilot programs tailored to local conditions. Some recommendations are quite specific about key issues that should be addressed, but even here the report recognizes that understanding can always be improved through critical evaluation and input from other parties. Our hope is that the report will stimulate vigorous study and testing of our recommendations over the next several years by stakeholders drawn to the sector.

2.4 Overview of the Full Report

The target audience for the full report is anyone who seeks a fuller understanding of the issues presented in this summary. The full report describes decision-making and outcomes regarding (a) *where* oil palm is planted, (b) *how* plantations and mills are developed and managed, and (c) *how* companies and communities form partnership arrangements that determine social and development impacts of plantations (Figure 2). Where oil palm is planted is an outcome of two distinct decision-making processes, the first determining where licenses are issued, and the second where plantations are developed on-the-ground within areas licensed for that purpose (Figure 3, below). The full report addresses this question in two chapters, the first entitled "Where Oil Palm Licenses are Issued" and the second "How Plantations and Mills are Developed and Managed". This latter chapter also describes outcomes arising from decisions over *how* plantations and mills are managed once they become operational. In a subsequent chapter the study describes and analyzes decision processes underlying how companies and communities form and implement partnership agreements covering small-holder farming arrangements as well as broader community development programs delivered

by companies. The concluding chapter of the full report provides structured recommendations for how to improve development outcomes through incremental changes within the existing decisionmaking framework, or through more significant modifications to it, building upon recommendations provided in this summary report.

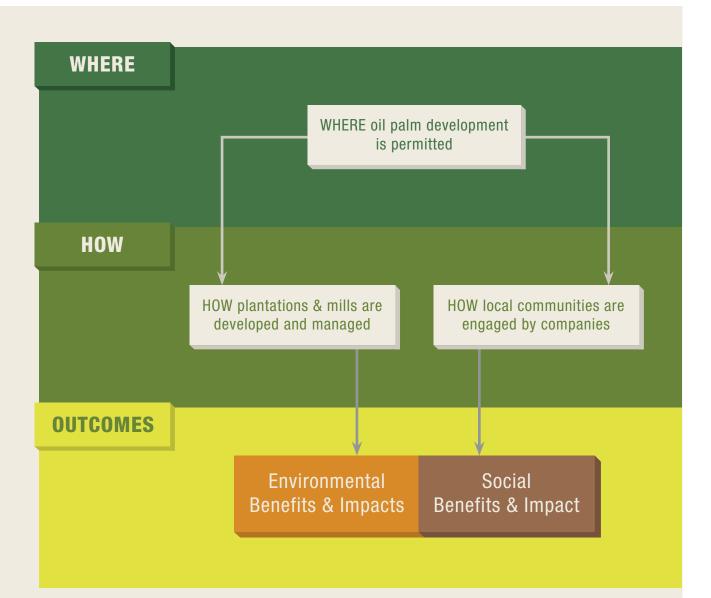


FIGURE 2. Thematic areas and questions explored in the full report. Decision-making processes determining *where* plantation licenses are issued and *how* plantations and mills are developed and managed determine benefits and impacts on the environment. Decision-making about where plantations are developed and in the process how communities are engaged by companies to form and implement partnership agreements determine local development benefits and social impacts on communities.

³ SUMMARY OF **FINDINGS**



Juvenile oil palm trees in an established plantation. Photo: R. Harjanthi.

The following three sections describe important decision points and decision-making processes that affect oil palm development outcomes:

- Decisions that determine where oil palm licenses are issued
- Decisions affecting environmental impacts of plantations and mill
- Decisions that determine company-community relations in palm oil

In each of these sections, we identify decision points, actors involved, decision alternatives they face, factors that influence how decisions are made, and outcomes that arise. This is followed by a section that describes a selection of cross-cutting issues that influence the development and implementation framework affecting decisions in palm oil.

3.1 Decisions That Determine Where Oil Palm Licenses Are Issued

This section explores decision processes that determine where oil palm licenses are granted, including: how decisions are influenced by the current legal and regulatory framework; outcomes of permitting decisions; and observations on how to support, strengthen, and where appropriate modify the framework to promote outcomes more consistent with Indonesia's green growth objectives for the sector (details provided in the full report).³ Concerning where licenses are granted, there is much opportunity to work within existing legal and regulatory frameworks to improve planning and decision-making, but for some issues revision to the policy framework will likely be required to achieve fully Indonesia's vision for oil palm as a high-benefit, low-impact sector of the economy.

Decisions affecting where oil palm is licensed and ultimately planted operate at three spatial scales (Figure 3):

Macro-scale – Spatial Planning Decisions determine the boundary of the national Forest Zone and land available for agriculture outside this (Cultivation Areas for Non-forestry – *Kawasan Budidaya Non Kehutanan, KBNK*), as well as within it (Production Forest for Conversion – *Hutan Produksi Konversi, HPK*). It is legal to issue licenses for oil palm development on lands zoned as *KBNK* or *HPK*, with development conditional on results of impact assessment studies conducted at more local scales.

Meso-scale – Oil Palm Licensing Decisions determine areas within KBNK and HPK zones where large-scale plantation development will be licensed and development approved. Licensing and then screening decisions made at this "meso-scale" follow a legally mandated impact assessment process to identify (a) environmentally sensitive areas based on biophysical conditions (e.g. deep peat >3 meters) or (b) social factors that prevent development (e.g. customary lands managed by communities that oppose plantation development). Meso-scale actions to inform licensing and permitting decisions could include decisions by local government about areas prioritized for production versus protection (e.g. promoting deforested non-peat areas for development), or by company lead due diligence to aid compliance with the Indonesian Sustainable Palm Oil (ISPO) standard or voluntary certification systems such as the RSPO.

Micro-scale – Plantation Planning Decisions made by companies, often in coordination with local communities, delineate areas within their plantation licenses that may not be developed due to legal restrictions (e.g., riparian zones, deep peat >3m or steep slopes), desires of local community members (e.g. land that communities plan to retain for non-oil palm uses) or voluntary certification standards (e.g. HCV areas under the RSPO).

³ The report examines how large-scale private sector or state owned oil palm plantations are sited, and does not consider decisions that determine where independent smallholder plantings are established. This latter topic merits investigation in a separate study, including geographic variation in norms of smallholder decision-making.

The nation-wide spatial planning process delineates land zoned as permanent forest (the Forest Zone) versus land for agricultural uses, including oil palm (Figure 4; Table 1). Spatial planning is followed by decision-making by local governments and companies within areas zoned for agriculture to (a) offer or request proposed licenses, (b) evaluate their suitability based on sensitive ecosystems (e.g., deep peat, extensive flood plains) or other factors that preclude development under national or local regulations (e.g. Moratorium⁴ areas or community opposition), and (c) approve licenses for development (Figure 4). Analysis to inform approval decisions at this scale is typically led by district government, centering on government-mandated environmental impact assessments and related permitting procedures (Figure 5). Such pre-licensing decision-making includes a requirement for district government to consult local communities even before a location permit (*ljin Lokasi;* Figure 5) is issued, but adherence to this requirement varies. The quality of such pre-licensing consultation lays the foundation for future company-community relations (discussed further in Section 3.3), especially community preparedness and attitudes toward palm oil when companies seek a land release agreement from them. National sustainability initiatives such as the ISPO hold potential to strengthen meso-scale decision-making, by influencing company decisions about whether to seek high-risk licenses in the first place, given future difficulties this will cause to comply with legal requirements formalized under ISPO.



Mature oil palm plantation in Kalimantan. Photo: Bas van Balen.

In May 2011 Indonesian President Susilo Bambang Yudhoyono decreed a temporary moratorium on issuance of new logging and plantation licenses over an area covering 65 million ha, providing temporary protection to areas of primary forest and peatlands. The original decree expired early 2013 but was renewed for another two-year period, as part of a broad-based effort to promote governance reform in the forestry and agricultural sectors.

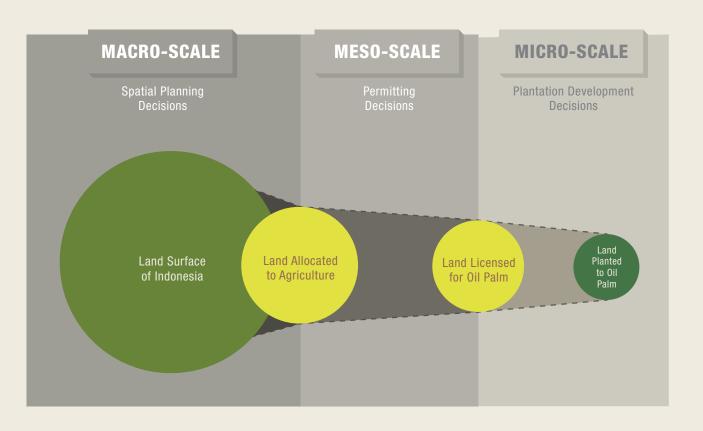


FIGURE 3. Schematic depiction of decision processes at three different spatial scales that determine where oil palm is planted. As described more fully in Section 3.2, meso-scale decision making is followed by finer (micro) scale decisions within areas licensed for oil palm to avoid areas unsuitable for planting.

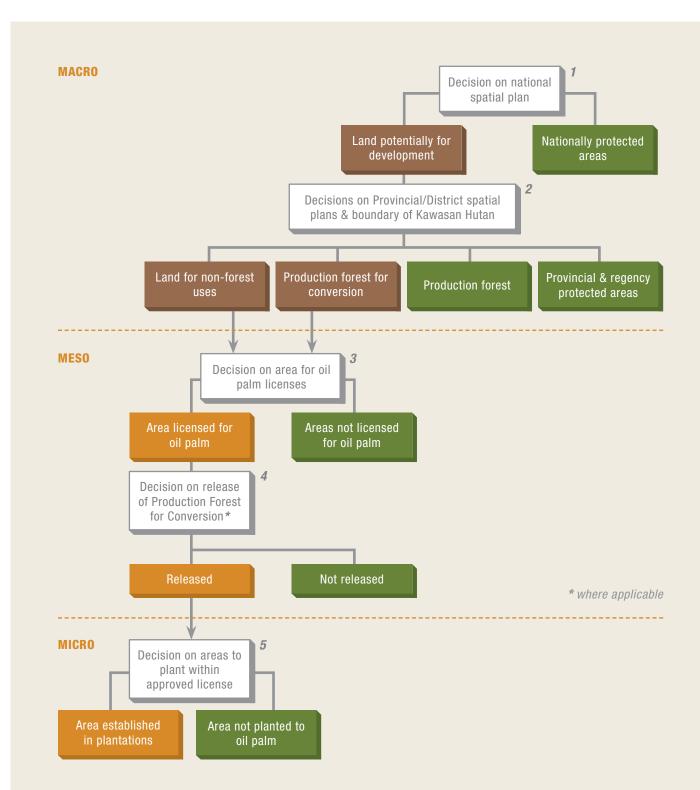


FIGURE 4. A schematic depiction of decisions related to (a) Indonesia's Spatial Planning process, (b) Licensing, and (c) Plantation development, corresponding to macro, meso and micro scale decisions shown in Figure 3. The spatial planning process designates land legally permitted for agriculture versus land to be maintained as part of the permanent Forest Zone (Kawasan Hutan) for protection or production purposes such as logging. Numbers indicate steps with corresponding supporting laws and regulations shown in Table 1.

TABLE 1. Laws and regulations relevant to decisions concerning where oil palm licenses are issued and whereplantations are developed within licenses.

1	UU 26 2007	Spatial Planning Law
	PP 26 2008	Regulation on National Spatial Plan
	PP 15 2010	Regulation on Implementation of Spatial Planning
2	UU 26 2007	Spatial Planning Law
	PP 15 2010	Regulation on Implementation of Spatial Planning
	UU 41 1999	Basic Forestry Law
	PP 10 2010 revised by PP 60 2012	Procedures for change to the allocation and function of Forest Lands
	P Menhut 32 2010 revised by P 41 2012	Exchange of Forest Lands
	P Menhut 33 2010 revised by P 17 2011 and P 44 2011	Procedure for release of Conversion Forest
	P Menhut 34 2010	Procedures for changing the function of Forest Lands
	P Menhut 36 2010	Integrated Research Team for change of use and function of Forest Lands
3	UU 41 1999	Basic Forestry Law
	PP 10 2010 revised by PP 60 2012	Procedures for change to the allocation and function of Forest Lands
	P Menhut 33 2010 revised by P 17 2011 and P 44 2011	Procedure for release of Conversion Forest
	P Menhut 34 2010	Procedures for changing the function of Forest Lands
	P Menhut 36 2010	Integrated Research Team for change of use and function of Forest Lands
	P Menhutbun 376/1998	Criteria for making Forest Lands available for Oil Palm Plantation
4	Permentan 26 2007	Regulations for Plantation Business Licensing (IUP)
	UU 32 2009	Protection and Use of the Environment
	PP 27 1999	AMDAL
	Keputusan Kepala Bapadal 56/1994	Manual for Important Impacts
	Peraturan Menteri Negara Agraria/ Kepala Badan Pertanahan Nasional No.2/1999	Joint decree on Location Permits (Ijin Lokasi)
5	Permentan 14 2009	Manual for use of peatlands
	Permentan 19 2011	ISPO
	PP 27 1999	AMDAL

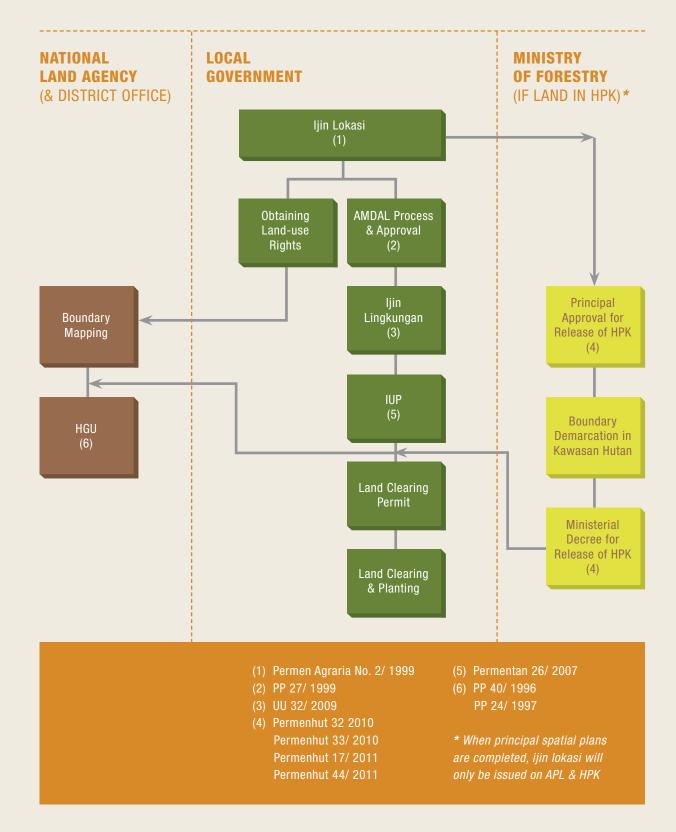


FIGURE 5. A flow diagram of the process for obtaining key permits and approvals required for oil palm development in Indonesia. Foundational laws and regulations associated with each permit are noted.

3.2 Decisions Affecting Environmental Impacts of Plantations and Mills

Decisions about where oil palm plantations are licensed determine the potential magnitude of negative impacts they cause, by determining whether natural forests, hilly terrain or peat lands are placed at risk of conversion. Yet, after a license is issued, myriad local decisions are made concerning how and where plantations are developed and how mills will be operated, decisions that can lessen or intensify impacts of licensing decisions made by government. In this way, licensing determines the location of the oil palm footprint, whereas development decisions define its ultimate size and shape.

Palm oil companies are the most important actors making decisions in post-licensing stages of the development process, determining where plantations and mills will be developed and how they will be managed. Companies must balance multiple objectives in designing plantations across large heterogeneous areas (c. 3,000–20,000 ha), often with insufficient data or time to make well-informed decisions. The extent to which legal requirements guide company decisions depends as much on corporate policy toward compliance as it does on government enforcement and perceived risk of penalty for breach. Mitigating environmental impacts of plantations and mills is steadily becoming mainstream corporate policy for oil palm companies, encouraging investment in impact mitigation measures as well as pro-active forest protection and species conservation programs. Companies committing to voluntary certification under RPSO can be especially progressive in this regard, but industry has shown that such commitments are not a pre-requisite to take positive action.

In addition to companies, a mix of government and non-government actors also play an important role in post licensing decisions. Central Government actors set (a) procedures to assess and mitigate environmental impacts (AMDAL), (b) requirements to avoid environmentally sensitive areas such as steep slopes and deep peat, (c) pollution control standards and (d) compulsory performance monitoring systems (e.g. ISPO). In turn, local government actors have authority to (i) approve AMDAL reports; (ii) enforce environmental management, monitoring and reporting requirements; and (iii) issue penalties, corrective action requirements, or even initiate procedures to revoke licenses for chronic non-compliances. While in principle local officials have broad authority to regulate performance of companies, in practice, local agencies must temper their regulatory stance to maintain a business friendly environment, since districts are effectively competing for palm oil investment. Local communities also play an important role in post-licensing decisions, serving to dampen or amplify impacts of licensing through decisions concerning which land to offer companies for planting and whether and how to pressure companies to improve practices that impact their livelihoods (e.g. erosion protection and water quality).

Plantation Development: Companies make numerous decisions during plantation development that affect environmental outcomes (Figure 6). Leading examples include: (i) how and where to construct nurseries, buildings, roads, bridges and other infrastructure; (ii) which areas to plant and which to maintain under existing land cover; (iii) how land clearance and debris removal is performed; and (iv) whether contractors are used for land clearing and how they are controlled. As noted, plantation companies are required to identify and avoid environmentally sensitive *locally protected areas* (e.g. riparian zones, and steep slopes, etc), but can further mitigate cumulative impacts across a plantation through decisions about whether conservation set asides will be delineated and managed pro-actively within the plantation. If set-asides are delineated, companies must choose between retaining the area within the Business Use Permit (HGU) or excising it. If the company retains the area, they are then faced with the responsibility

of managing it to maintain forest cover, as well as having to pay land taxes on it, a move that is often neither supported nor popular with local government given priorities to develop land zoned for agricultural uses. If the area is excised, then the company may lobby for the area to be protected via district level spatial planning (RTRWK) as *Kawasan Lindung*, or work with local communities to designate the area as community managed forest (*Hutan Desa*), but ultimately it is within rights of local government to issue another location permit on this land to a different company.

Benefits accruing to companies for making careful decisions about plantation development might include reduced conflict with communities who might suffer impacts of poor practices, lower risk of government penalties tied to non-compliance and improved market access through ISPO or RSPO certification. Success is not guaranteed, however. Most companies use contractors to prepare sites for planting, and contractors vary widely in their experience, professionalism, and understanding of legal requirements. Contract terms sometimes unintentionally provide incentives for contractors to clear as much land as possible, including environmentally sensitive areas, and this must be avoided. Encroachment pressures or hunting activities within set-asides also places conservation areas at risk. To be successful, companies must therefore make environmental management a central feature of operational planning and systems, and this comes at significant cost and effort.

Plantation Management: Once plantations are established, companies make management decisions that affect not only agronomic outcomes but also environmental impacts of operations. These include: (a) how riparian buffers are managed; (b) whether cover crops are planted to reduce erosion; (c) whether organic fertilizers are used to reduce chemical inputs; (d) how water levels are managed in peatlands to slow subsidence, and in swamps or flood plains to reduce run-off; and (e) whether yield enhancement Best Management Practices (BMP) are employed. Of special note concerning GHG emissions is that under Indonesian regulations plantations on peatlands are now required to mitigate hydrological and GHG impacts by maintaining water levels at 40-60 cm below surface. Maintaining high water levels is costly for growers, requiring investment in robust canal systems and, in some cases, acceptance of reduced FFB yields due to root stress.

Average industry-wide palm oil yields in Indonesia have stagnated since the 1970s at c. 3.8 tons per ha of CPO, despite growing use of improved planting materials. On favorable sites, CPO yields can be increased to at least 5 t per ha, an improvement of 30-35% that has been demonstrated in commercial plantations using established BMPs. Such BMPs provide high financial returns with relatively small investment. It is estimated that if all existing oil palm plantations were to increase CPO yields to 5 tons per ha, 1.6 M ha of new plantings could be avoided by 2050 while still meeting projected growth in global demand.

Processing fresh fruit bunches (FFB) from oil palm creates numerous solid and liquid by-products, including empty fruit bunches (EFB), residual fruit material, palm kernel shells and liquid palm oil mill effluent (POME). In the past, these by-products were seen as waste materials requiring disposal, and carried significant pollution risk. More recently, plantation companies are beginning to use by-products to produce solid and liquid organic fertilizers, which in turn improve soils, reduce chemical fertilizer use, create jobs and save money. Advanced technologies for containerized EFB and POME co-composting (discussed below) generate nutrient-rich organic fertilizers, capture biogas by-products, and eliminate GHG emissions arising from conventional waste treatment. Such technologies require significant capital investments, but also carry significant on-plantation benefits for promoting higher yields and improving soils.

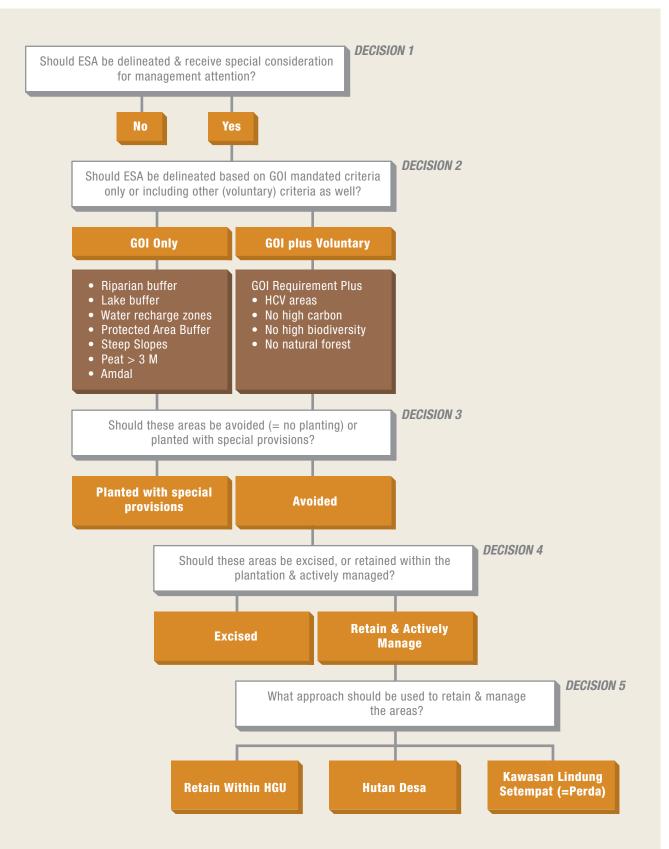


FIGURE 6. Selection of five key decisions made by companies regarding treatment of environmentally sensitive areas (ESA) within areas licensed for plantation development.

Mill Operations encompass numerous company decisions made over the lifetime of a palm oil mill (POM) to manage CPO production while reducing negative environmental impacts. Key decisions include: (a) whether effort is made to reduce POME volumes by increasing water use efficiency; (b) whether CO2 scrubbers are installed to reduce point source GHG emissions from mill boilers; (c) whether methane capture technology or other co-composting techniques are used to reduce GHG emissions of POME treatment; and (d) whether advanced technologies described above are installed to biodigest solid and liquid by-products. Decisions made about mill operations can have significant impact on local livelihoods and health, especially water and air quality, and on perceptions by international stakeholders concerned about GHG emissions. Methane capture technologies, especially bio-digesters, can reduce emissions originating from POMs and create a reliable source of renewable energy; their wider uptake is a growing priority of government. Mills can also markedly reduce their water footprint, another area of growing concern, by taking water use efficiency measures, and thus reducing competition with local water users and pressure on aquatic ecosystems.

3.3 Decisions That Influence Company-Community Relations

Decisions relating to how communications are approached, relationships are formed and agreements between companies and communities are structured impact the amount and distribution of benefits local communities derive from oil palm (Figure 7). They also set the tone for a wide range of company-community interactions. Examples of key decisions made early in the formation of company-community relationships that influence development outcomes include: (a) terms for the release of land by communities for plantation development, including compensation payments, land sharing ratios and partnership arrangements; (b) decisions over how and what to communicate with communities during *sosialisasi* (community awareness raising about a plantation's development aims), land release negotiations, and implementation of smallholder partnerships; and (c) decisions that affect how discussions are structured and expectations are formed about the size and timing of benefits derived from plantations.

Among other things, these decisions determine: (a) which land will be made available for plantations; (b) financial relations and benefit sharing between companies and communities, including both small-holder oil palm farmers and other community members; (c) which local parties enjoy benefits and which bear costs of development; and (d) the overall social milieu in which a plantation operates throughout its lifetime, including the risk of future social conflict.

The sum total of benefits from oil palm enjoyed by local communities, especially smallholders, is the cumulative outcome of numerous interactions between companies and communities that unfold over a period of many years. Decisions made during this process are numerous, highly inter-dependent and with outcomes that are cumulative in nature. This cautions against making far-reaching diagnoses of company-community relationships based on narrow, short-term research or limited consultations.

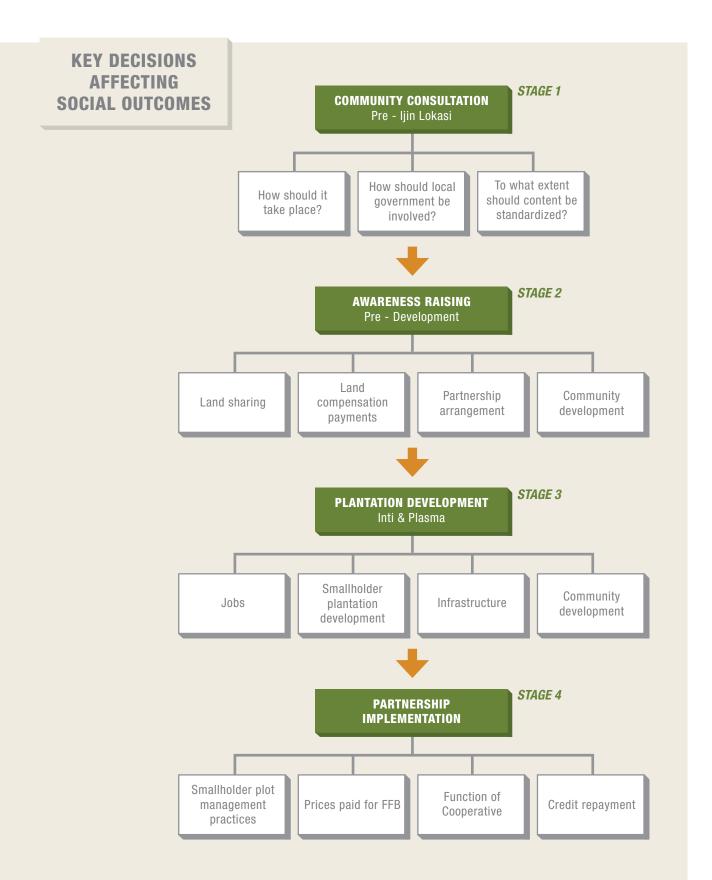
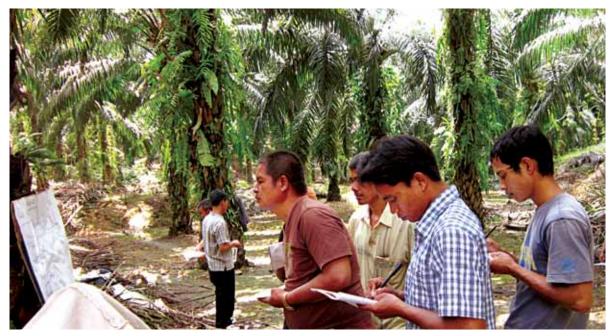


FIGURE 7. Schematic depiction of four stages at which plantation companies engage with communities and make decisions that determine various aspects of company-community relations.

Existing laws and regulations governing company-community relationships are intended to ensure communities derive benefits from oil palm development, but can: (a) place communities in subordinate positions of power; (b) create limited incentives for companies to invest in higher yields and thus net incomes for smallholders; and (c) place significant discretionary power in the hands of local authorities to monitor implementation of company-community agreements without equipping them with the tools and support needed to do the job effectively. Local government actors can exert direct influence on these decisions based on their goals to attract outside investment, and perception of oil palm as a driver of local development.

Community land rights typically are not legally recognized, placing a burden on communities to demonstrate their use rights in land negotiations.⁵ Communities and companies often have differing views about the nature and duration of the property right being negotiated and what constitutes 'fair' compensation for community release of land. The experience and negotiating skills of formal and traditional community leaders is an important determinant of negotiated outcomes with companies and has important implications for smallholder financial outcomes including: (a) land ratios for company versus smallholder plantings; (a) where smallholder plots are located and the pace at which they are planted; (c) maintenance of roads connecting smallholder plots to mills; (d) the quality of planting material smallholders obtain; and the quality of technical assistance provided by the company.

One key challenge faced by smallholder farmers is how to maintain livelihoods before young palm trees begin to produce fruit (typically three years). During this period, some farmers earn money as laborers or borrow money to provide for basic needs, sometimes augmented by growing other crops. Companies often assist famers by providing employment (in some cases guaranteed employment in excess of true labor needs) or by ensuring that farmers retain sufficient land to continue subsistence and/or market-based farming activities without placing undue pressure on other lands. Decisions relating to this depend largely on company policies relating to community development and livelihoods support.



Field training to improve plantation management practices for yield enhancement. Photo Piers Gillespie.

3.4 Cross-cutting Findings

In addition to findings specific to decisions about where oil palm licenses are issued, how environmental impacts of plantations and mills are managed, and how community-company relations are formed, five major cross-cutting issues relevant to multiple decision-making areas are highlighted in the study. Overcoming challenges related to these cross-cutting issues would assist directly in aligning future sectoral expansion with Indonesia's Green Growth objectives. The report identifies the following cross-cutting issues:

(a) The Indonesian Sustainable Palm Oil (ISPO) initiative holds significant potential to improve palm oil sustainability in Indonesia because it is a mandatory certification system for the industry as a whole and can be enhanced over time to include new provisions. On its inception, ISPO introduced a series of progressive requirements, such as the need for companies to provide more information on how they engage with and support communities, to monitor and report emissions arising from plantation and mill operations, and to make an emissions reduction plan including methane capture for treatment of POME. Implementing ISPO across Indonesia's vast and dispersed plantation sector is an enormous challenge both logistically and practically, and would benefit from sustained national and international support and partnership to strengthen the system, as well as its recognition, to help producers maintain access to high-value markets. The recently finalized timber legality standard in Indonesia's forest sector (SVLK) is a good example of how sustained engagement can produce positive results through such effort. Key areas of engagement include: standards improvement; good process management and stakeholder involvement; sending clear signals of market demand (reward) and long-term expectations; and sustained technical support where it is welcomed.

(b) A number of shared constraints result in sub-optimal decision-making in palm oil development planning. Many oil palm development decisions do not fully consider all relevant decision factors, due to one or more of the following constraints: (a) variable amounts of information, knowledge and capacity among actors empowered to make decisions; (b) limited participation of some stakeholders in key decisions; (c) a legal framework that in some areas is inconsistent and/ or incomplete; and (d) limited time to make key decisions due to government pressures for rapid development. Though challenging, understanding these common problems can help to identify constraints that, if overcome, will improve a variety of outcomes.

(c) Enhanced use of existing legal mechanisms and regulatory tools has tremendous potential to improve long-term development outcomes. One particularly important example is the new ISPO certification standard which, critics notwithstanding, could instigate a step-wise paradigm shift in the industry if rigorously applied and enforced (discussed below). The AMDAL environmental assessment process could also be a much more powerful screening mechanism with relatively small procedural changes, as could the Ministry of Forestry process for ad hoc release of Conversion Forest areas in the Forest Zone requested for conversion to agriculture. Such incremental changes would not be unduly costly in terms of economic development, financial investment, or political capital, and in some cases would markedly improve social and environmental outcomes.

5 Attention is drawn again to the recent Constitutional Court decision on recognition of customary forest rights (MK35/2012) that redresses some of this imbalance of power tied to legal status of local community rights over customary forest areas.



Mature agro-forestry gardens in Kalimantan managed by local communities. Photo: Gary Paoli

(d) Some recommendations could have substantial spill-over benefits for natural resource governance in general. These include: coordinating spatial and development planning; making forest and land use planning more flexible and responsive; refining the process for awarding community forest management rights and ownership of customary forest; harmonizing provisions of different laws and regulations; clarifying and coordinating roles of various government actors in decision-making; providing necessary financial support and motivations for key government departments to perform their work professionally; and ensuring licensing decisions and permit approvals are made in appropriate sequence.

(e) Work to improve oil palm outcomes should be viewed in the broader context of Green Growth in Indonesia. Many of the recommendations below contribute to more efficient use of land, forests, and carbon stocks, and in some cases parallel efforts of central government to implement REDD+ initiatives in Indonesia. It is also necessary to see the broader context given the constant challenge of evaluating tradeoffs between different outcomes. Making deliberate, pragmatic and principled trade-offs among objectives with a view towards improved outcomes should be the guiding principle of oil palm decision-making at all levels.

KEY 4 RECOMMENDATIONS



Native plant species of lowland rain forest in Kalimantan. Photo: Gary Paoli

Findings presented in the report are intended to improve palm oil governance and management practice through a variety of approaches including procedural improvements, changes to the legal framework, capacity building, and adoption of improved management practices or technologies. While concerned stakeholders can develop their own action agendas based on their own capacity and interests, it's acknowledged that coordinated action is desirable to achieve maximum impact. The central government of Indonesia has significant potential capacity to improve oil palm outcomes through its authority to revise laws via Parliament, provide resources, coordinate among levels and across sectoral Ministries of government, and ensure local government compliance and accountability. At the same time, individual provinces, districts, and companies also have shown that innovative local regulations⁶ and corporate policies can lay groundwork for improved outcomes at the local level, including pursuit of industry best practice that exceeds legal requirements. A host of supporting actors, including researchers, donors and civil society organizations, can play important roles by providing technical and financial resources to improve the capacity of core actors to make sound, informed decisions. The recommendations outlined here are intended to support this.

Here we provide several key recommendations for improving palm oil governance, practices and development outcomes. The recommendations are also arrayed in tabular form in the Executive Summary, organized under the same Decision sub-headings used in Section 3 to organize key findings."

4.1 Support A Multi-Stakeholder Process to Strengthen and Promote ISPO as A Valuable and Internationally Recognized Part of Indonesia's Green Development Strategy

- 1. Broad-based stakeholder support for ISPO can help markedly to ensure the standard is implemented with maximum effectiveness. ISPO holds significant potential to improve governance of Indonesian oil palm in the near term. Positive, coordinated, constructive engagement to support development of a credibile, independent national standard is critical to meet this potential. Support from foundations, multi-lateral donors, NGOs and international organizations with interest in upstream segments of the palm oil supply chain can be especially important to enable supporting activities. Actors should seek ways to engage with ISPO alongside support to voluntary schemes such as RSPO.
- 2. Increase leadership from the Indonesian Chamber of Commerce (KADIN), the Indonesian Business Council for Sustainable Development (IBCSD) and palm oil producers association (GAPKI) to promote and strengthen ISPO. Encourage leading business associations to utilize their power to convene and reach consensus among business leaders to ensure palm oil producer members approach ISPO compliance earnestly and participate actively in efforts to strengthen enforcement, improve provisions of the standard, and maintain rigor of the certification system.



Intact peat swamp forest in Kalimantan. Photo: Gary Paoli.

4.2 Strengthen and Improve Local Government Systems For Management Of The Palm Oil Sector

- 1. Central government agencies could strengthen guidance, training, and related support programs to ensure that all district governments have sufficient capacity to regulate oil palm development. District governments have authority to issue oil palm licenses and verify company compliance with regulations. Performance of these duties varies widely as a result of variation in capacity, resources, and attitudes toward palm oil development. 'Frontier' areas generally lag behind established oil palm growing regions in ability to avoid development of high-risk areas and to monitor compliance. Governance standards could be leveled across Indonesia, including via certification of local government capacity as a requirement for exercising full licensing authority, or enjoying performance based central government incentives.
- 2. Provide districts with training, improved spatial data, and decision support tools for spatial planning and palm oil development planning. The outcome of spatial planning at district levels is a critical determinant of where oil palm is planted and potential impacts arising from it. Land allocation decisions at this level, especially in remote areas, are often made without adequate technical knowledge, spatial data, and decision support tools. In development planning, structured analysis to assess trade-offs among alternative land uses based on economic, social, and environmental criteria is complex and rarely performed. This means local authorities fail to capitalize on the opportunity to optimize development outcomes through effective spatial planning, licensing and target-driven sectoral growth strategies.
- 3. Encourage and support local governments to consider a fuller range of development benefits and costs when issuing oil palm licenses to maximize positive secondary benefits (e.g., infrastructure) and minimize opportunity costs of foregone alternatives. Such analyses can be analytically complex, involving multiple trade-offs across spatially heterogeneous landscapes. Local governments typically have insufficient resources and data to assess development options at this level of detail, but doing so could markedly improve outcomes of licensing decisions.
- 4. Improve enforcement of the Joint Decree of MoA and the National Land Agency (1999) on issuance of Location Permits (*Ijin Lokasi*) that requires formal community consultation before issuance of a Location Permit. Gol regulations state that community participation in decisions about where oil palm is planted begins with government-facilitated consultations before a Location Permit is issued. The quality and content of such consultation lays the foundation for future development outcomes by alerting communities to the possibility of development, and providing an opportunity to voice concerns to government and the company before licenses are approved. Pre-licensing consultation also provides companies with advance knowledge of the social complexities of an area before making a decision to pursue a license. Currently, the joint decree is not widely implemented. Reviewing and updating the decree, or creating a new, stronger legal basis for pre-licensing consultation requirements, is recommended.

5. Develop, pilot and implement a transparent, publically available licensing registration system that shows the location of all plantation licenses and reports on the status of permitting decisions at each stage in the permitting process, beginning with pre licensing consultations through to issuance of HGU. Ideally, this would also include status of planting for inti plantation (ha planted) as well as progress in establishing smallholder plantations.

4.3 Update and Fully Operationalize Suitability Criteria Consistent With Indonesia's Green Growth Objectives to Ensure That Unsuitable Land Is Not Brought Under Cultivation

- 1. Develop clear, national-level land suitability criteria for oil palm development including social, physical, biodiversity, and GHG emissions considerations as a guide to local government licensing decisions on land zoned for agricultural use. The 1999 joint decree on issuance of Location Permits stipulates that land suitability is a criterion license approval, but does not define suitability factors that must be considered, criteria for evaluating them, or thresholds that may not be exceeded. Within land zoned for agriculture, local authorities are left to decide what factors to consider and how to evaluate them in making license decisions. Creating a system for land suitability assessment would standardize decisions and prevent worst-case outcomes where licenses are issued in areas that carry risk of severe impact, despite being zoned for agricultural use.
- 2. Improve the quality, credibility, and influence of the environmental impact assessment process by: (i) conducting the assessment prior to issuance of a Location Permit, rather than after, as currently happens; (ii) establishing clear thresholds for unacceptably high impacts, linked to the suitability criteria referenced above, that prevent AMDAL approval, including GHG emission levels; (iii) deepening the pool of accredited, experienced consultants who conduct the assessments; (iv) including technically qualified, accredited, independent members in local AMDAL commissions that evaluate and approve AMDAL reports; (v) improving local transparency and participation; and (vi) providing better central government oversight and audit of AMDAL reports and subsequent decisions by local government.
- 3. Review Ministry of Agriculture 2009 regulation on plantation development on peatland and consider revisions to suitability criteria for planting, the sequencing of peat evaluation in the permitting process, and management of existing plantations on peat. *Permentan No.14/2009* governing plantation development on peat contains provisions that reduce conversion pressures on deep peat >3m but still results in significant GHG emissions from conversion of shallow (<3m) peat and off-site impacts to adjacent deep peat areas. The regulation requires that firms avoid planting where >30% of an area is peat >3m. The regulation is enforced after a Location Permit is issued, not as part of the pre-licensing screening process. The

license holder is expected to survey, delineate and plant only in areas that meet requirements, in accordance with an approved plan. Implementation of Permentan No.14 after Location Permits have been acquired is often too late, because companies naturally face pressure to plant, in turn creating incentives to under-report non-compliant areas and for local government to be lenient. The situation is exacerbated by weak enforcement due to limited institutional capacity in many regions. MoA temporarily allows companies to map peat depth themselves and gives regional plantations offices (Disbun) authority to verify company data through locally established procedures. Ideally, detailed peat land mapping would occur before Location Permits are issued as part of pre-licensing screening.

4. Develop criteria for screening biophysical suitability of land inside the Forest Zone that is allocated for conversion as a pre-condition for Ministry of Forestry approval for release. Areas of production forest in the Forest Zone allocated for conversion (HPK) can be released for agricultural use at the Ministry of Forestry's discretion. Land is not screened for biophysical suitability as part of the release process; approval appears to be automatic once administrative requirements have been met. Including GHG emissions, environmental service impacts, land tenure and/or other social criteria could make HPK release an effective instrument for land use decision making in support of Green Growth objectives.



Intact riparian buffers along a river in a oil palm plantation in Kalimantan. Photo: Craig Furmage.

4.4 Increase The Availability Of Suitable, Low Impact Land For Oil Palm Development

- 1. Simplify and expedite mechanisms for making low-carbon, deforested areas within the Forest Zone available for agriculture. Indonesia's legally defined Forest Zone includes large areas of deforested land prohibited from conversation to agriculture, whereas large areas outside the Forest Zone support intact forest that is legally permitted for conversion. The legal mechanism for rezoning low carbon Forest Zone land to make it available for oil palm is controlled by the Ministry of Forestry. In practice, the process is complex, time-consuming and encumbered by protracted, on-going spatial planning revision processes in many of Indonesia's provinces. As a result carbon-dense areas outside the Forest Zone are often cleared for development, despite environmental and other impacts. It is therefore urgent to streamline the reclassification process to facilitate "land swaps" or other programs to ensure carbon-rich forests outside the Forest Zone are managed as forest, and deforested lands inside the Forest Zone are made available for oil palm where they are suitable for planting and supported by communities.
- 2. Explore opportunities for smaller mills that require a smaller planted supply base: One key challenge for utilizing suitable, low carbon land in Indonesia is that current mill sizes require at least 3,000 hectares of productive plantations in order to generate enough fruit bunches to run the mill at optimal levels. Where land zoned for agriculture is already deforested, it can be a challenge to find 3,000 hectares of suitable land within an acceptable delivery radius given the mosaic of local land uses in such areas. In Thailand as well as other palm oil producing countries, smaller mills are commonly used, and this may be an option in parts of Indonesia. Analysis is needed to further understand the legal and practical challenges to this approach, especially those related to foregone economies of scale. This could be an area for government support via fiscal or financial incentives.



Swidden agricultural field in Kalimantan. Photo: Gary Paoli.

4.5 Promote Investments in Yield Enhancement and Reward Good Performance to Optimize Production on Existing and Future Plantations

1. Promote industry-wide CPO yield improvements through encouraging the following actors make some or all of the following decisions: Central Government mandate that plantations meet specified yield levels and/or document use of yield enhancing BMPs (e.g. via ISPO), and create fiscal incentives to support this; palm oil producer associations adopt and promote industry-wide standards on BMPs and yields and provide guidance, support and incentive for members to meet these standards; oil palm Companies and Smallholders commit to yield improvement and mainstream adoption of BMPs in company SOPs and smallholder support programs; and NGOs draw attention to the economic and environmental logic of improved yield and provide technical support to small holders and, where appropriate, smaller firms to adopt BMPs.

4.6 Develop Legal Tools and Build Implementation Capacity to Strengthen Management of Areas With High Conservation Value in Land Zoned for Agricultural Use

- 1. Strengthen the legal right of plantation companies to retain and manage unplanted conservation areas within the HGU for the plantation. With support from the National Land Agency and Parliament, the Ministry of Agriculture should consider modifying palm oil plantation development requirements to accommodate voluntary commitments by companies to undertake conservation activities within their plantations by retaining conservation areas and actively managing them to ensure provision of ecosystem services, biodiversity conservation and local livelihood benefits.
- 2. Create legal mechanisms for long-term conservation of forests set aside for conservation in areas zoned for agriculture under spatial plans but not yet burdened by licenses. When land within areas zoned for agriculture are identified as conservation priorities (e.g. due to social or environmental concerns noted during the AMDAL), such areas are often excluded from the plantation HGU, but are rarely placed under alternative management or reclassified for protection. Legal tools for long-term protection of such areas are not well-established, but are critically needed to ensure excised land is not re-licensed in the future.

- 3. Support private sector efforts to make explicit, progressive goals for management of conservation areas within oil palm plantations. Where companies retain management authority over conservation set-asides within their plantations, they set conservation goals at one of three levels: (i) treat the areas as 'no-go zones' for oil palm, but offer limited if any protection; (ii) adopt a 'pro forma' conservation approach, including posting signage, conducting patrols, and reporting encroachments to local authorities; and (iii) adopt a 'pro-active' full commitment approach through direct management, monitoring, and measures to reduce encroachment including active engagement with communities and local authorities or universities. Concerted effort should be made to encourage and support companies to make ambitious conservation commitments and to reward them when they succeed through fiscal, financial or market-based incentives.
- 4. Create financial incentives for companies to maintain undeveloped areas in plantations. Local governments can create incentives for maintaining undeveloped areas in the plantation through e.g. reduced or zero land taxes. Losses in tax revenue could potentially be offset by public finance mechanisms and/or paid by outside parties actively promoting biodiversity conservation and emissions reduction from production landscapes (e.g. downstream supply chain members, international NGOs, environmental institutions or foundations). External financing to support joint management of conservation areas with NGOs or communities should be a special priority for funding.
- 5. Make plantation companies more accountable for contractors hired for land clearing and improve systems for managing contractors. Better control over land clearing procedures would reduce risk of company-community and community-community conflict, and engender better relations overall between local actors at the plantation level. Greater attention must be placed on communicating to contractors where they are permitted to clear and where they are not; marking boundaries clearly in the field; and imposing penalties for incursions into nogo areas. Other possible steps include requiring contractors to post performance bonds with government and use of hand-held GPS to confirm their position against no-go maps. A system of contractor certification could potentially assist here.
- 6. To reduce encroachment pressures by local communities into conservation areas, companies should consider voluntary limits on how much community land they are prepared to place under oil palm cultivation. Communities sometimes agree to give over nearly 100% of their land to oil palm development in order to maximize revenues from land transfer and future income from oil palm. This can create problems for conservation within plantations, as well as for local livelihoods, when communities seek to expand household farming into areas allocated for conservation within a plantation. Although counter to a plantation company's goal to maximize planted area on suitable land, voluntarily limiting the percentage of land that companies accept for planting could help to ensure communities retain sufficient land for farming and reduce encroachment pressures.

4.7 Ensure Communities Are Well-Informed and Able to Participate Effectively in Negotiations With Oil Palm Companies From Earliest Phases of Development, Including Pre-Licensing Consultations

- 1. Make local governments accountable for mandatory provision of accurate and readily understandable information for local communities in areas under consideration for palm oil development. Local government has considerable authority to mandate how sosialisasi is performed by companies during land release negotiations. Some have established district, sub-district, and village-level teams to assist plantation companies to undertake sosialisasi. Companies are legally responsible for the sosialisasi process, yet face contradictory goals of disseminating objective and accurate information about plantation plans while also persuading as many local landowners as possible to make land available to the plantation. Whatever their motivation, it is very challenging for a company to communicate the positive and negative social and livelihood changes that will ensue following plantation development, especially in rural frontier areas. Factors that commonly hamper effective communication include: illiteracy and limited common language; difficulty in managing an open and inclusive sosialisasi process; limited skills in cross-cultural communication; deep philosophical divides within communities themselves; time pressure; and use of sub-contractors to engage communities.
- 2. Develop guidelines for establishing a more structured approach for local government to support company-led *sosialisasi* and on-going future negotiations, defining roles of government teams and establishing measurable, verifiable indicators of what should be accomplished by all parties in the process.



Mature agro-forestry gardens in Kalimantan managed by local communities. Photo: Gary Paoli.

- **3.** Develop a set of standard guidelines for community engagement, tailored to local conditions, aimed at ensuring that companies and communities cover a required set of issues in sufficient detail and in suitable form to clarify oil palm costs and benefits and details of partnership arrangements, especially repayment of credit. Independent assessment of this process by central government officials could be undertaken in tandem with civil society organizations. Implementing this system would require extensive training and significant financial support, which could be funded by a mix of private (especially supply chain actors), public, donor and civil society sources, all of whom show growing interest in smallholder outcomes.
- 4. Review and clarify minimum requirements for land division between Company and Communities as stipulated in Ministry of Agriculture's 2007 Regulation on licensing requirements. There is need to finalize the review of provisions of MoA Regulation No.26/2007 (see Annex 1), as it has created challenges for both companies and communities to interpret and implement land division arrangements. Such a revision should be informed by socio-political analysis of current outcomes tied to the regulation and the land division it stipulates, with the aim of understanding conditions under which the regulation has favored company versus community outcomes and how stronger, mutually beneficial outcomes could be promoted under revised provisions. 7
- 5. Through pilot trials, develop a mechanism for district government to provide negotiation support for all parties during the formation of benefit sharing agreements, especially smallholder partnership arrangements. Central government actors must provide guidance and reference to existing rules and regulations to develop acceptable multi-stakeholder engagement processes that can improve the quality of company-community negotiations. Some examples include ISEAL Code of Good Practice for Setting Social and Environmental Standards processes, World Bank Guidelines on Participation and Civic Engagement, among others. All parties involved, especially local authorities, must be prepared to accept that such a process will likely slow the rate of land acquisition and thus development, but in exchange contribute to stronger, more stable company-community relations. Slowed plantation establishment would need to be accommodated in the time allowed for development under current licensing requirements.
- 6. Develop clear, binding agreements between companies and communities regarding where and when smallholder plots will be developed. The establishment of a plantation takes many years, making the timing of establishment of smallholder plots a significant determinant of community development outcomes. Indonesian law requires that both company and smallholder plantations are developed concurrently. This requirement should be coupled with more effective oversight by local government to enforce the provision, with exceptions allowed only where there is clear approval of this by company and communities.
- 7. Develop and require use of model agreements for land release and smallholder partnership arrangements. Simplified, template-based model agreements for land release will be easier to understand by relevant parties and promote harmonization of plantation arrangements within the same district. Model partnership agreements should contain clauses

addressing, at a minimum: type of seedlings provided to smallholders; type and amount of technical assistance provided to smallholders and at what cost; credit repayment obligations; and road maintenance responsibilities and costing. Some features of these topics can be difficult to predict in the future, so a degree of flexibility must be allowed in agreements, but rights and responsibilities should be clearly laid out.

8. Clarify and strengthen plantation company obligations to support smallholder yields and create incentives that promote compliance with existing requirements. Enhanced company commitment to smallholder yields should improve smallholder productivity and thus incomes. Motivations for companies and communities to improve smallholder yields are not uniform across plantations in Indonesia, so a flexible approach will have to be taken. Such efforts should be assisted by far more intensive and committed private sector support, especially from the international palm oil supply chain (buyers) and from end users of palm oil and its derivatives. One feature of a smallholder productivity program would be to undertake a country-wide, systematic review of the extent and impact of low-yielding fake seeds and create a district level approach to progressively replant low-yielding trees with registered higher yielding varieties. This will require cooperation from numerous parties, including district governments, and leadership of the MoA.



Children in local villages near an oil palm plantation in Kalimantan. Photo: Philip Wells.

4.8 Develop Measures to Ensure Levels of Community Benefit During Implementation of Smallholder Partnership Agreements Are in Accordance with Negotiated Terms and Conditions

- Deliver effective smallholder training by district government, MoA extension trainers, and plantation companies, supported financially by downstream members of the palm oil supply chain. Give high profile, national awards to plantation companies that demonstrate quantifiable smallholder yield and livelihood improvements.
- 2. Job creation or other forms of community livelihoods support during the period when palms are maturing should be agreed upon between companies and communities during sosialisasi for land release. Direct employment with the company can be an important benefit for local communities assuming sufficient numbers of adequately well-paying jobs are created, employment tenure is clear, and opportunities are made available to those who need them.
- 3. Consider development and use of a more flexible and transparent fresh fruit bunch (FFB) price setting system that is easier for smallholders to understand and that creates opportunity for merit based pay that rewards good quality fruits. The current pricing scheme for smallholder FFB is designed to provide a degree of protection to smallholders, but it is complex and can create disincentives for smallholders to improve FFB quality. It is necessary to revisit relevant regulations on FFB pricing for smallholders and create an experienced team of plantation staff, smallholders, policymakers, economists and civil society organizations to look at how to improve the current system for pricing, balancing needs for transparency and uniformity with fairness and flexibility.



Field training for smallholder oil palm farmers. Photo: Piers Gillespie.

4.9 Develop Innovative Policy Measures and Fiscal Tools to Promote and Reward Investments in Zero Waste Technologies to Maximize Net Positive Impacts of Mill Operations

- 1. Increase sector wide awareness of and interest in advanced waste treatment and utilization technologies to promote uptake of Zero Waste practices. This can be achieved if the following actors make some or all of the following decisions. Central Government mandate that plantation companies make time-bound commitments to zero-waste management through, e.g. use of co-processing of EFB and POME, bio-digesters, and/or methane capture; Oil Palm Industry associations promote industry-wide standards on Zero Waste practices, and provide guidance, support and incentives to members; Oil Palm Plantations commit to use of co-compositing and biogas production facilities and incorporate these investments into business planning; and NGOs draw attention to the financial savings and environmental benefits of Zero Waste technologies and lobby for government requirements and positive incentives to promote this.
- 2. Create fiscal and financial incentives to promote (a) methane capture, (b) increased use of Land Application techniques for POME soil enrichment where appropriate, and (c) increased use of composting technologies to utilize soild waste by-products productively and reduce use of chemical fertilizers. Liquid and solid waste by-products from oil palm processing carry significant potential to be utilized productively for production of Biogas, fertilizer and a wide range of other useful products. Currently these resources are vastly under-utilized and viewed by some companies as a waste disposal burden. Members of the investment sector could lead a cross-sectoral team comprising Government, development agencies, GAPKI and other private sector interests to develop funding mechanisms to promote industry wide uptake of Zero Waste practices and technologies. This will require building linkages between donor agencies, private capital and oil palm companies to catalyze rapid uptake of new processes and technologies. Progress on this front will directly support ISPO compliance, which encourages investment in these practices and technologies. Industry leaders in this area will enjoy reputational, financial and certification benefits.



Methane capture bio-energy facility in Thailand owned by Univanich Limited.

4.10 Increase The Probability That Land is Allocated to Responsible Companies

- 1. Link access to land for additional oil palm development to successful company performance in the past. If a plantation group seeks to obtain multiple plantation licenses, approval could be made contingent on the company first demonstrating competence through, e.g. documented successful oil palm development elsewhere. There are precedents for such regulatory due diligence in Indonesia. For example, Ministry of Forestry's *Permenhut No.33/2010* required proof of procedural compliance with HGU and plantation development rules before a holding company was issued its second and all subsequent requests for release of HPK (Conversion Forest) from the Forest Zone. (But note this clause was removed in *Permenhut No.17/2011*, which replaces No.33/2010). Similarly, under UU18/2004 the Bupati holds the right to approve or reject a company's request for expansion of existing licenses (*ijin*) based on field verification of current performance. One potential mechanism for approval being made contingent on company performance could be via formal linkage to ISPO certification of existing plantations.
- 2. Explore mechanisms to eliminate the involvement of licensing agents, companies or individuals that specialize in obtaining licenses and initiate development for purposes of selling them on. Experience over the past decade has shown that licensing agents can create substantial future social and environmental problems for subsequent buyers as a result of the manner in which land release was obtained from communities and areas cleared by the original licensee. One option would be to require performance bonding to maximize the chance that more legitimate developers are involved in plantation licensing and initial development. Another is to place restrictions on the unregulated market trade of licenses to prevent developers from making false and deliberately misleading promises to local communities and/or making short term decisions about development that overemphasize short term development targets at expense of the environment or local communities.



Conventional treatment of POME in open air settlement ponds can be costly to maintain and generate significant GHG emissions. Photo: R. Harjanthi.

ANNEX 1

Legal Framework For Oil Palm Development

Indonesian central and regional government authorities have developed a complex legal framework governing oil palm (OP) development. Seven key areas of decision-making governed by the framework include:

- State vs private control of land
- Regional autonomy (Otonomi daerah) and division of authority between central and regional governments
- Legal structure for oil palm development
- Spatial planning
- Oil palm licensing
- Management of environmental impacts
- Plantation performance and legal compliance

1. State Control of Land

- Indonesian National Constitution (UU Dasar 1945)
- The Basic Agrarian Law of 1960 (UU No.5/1960)
- Constitutional Court decision (MK35/2012)

The Basic Agrarian Law of 1960 (UUPA No.5/1960) established the basis for modern agrarian law in Indonesia. The Basic Agrarian Law reinforced supremacy of the State in land matters and, among other important provisions, converted most *adat* (traditional) rights recognized under Dutch colonial law into a series of new (and weaker) statutory titles that made indigenous land ownership subordinate to the 'national interest'. Subsequent laws also gave government authorities discretion to recognize adat land ownership and thereby determine circumstances where communities are legally entitled to defend their customary land use rights (hak ulayat) against the State or a company licensed by the State.

Since UUPA No.5/1960, a host of other laws relevant to land ownership have been enacted that reinforce supremacy of the State in land matters, such as the Forestry Law of 1999. The current legal framework for oil palmis still firmly rooted in concepts of State control, with emphasis on rights conferred to companies via licenses issued by the State. Yet, significant improvements have been made in recent years, including requirements for: (i) plantations to provide meaningful development benefits to local communities; and (ii) companies to 'purchase' use rights from local communities prior to any development, with communities free, in principle, to accept or reject offers negotiated directly with a company. In a recent Constitutional Court decision (MK35/2013) of notable significance, the court decided that where Customary Forest *(Hutan Adat)* claims can be demonstrated by local communities, rights over such forests shall be conferred to local communities, and will no longer be considered state land. It's not clear how this decision will affect power relations between companies and communities moving forward, but it's a landmark decision of significant importance.

- UU No.22/1999 and No.25/1999 (replaced by UU No.32/2004)
- PP No.27/1999 (replaced by PP No.38/2007)
- UU No.26/2007
- UU No.33/2004 regarding fiscal arrangements under decentralization
- Keppres No.34/2003

The cornerstone of legislation governing decentralization are two laws passed in 1999 (UU No.22/1999&UU No. 25/1999), Presidential Decree No.34 in 2003 (Keppres No.34/2003) and the 2007 Law on Spatial Planning (UU No.26/2007). Combined with the 2004 Law on Plantations (UU No.18/2004) discussed below, this body of legislation fundamentally transformed the balance of power between central and regional authorities with respect to oil palm. Under Regional Autonomy (Otonomi Daerah), central authorities retain power to set national laws and regulations governing oil palm, but local authorities are assigned significant defacto and dejure authority to implement these guidelines. Regional authorities are also granted authority to supplement national laws through passage of regional regulations (Peraturan Daerah or *Perda*), provided they do not conflict with or weaken laws or regulations defined by central government. The broad powers vested in local government to implement and oversee the legal framework for oil palm covers proposals for spatial planning; licensing decisions; Environmental Impact Assessment (AMDAL) evaluation and approval; performance oversight and evaluation; verification of legal compliance; company-community conflict resolution; and issuance of fines and corrective action requirements for non-compliance.

3. Law On Plantations - UU No. 18/2004 The Law on Plantations enacted in 2004 (UU No.18/2004) is a critical piece of legislation defining national policies for oil palmin Indonesia. The far-ranging provisions of this law address, among other things: (i) definition of legal grounds for acknowledging customary (adat) land ownership by indigenous communities;⁸ (ii) delegation of responsibility to companies (rather than government) to obtain consent from local communities to release land for planting to initiate development; and (iii) defining legal instruments that companies can use to assert and protect rights over land once required permits have been issued. The law also assigns authority to companies to enforce plantation security, and details punishments that can be imposed on parties who steal or cause

2. **Regional Autonomy** and The Division of Authority Between Central and Local Government

disruption. The law also reinforces the authority of district officials to issue licenses, monitor compliance and oversee company-community relations, including conflict resolution. The wide discretionary powers assigned to local government and private companies under the law causes extreme variability across Indonesia in norms of social and environmental management of oil palm. Outcomes on the ground thus reflect a combination of local government attitudes toward oil palm and especially their role as regulators, corporate philosophy of firms operating in the region, and community preparedness for negotiations.

4. Spatial Planning

- UU No.26/2007
- UU No.41/1999
- PP No.26/2008
- PP No.10/2010
- PP No.15/2010

Spatial planning, a process for determining where local authorities are allowed to issue licenses for agricultural development is governed by a complex body of laws and regulations. Key elements include the Law on Spatial Planning (UU No.26/2007), Government Regulation on the National Spatial Plan (PP No.26/2008), Government Regulation on the Implementation of Spatial Planning (PP No.15/2010), and the 1999 Law on Forestry (UU No.41/1999) and Government Regulation on Procedures for change to the allocation and function of Forest Lands (PP No.10/2010). Other legislation, such as the Law on Protection of the Environment (UU No.32/2009), interacts with spatial planning law to determine areas legally permitted for conversion. An even larger body of central government and ministerial regulations governing oil palm plantation development potentially affects company decisions on which licenses to pursue, and thus areas placed at risk for conversion.

The Law on Spatial Planning lays the foundations for determining where oil palm may be licensed, by dividing Indonesia's landmass into areas that are allocated for protection (Lindung) or development (Budidaya). The primary function of Lindung areas is to conserve the environment and services it provides, whereas that of Budidaya is production. Budidaya areas in turn are subdivided into those suitable for forestry versus those allowable for other activities including agricultural. The law outlines a multi-tiered approach to create National, Provincial, and District spatial plans through a process that aspires to be 'transparent, effective and participative to realize a safe, convenient, productive

⁸ Here again, attention is drawn to the recent Constitutional Court decision concerning legal recognition of local community ownership and control over customary forest (MK 35/2012), which broadens scope for communities to assert adat ownership of land far beyond that defined in the 2004 Plantations Law.

and sustainable space'. The multi-tiered system defines an iterative process for excluding areas that are unsuitable for development based on finer levels of analysis from National to Provincial to District levels. The overall process for designating land available for oil palm licensing is shown in Figure 4 (see main text); relevant legislation defining this process is summarized in Table 1.

National Spatial Plan (RTRWN)

The current National Spatial Plan (RTRWN) was enacted in 2008 under PP No.26/2008. In the associated map (1:1,000,000 scale), the RTRWN delineates *Lindung* areas for protection and *Budidaya* areas potentially available for development, pending finer analyses during formulation of Provincial and District spatial plans. Under current law, *Lindung* areas designated for protection in the RTRWN may be expanded but not reduced in extent during Provincial and Regency reviews. This makes RTRWN, in effect, the legal reference of highest authority for delineation of *Lindung* areas across Indonesia. Mapping *Budidaya* areas is guided by: (1) a scoring system that ranks suitability of land for different purposes on the basis of slope, soil type and rainfall intensity; and (2) a requirement under PP No.26/2008 that at least 30 percent of each island must be protected from development.

Provincial, Regency and MoF Spatial Planning

Under Indonesian law (UU No.41/1999), the Ministry of Forestry (MoF) is authorized to (a) define at its sole discretion the extent of the Forest Zone (Kawasan Hutan), and (b) exercise full management authority over this area.⁹ Under a separate law, the provinces are required to develop spatial plans (UU No.26/2007), in accordance with two government regulations – one on forestry (PP No.10/2010) and another on spatial planning (PP No.15/2010) – governing how MoF and the provinces shall reach agreement on boundaries of the Forest Zone before the new spatial plan is enacted. Indonesia's Forest Zone was originally mapped in the early 1980s, in a process referred to as *Tata Guna Hutan* Kesepakatan (TGHK), which separated Forest Lands into Protected Areas (such as wildlife and nature reserves), Protected Forest (primarily for the protection of watersheds), Production Forest for forestry, and non-Forest Zones for agricultural use. Due to inadequate forest cover data at the time, many deforested areas were designated Forest Zone, and many forested areas were designated non-Forest Zone. After initial provincial spatial plans (RTRWP) were drawn up in the 1990s, MoF made efforts to correct these discrepancies and to reconcile differences between TGHK (developed by MoF) and RTRWP (developed

9 On this point, in 2011 Indonesia's Constitutional Court ruled a provision of the 1999 Forestry Law to be unconstitutional, in effect revoking MoFs authority to define boundaries of the Forest Zone through designation on a map, as opposed to formal gazettement in the field, which requires local government approval. The decision introduced questions concerning MoF management authority over areas that have been delineated but not gazetted as Forest Zone, and to an extent shifted the balance of power between MoF and regional authorities concerning negotiations over limits of the Forest Zone as part of spatial planning. A fuller discussion of this important decision is available here: http://www.daemeter.org/ news/constitutional-court-decision-on-indonesias-forest-zone-could-lay-groundwork-for-sustainable-low-emissions-development/

by provinces), resulting in a series of maps called TGHK *Paduserasi* ¹⁰. These maps reduced much, but not all, of the differences between RTRWP and MoF versions of Forest Zone boundaries, but failed to correct the misallocation of forested and deforested areas as Forest versus non-Forest Zone. Consequently, large areas of Forest Zone are deforested but unavailable for agriculture, and areas of non-Forest Zone support natural forest at risk of conversion.

Under current spatial planning procedures (UU No.26/2007, PP No.10/2010, and PP No.15/2010), deforested areas of the Forest Zone can be reclassified as non-Forest Zone, making it available for agriculture, but the process is complex. It requires a formal request by the Province during RTRWP revisions (discussed below), evaluation by an ad hoc team of experts, proof that >30% of the Provincial area remains classified as Forest Zone, endorsement by MoF and approval by the National Parliament. At its discretion, MoF can also require completion of a Strategic Environmental Assessment if severe impacts (Dampak Penting) are deemed likely (see UU No.32/2009). Complexity and non-transparency of this process is a major challenge for optimizing spatial planning in support of Indonesia's Green Growth objectives.

Activities at the provincial level to define the RTRWP, the second tier of analysis, are intended to refine delineation of Lindung areas (which may be expanded but not reduced) and Budidaya areas mapped in the RTRWN. Of greatest importance to oil palm is the sub-division of Budidaya areas into those allocated to forestry as part of the Forest Zone administered by MoF (so-called Forestry Utilization Areas or Kawasan Budidaya Kehutanan, KBK) versus those allocated for other uses including agriculture (so-called Non-Forestry Utilization Areas or Kawasan Budidaya Non-Kehutanan, KBNK) (see Figure 4, main text). Areas defined as KBNK fall outside the Forest Zone, may be licensed for oil palm, and are administered by local authorities without direct involvement of central government. The process of defining the split between KBK and KBNK, and thus boundaries of the Forest Zone, is a negotiation between provincial governments and MoF, but as noted above ultimate authority is vested with MoF, since any changes to the Forest Zone requires its approval. Areas of KBK within the Forest Zone can be further classified as forest for conversion purposes (Hutan Produksi Konversi, HPK), which in turn may be licensed for oil palm, but development is contingent upon MoF release of such areas for agriculture (see Figure 4).

Formulating the RTRWP is timed to coincide with development of District level spatial plans (RTRWK), the third tier of spatial planning. The RTRWK is developed by district planners and submitted to provincial planners for reconciliation with draft provincial spatial plans. While districts are empowered under decentralization laws to develop the RTRWK, the spatial planning law (UU No.26/2007) stipulates that district planners must respect boundaries of the Forest Zone as defined in the RTRWP, which itself must follow MoF designations of Forest Zone or seek approval for deviations from this (as described above). Thus, while significant authority has been granted to provincial and district governments in developing spatial plans, central government retains a high level of control over this process, through designation of the Forest Zone (KBK vs KBNK), and protected (Lindung) areas defined by the national spatial plan, and thus areas eligible for oil palm development. In this regard, MoF control over delineation of the Forest Zone could be seen as a safeguard to prevent local government licensing of palm oil in forested areas - a positive outcome for the environment. Yet, on the other hand, the complex process for MoF release of deforested (low carbon) land within the Forest Zone remains a major encumbrance to oil palm development on low carbon land.

5. Oil Palm Licensing

- UU No.32/2009
- Peraturan Menteri Negara Agraria/Kepala Badan Pertanahan Nasional No.2/1999
- PP No.40/1996
- PP No.24/1997
- PP No.27/1999
- Permentan No.26/2007
- Permenhut No.33/2010, No.17/2011 and No. 44/2011

A large body of laws and regulations related to permitting for oil palm defines: (i) the licenses required for development; (ii) process and requirements for obtaining them; (iii) division of local vs central government authority for issuing them; and (iv) requirements for securing long-term business use rights (HGU) once plantations are developed. A critical legal instrument codifying this framework is the Ministry of Agriculture Regulation No.26/2007 concerning Guidelines for Plantation Licensing (*Permentan No.26/2007*). The legal authority of *Permentan No.26/2007* is derived from the landmark 2004 Law on Plantations, which assigns authority to the Ministry of Agriculture (MoA) to formalize licensing requirements and procedures to be administered at local and national levels.

The main permits required to develop OP plantations and secure long term use rights from the State are outlined in Figure 5 in the main text

above; key laws and regulations relevant to each step are also shown. In brief, companies are required to obtain a Location Permit *(ljin Lokasi)*, which confers the right to begin negotiations with local communities for land release to plant oil palm and to initiate the mandatory Environmental Impact Assessment (AMDAL), as well as other ground survey activities. Once the AMDAL is completed and approved (see below), companies are issued an Environmental Permit *(ljin Lingkungan)* by local offices of the Ministry of Environment. Together with the plantation development plan, a sworn declaration to develop smallholder plots, and other documents, a permit is used to obtain a Plantation Business License *(ljin Usaha Perkebunan, IUP)*. Once the IUP is issued, companies must obtain a Land Clearing Permit *(ljin Pembukaan Lahan, IPL)* from local authorities to begin development.

At this point, companies are legally permitted to initiate development, provided: (i) community approval for land release has been received; and (ii) the license area falls outside the Forest Zone and thus allocated for agriculture (APL or KBNK) where local officials have authority to license development. If the license falls within Forest Zone, and such areas have been classified as forest for conversion (*Hutan Produksi Konversi, HPK*), then a request for HPK release must be filed with local MoF offices. This is a two stage process (see Figure 5), the first a request to obtain approval in principle (*Persetujuan Prinsip Pelepasan Kawasan HPK*) after obtaining the *Ijin Lokasi*, and the second a request filed once boundaries of the plantation have been agreed to obtain the formal MoF Decree for release of HPK (*Keputusan Menteri tentang Pelepasan Kawasan HPK*).

Another important licensing process runs in parallel with the above, and is required to obtain the long term Business Use Right (*Hak Guna Usaha, HGU*) for control over the plantation (see Figure 5). This permit provides control over the land for a period of 35 years, with option for extension of a further 25 years. This process can be initiated at any point after the *Ijin Lokasi* has been obtained, but cannot be completed until steps 1-4 in Figure 5 are complete and plantation boundaries have been demarcated in the field by local offices of the National Land Agency (BPN).

The Location Permit (Ijin Lokasi) is valid for three years with possible extension for one year. It is a challenge for companies to complete required licensing procedures within the time allotted, given that, in addition to developing several thousand hectares of plantations, they must conduct consultations with communities for negotiating land release, put in place environmental safeguards to mitigate negative impacts of plantation development identified during the AMDAL (and HCV assessments for RSPO members) and organize and control contractors to comply with these safeguards.

6. Management of **Environmental Impacts**

- PP No.27/1999
- Permen LH No.28/2006
- UU No.32/2009
- Keppres No.32/1990
- Permentan No.14/2009

Components of Indonesia's national regulatory framework for oil palm have been designed to avoid or mitigate environmental impacts of plantations and mills. The framework includes national laws and regulations, supplemented by numerous Ministerial regulations and sub-Ministerial decisions that set: (i) pollution control standards covering fertilizers, pesticides, herbicides, air pollutants (including those resulting from fires), and waste water; (ii) procedures and standards for Environmental Impact Assessments (AMDAL); and (iii) locallyestablished protected areas *(kawasan lindung setempat)* that may not be developed.

The AMDAL analyzes likely environmental impacts of a proposed development activity and identifies recommended actions to minimize and/or avoid environmental impacts of a project. In theory, the document provides a basis for discussion among project proponents, government officials, and impacted communities on whether the proposed activity should move forward given the magnitude of impacts and potential to mitigate them. AMDAL is a strict requirement for all oil palm plantations greater than 50 ha and is integrated into licensing procedures (see Figure 5 and Box 1).

BOX 1 Environmental Impact Assessment (AMDAL) in Indonesia

The AMDAL process is defined in Government Regulation No. 27 on EIA (PP No.27/1999) and comprises four parts: (i) Terms of Reference *(Kerangka Acuan, KA),* defining the scope and approach; (ii) Environmental Impact Statement *(Analisis Dampak Lingkungan, ANDAL);* (iii) Environmental Management Plan *(Rencana Kelola Lingkungan, RKL);* and (iv) Environmental Monitoring Plan *(Rencana Pemantauan Lingkungan, RPL).* The AMDAL must be conducted for all OP plantations greater than 50ha *(Permen LH No.28/2006)* and is performed on behalf of the company by individuals or a consulting company accredited by the Ministry of Environment (MoE) to conduct AMDAL.

An ad hoc AMDAL Commission formed by local government authorities and other experts evaluates each step in the AMDAL process. This begins with announcement of a company's intention to conduct AMDAL and holding a public consultation during KA development. Upon approval of the KA by the commission, the team begins field-work to obtain baseline data covering physical parameters, biological parameters, and social, economic, and cultural components. The ANDAL is produced describing the setting, proposed activities and likely impacts, followed by explanation of recommended measures to mitigate impacts (RKL) and required monitoring to evaluate impacts (RPL). Once the draft AMDAL is complete, the AMDAL commission is required to hold a final public hearing for public input and to evaluate the documents. This can lead to recommendations for improvement, rejection or approval, which are forwarded to the Bupati or Governor for final decision. If the AMDAL is rejected, the proposed project activity is terminated.

In practice, it is extremely uncommon for AMDAL of an oil palmproject to be rejected on grounds that impacts are too severe. In part this reflects the challenge of finding qualified parties with required knowledge and understanding to evaluate environmental issues free of conflict of interest. It also reflects a general sentiment that, in pratice, the AMDAL is a formality to fulfill licensing requirements, rather than a genuine opportunity to screen or reshape development activities unsuitable in a given setting. According to formal procedures, the AMDAL is a powerful tool to democratize decision making over natural resources within the existing legal framework. Significant improvements in implementation are required, however, to deliver on this potential.

Criteria for delineating locally protected areas (*Kawasan Lindung Setempat*) were first stated in Presidential Decree No.32/1990 and have since been reinforced in more recent regulations. Maps of locally protected areas are not produced by government agencies, but rather must be identified and avoided on the basis of biophysical characteristics that are measured in the field by companies during plantation development. Areas that may not be developed include:

- Peatlands greater than 3 meters in depth.
- Coastal tidal buffers of at least 100m from the high water mark.
- Riparian buffer zones of 5 m for a river with a dyke, and 100 m for a river (*sungai*) or 50 m for a tributary of a river (*anak sungai*).
- Buffers around lakes and dams of at least 50-100 meters from the high water mark.

- Buffers around surface water springs of at least 200 meters.
- Slopes greater than 40 percent.

Further restrictions on peat land development were also enacted by the Ministry of Agriculture (MoA) in *Permentan No.14/2009.* This regulation prohibits development (a) on peat where >70% of the area is >3 meters deep, or(b) where peat <3m deep that has specific characteristics considered too high risk for development (see Box 2 for a fuller description).

BOX 2 Restricted use of peat lands for palm oil cultivation - *Permentan No.14/2009*

Permentan No.14/2009 concerning use of peat lands for OP does not prohibit development of peat lands, but restricts development only to areas that meet specified pre-conditions:

- 1. Peat must be less <3m deep (specifically, 70% of the total planted area must be on peat <3m, accounting for small patches >3m);
- 2. The mineral soil substratum may not be not quartz sand or acid sulfate soils;
- 3. Peat soils must be well developed (sapric or hemic in maturity); immature febric peat is not permitted;
- 4. The peat must have eutrophic fertility levels (defined as sufficient fertility to sustain OP growth).

The regulation applies to all companies issued plantation business permits (IUP) in peat lands after February 2009. The required output is a map indicating eligible peat lands produced at scale of at least 1:100,000. Competent institutions identified by MoA include the Indonesian Oil Palm Research Institute (IOPRI), Sucofindo (an Indonesian certification body), and the *Balai Besar Sumber Daya Lahan Pertanian*. Based on this map, a plantation design and yearly work plan must be made, defining the time and place of land clearing and planting activities, plantation maintenance, and conservation efforts (especially hydrology).

The Permentan reinforces other regulations that prohibit use of fire to prepare land for planting, and outlines other requirements for peat land development, including provisions to maintain hydrological function through installation of a water control system to maintain water table levels at no more than 60-80 centimeters below the peat surface. The burden to demonstrate compliance with this *Permentan* rests with oil palm companies who are issued licenses; it is not a requirement for local government to pre-screen Location Permits before they are offered to companies.

Permentan No.14/2009 also stipulates that annual monitoring of plantation development must be undertaken by CG or LG authorities to ensure plantation development follows the approved plan. If non-compliance is found (e.g. planting occurs outside prescribed areas) a series of three, quarterly corrective action warnings are issued. If the warnings are not heeded, the district government can request MoA to revoke the company's operating license.

7. Plantation Performance and Legal Compliance

- Permentan No.7/2009
- Permentan No.19/2011

Industry compliance with GOI's regulatory framework covering social and environmental impacts of oil palm varies widely, reflecting differences in corporate philosophy and ability of local authorities to monitor and verify legal compliance. The MoA recently enacted two regulations designed to standardize monitoring efforts, promote compliance with legal requirements and facilitate wider adoption of improved oil palm agronomic practices.

Guidelines to Evaluate Plantation Businesses (Permentan No.7/2009)

In February 2009, the MoA issued Regulation No.7 on Guidelines to Evaluate Plantation Businesses, directing local officials to evaluate the performance of plantation companies operating under their jurisdiction *(Permentan 07/2009).* The evaluations are to be performed annually for plantations under development and once every three years for operational plantations.

The purpose of the evaluation program, as stated in *Permentan* 07/2009 is to:

- 1. Evaluate the performance of a plantation business;
- 2. Evaluate compliance with applicable rules and regulations;
- Encourage plantation businesses to conform to technical standards of plantation and mill management and business operations to maximize performance (e.g. yield);
- 4. Encourage plantation businesses to meet obligations under applicable rules and regulations (e.g., retention of riparian buffers);
- 5. Implement a plantation business mentoring program.

Permentan No.7/2009 was enacted on the basis of Article 42 of the Plantations Law (UU No.18/2004) that requires development of a system to monitor plantation company performance and legal compliance. It aims to increase yields through promotion of better management practices, improve social and environmental performance, and penalize companies that repeatedly fail to meet established standards. The performance evaluation system enacted in Permentan No.7/2009 is separate from, but runs in coordination with, the Indonesian Sustainable Palm Oil (ISPO) standard, serving as a precertification step leading toward ISPO certification (see below). For plantations under development, evaluation under Permentan No.7/2009 covers legality; rights to land; management systems; development progress against stated plans; ownership of infrastructure; fire and pest management; AMDAL implementation; local community development; and reporting. For operational plantations, evaluations cover the above plus management practices related to yield and mill operations.

Significant authority for implementing *Permentan No.7/2009* lies with the district head (*Bupati*) as do implementation costs. The *Bupati* is empowered to appoint a team of assessors certified by the Plantation Education Institute (*Lembaga Pendidikan Perkebunan*) under a separate MoA regulation (*Permentan No.36/2009*). Certified assessors have technical and legal responsibility for assessment results and their individual performance is evaluated every three years.

Assessments are performed following detailed evaluation and scoring instructions outlined in Permentan No.7/2009. The Bupati is empowered to assign a performance ranking to the plantation based on the assessment results. Plantations in the development stage are assigned scores of A, B, C, D or E (from high to low performance); operational plantations are assigned to classes I, II, III, IV or V. Plantations classified D/E or IV/V are deemed severely non-compliant and issued corrective action request(s) to resolve problems within a specified time frame (four to 12 months for new plantations; 12-18 months for existing ones). If the company does not take corrective action within the time allotted, their license can be revoked.¹⁰ Companies who refuse to be assessed are automatically classified as level E or V and face risk of immediately losing their license. Results of the performance assessment serve as the basis for companies to advance to ISPO certification. Companies assigned to performance classes I-III (or A-C) are deemed eligible to proceed toward ISPO certification.

Indonesian Sustainable Palm Oil (Permentan No.19/2011)

In March 2011, MoA enacted *Permentan No.19/2011* to improve palm oil industry practices through certification against the governmentdefined Indonesian Sustainable Palm Oil (ISPO) standard. The regulation requires all Indonesian palm oil producers to comply with ISPO criteria by 31 December 2014.

The ISPO standard comprises seven principles, 45 criteria and 174 indicators, grounded in the national legal framework (with a few additions) and encompassing:

- **social aspects** including land tenure, worker well-being, social responsibility, and local economic development;
- **environmental aspects** including greenhouse gas emissions, biodiversity protection, and pollution control;
- productivity aspects linked to good agronomic practices and mill operation techniques; and
- principles of continuous improvement.

Implementation of the ISPO regulation is closely linked to the Plantation

Performance Evaluation system of *Permentan 07/2009* described above. The systems are designed to be implemented in coordination so that companies achieving specified levels of performance under *Permentan 07/2009* advance to ISPO certification audit by an approved ISPO certification body (CB). Accreditation of CBs is overseen by the ISPO Commission, with priority given to CBs already accredited by the National Accreditation Commission for audit against other standards. The ISPO audit must be performed by accredited ISPO auditors following a pre-defined evaluation and scoring system, with oversight by CBs.

While details of the ISPO standard differ from that of RSPO, the certification systems are broadly similar, and structure of the standard share much in common. Among key differences between them, however, is that RSPO is voluntary, whereas ISPO is mandatory for all plantation companies operating in Indonesia. In this sense, ISPO carries broader potential reach than RSPO to drive improvements in performance throughout the industry, especially among those showing chronic non-compliance.

¹⁰ Curiously, the regulation also specifies that once an evaluation is complete, scores must be assigned within 2 months otherwise class A or class I status (highest mark) is received.

ANNEX **2** Summary of Decisions Evaluated in The Full Report

1. Where **Licenses are Issued** for Oil Palm Development

Power Relations of The State, Companies, and Individuals

• **Decision 1.1**: Authority to issue licenses for the development of land is vested in the state, unless other rights exist and can be clearly demonstrated

Boundaries and Management of The Forest Zone (Kawasan Hutan)

- **Decision 1.2:** The Ministry of Forestry determines the boundaries of Forest Area and non-Forest Area across Indonesia
 - o Sub-decision 1.2.1: The MoF has supreme power to define the location and extent of Forest Zone (Kawasan Hutan)
 - Sub-decision 1.2.2: The 2007 Spatial Planning Law (UU No.26/2007) enacted to guide land use planning at a national scale reaffirms and strengthens the MoF's authority to define the Forest Zone.
- **Decision 1.3:** Ministry of Forestry has final management authority over the Forest Zone
 - o Sub-decision 1.3.1: Land allocated for conversion (*Hutan Produksi Konversi*) within the Forest Zone can be released from it at the discretion of MoF
 - o Sub-decision 1.3.2: Oil Palm plantation is not designated as forest

Authority and Procedures For Issuance of A Location Permit (*IjinLokasi*)

- **Decision 1.4:** Local government has authority to issue licenses for OP in areas allocated for agriculture under spatial planning
- **Decision 1.5:** Whether decisions about where to issue OP licenses in specific locations take into consideration long term development planning to optimize development outcomes
 - Sub-decision 1.5.1: Whether local government makes licensing decisions with reference to OP development targets as part of long term economic development planning
 - Sub-decision 1.5.2: Whether infrastructure planning is given explicit consideration in decisions for where to issue Location Permits for OP
 - Sub-decision 1.5.3: Whether carbon stocks are considered in the decision making process for issuing a Location Permit, e.g., in pursuit of "low emissions development planning"

- Sub-decision 1.5.4: Whether government utilizes decision-support tools to balance multiple objectives in making decisions about where to issue OP licenses
- **Decision 1.6:** Regional government is required by central government decree to consult local communities before issuing a Location Permit
 - o Sub-decision 1.6.1: Whether the consultation process is defined in detail
 - o Sub-decision 1.6.2: Whether to develop standardized materials for consultation
 - o Sub-decision 1.6.3: Whether and how community input is considered in the decision to issue a Location Permit
 - o Sub-decision 1.6.4: Whether or not consultation is performed completely
- **Decision 1.7:** Within land allocated for conversion under spatial plans, whether there are clear and binding guidelines to direct OP development onto lands that are suitable

Required Procedures Following Issuance of A Location Permit

- **Decision 1.8:** Companies have ultimate responsibility for obtaining community agreement for planned OP development and must do so within three years
 - Sub-decision 1.8.1: Companies are responsible for negotiating with communities to secure (a) land release and agreed upon compensation for long term use rights; (b) agreement on land sharing arrangements between plantation and community members; and (c) terms of partnership arrangements with communities who become tied smallholder farmers by releasing land to the company for OP
 - o Sub-decision 1.8.2: Whether government or civil society organizations support and monitor the negotiation process to ensure that open and participative procedures are followed
- **Decision 1.9:** Detailed field studies are performed to evaluate environmental suitability for OP and identify environmentally sensitive areas that should be protected
 - o Sub-decision 1.9.1: Detailed field studies are performed after (not before) a Location Permit has been issued
 - Sub-decision 1.9.2: Whether specific thresholds are defined for maximum allowable impacts (e.g., clearance of forest in upstream watersheds or conversion of all agricultural land of rural farmers)
 - Sub-decision 1.9.3: Local governments evaluate AMDAL and peat depth mapping to verify compliance with safeguards with little functional oversight by central government to ensure regulations are followed.

- **Decision 1.10:** Following the issuance of a Location Permit *(ljin Lokasi),* a series of additional permits are required, each with a predefined decision process.
 - Sub-decision 1.10.1: Whether or not (a) an environmental license (*ljin Lingkungan*); (b) plantation business license (*ljin Usaha Perkebunan*); (c) land clearance permit (*ljin Buka Lahan*); (d) forest release permit (*Surat Pelepasan Kawasan Hutan*); and (e) long term business use permit (*Hak Guna Usaha*) is issued.
 - o Sub-decision 1.10.2: Whether and under what circumstances any of these permits can be revoked

Approaches To Monitor Decision Making About Where Op Licenses Are Issued

- **Decision 1.11:** The overall licensing process is highly decentralized with limited Central Government guidance or oversight of permitting decisions
- **Decision 1.12:** Companies must comply with the Indonesian Sustainable Palm Oil (ISPO) standard and are subjected to independent audit by accredited certification bodies to verify compliance.
- **Decision 1.13:** Whether companies apply voluntary criteria beyond those required by law (e.g., RSPO, ISCC) to identify and manage environmental and social risks of development.

Decision Making on Plantation Development

- **Decision 2.1:** Environmentally sensitive areas within the plantation.
 - o Sub-decision 2.1.1: Whether environmentally sensitive areas are delineated and avoided within the plantation.
 - Sub-decision 2.1.2: Environmentally sensitive areas are identified with reference to legal requirements, voluntary standards or both?
 - o Sub-decision 2.1.3: Whether semi-sensitive areas legally permitted for planting are developed following special provisions?
- Decision 2.2: Treatment of undeveloped land within the HGU
 - o Sub-decision 2.2.1: Whether undeveloped areas are excised from the HGU or retained within it to maintain management authority
 - o Sub-decision 2.2.2: The legal approach used to retain undeveloped areas within the HGU

2. Environmental Impacts of Plantations and Mills

- **Decision 2.3:** Preparation of Land for Oil Palm Planting
 - o Sub-decision 2.3.1: Whether fire or manual methods are used to clear vegetation in preparation for planting
 - o Sub-decision 2.3.2: Oversight and control of contractors responsible for land preparation

Decision Making on Plantation Management

- **Decision 2.4:** Control of air, water and noise pollution as part of plantation management operations.
- **Decision 2.5:** Whether plantations established on hydrologically sensitive areas such as flood plains and peatlands are managed to modulate water flows and GHG emissions arising from drainage.
- **Decision 2.6:** Whether use of organic fertilizers is promoted to reduce dependence on chemical fertilizers to maintain plantation productivity.
- **Decision 2.7:** Whether set-asides and riparian buffers within plantations are actively protected from external threats, e.g., hunting or illegal logging.
- **Decision 2.8:** Whether plantations are managed to improve yields.

Decisions Making on Mill Operations

- **Decision 2.9:** Whether water use by mills is optimized to minimize water usage and thereby reduce impacts on local water supplies and aquatic habitat.
- **Decision 2.10:** Whether methods for methane capture from POME treatment ponds are used to reduce GHG emissions from mill operations.
- **Decision 2.11:** Whether CO2 scrubbers are installed on boilers to reduce GHG emissions from mill operations.

3. **Community-Company** Relationships

Defining Roles of Communities and Companies

Decision 3.1: Whether community ownership of land is formally recognized

Community Consultation Before Issuing A Location Permit (Ijinlokasi)

- **Decision 3.2:** Regional government undertakes consultations with communities before issuing a Location Permit
- **Decision 3.3:** Whether or not the company performs its own detailed due-diligence before buying a Location Permit

Community consultation for awareness raising ('Sosialisasi') after a Location Permit has been issued

- **Decision 3.4:** The extent to which sosialisasi for land release is led by the company
- Decision 3.5: The government role in supporting sosialisasi
- **Decision 3.6:** Whether and how to develop effective generic sosialisasi guidelines/materials

Key terms of Partnership Agreements

- **Decision 3.7:** 'Compensation' paid to communities for acquiring use rights of land
- **Decision 3.8:** The land division ratio implemented during plantation development phase
- **Decision 3.9:** Location, establishment and infrastructure maintenance of smallholder plots
 - o Sub-decision 3.9.1: Where smallholder OP plots are placed
 - o Sub-decision 3.9.2: Schedule for establishing smallholder plots
 - o Sub-decision 3.9.3: Infrastructure maintenance from smallholder plots to the mill
- Decision 3.10: Quality of materials used for smallholder plots
- **Decision 3.11:** Training and extension support services for smallholders to promote adoption of good management practices and high yields
- **Decision 3.12:** Choosing the model of plantation partnership between company and smallholders
- **Decision 3.13:** Terms of loan repayment and treatment of expenses
- **Decision 3.14:** Employment opportunities with the inti plantation and mill
- **Decision 3.15:** Support for community livelihoods during establishment phase

Negotiation of Partnership Agreements

- **Decision 3.16:** Negotiation over terms of the arrangement between smallholders and the plantation company are led by the company
- **Decision 3.17:** Whether and how the district government is involved in negotiations of the partnership arrangement

Plantation Operations and Smallholder Benefits

- **Decision 3.18:** Determining prices for smallholder FFB
- **Decision 3.19:** Plantation company support for developing smallholder cooperatives

The Nature Conservancy Indonesia Program

Graha Iskandarsyah, 3rd Fl. Jl. Iskandarsyah Raya No. 66C Kebayoran Baru, Jakarta 12160 Indonesia Tel: +6221 7279 2043 Fax: +6221 7279 2044

nature.org/indonesia nature.or.id