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ISSUE BRIEF

HOW TO CHANGE LEGAL LAND USE CLASSIFICATIONS TO SUPPORT MORE SUSTAINABLE PALM OIL IN INDONESIA

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Indonesia is the world's leading producer of palm oil. Industry and government leaders have announced goals to expand production while avoiding forest loss and social conflict. Achieving those goals depends on establishing new plantations on suitable, non-forested land and respecting local rights. Land classification in Indonesia does not necessarily allow this, as many suitable areas are legally unavailable for development. This issue brief examines methods to change legal classification of land to support sustainable palm oil.

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CONTENTS

EXECUTIVE SUMMARY

Indonesia is the world's leading producer and exporter of palm oil, with roughly 18 million metric tons of crude palm oil exports valued at US $21.6 billion in 2012.[1] The commodity plays a crucial role in the country's economy. However, palm oil production is also closely linked to deforestation, social conflicts, and other environmental impacts, as large areas of Indonesia's forests and peatlands are cleared for conversion to oil palm plantations.[2]

Palm oil industry and government leaders in Indonesia have announced goals to expand palm oil production while avoiding forest loss and social conflicts. Achieving these goals largely depends on where new oil palm plantations are established and whether local rights and interests are respected during site selection processes. Site selection, in turn, depends on government spatial planning and permitting processes that determine where companies can legally establish plantations.

As of 2011, approximately 70 percent of Indonesia's total land area was classified as "forest estate" (*kawasan hutan*) by the Ministry of Forestry.[3] However, this and other classifications may not conform to the physical reality of the land cover: many forest estate lands are settled or degraded, and many nonforest estate lands host rich primary forests and extensive peatlands. A study by the World Resources Institute found that 5.3 million hectares of suitable land are part of the forest estate, and are therefore legally unavailable for agricultural development.[4]

Based on a desktop legal review, this issue brief found multiple methods for changing legal land classifications in Indonesian law. Companies could use these methods to expand certified sustainable palm oil production in areas that were previously legally unavailable. The methods could also be used to facilitate the conservation of forested areas currently legally available for agricultural uses.

This study identifies three types of methods for legally reclassifying land:

1. Single reclassifications: Procedures that change the land-use classification of a single area.

2. Multiple reclassifications: Procedures that change (or "swap") the land-use classifications of multiple areas simultaneously.

3. Local/special designations: Procedures that change the allowable land uses in a designated local area, without changing the land use classifications.

In addition to the legal review, WRI carried out a land swap through a pilot project with Indonesian partner Sekala and PT Smart, one of the largest publically listed palm oil companies. PT Smart, which has committed to the standards of the Roundtable on Sustainable Palm Oil,[5] held a license for forested peatland that was classified as "nonforest estate" and was willing to seek an alternative site on degraded land. In 2009, WRI and Sekala identified nearby suitable degraded land, where the local community had a strong interest in palm oil development. However, despite this interest, the plan has not been approved by the national government, and has stalled because of the complexity and cost of the legal process.

Companies, project developers, and communities seeking to change legal classifications in a manner that is consistent with sustainability standards face substantial legal challenges, namely the length and costs of the processes, lack of legal clarity, and lack of consistency with goals to avoid forest loss and social conflicts.

This study offers several recommendations for palm oil companies to help address these challenges, such as understanding the legal reclassification procedure options and sharing implementation experience, going beyond legal compliance to follow best practices, and engaging with initiatives such as the Roundtable on Sustainable Palm Oil and Indonesian Sustainable Palm Oil to support land-use classification policies. Recommendations are also outlined for Indonesian policymakers, including clarifying the objectives and definitions associated with land swap policies, simplifying procedures, incorporating biophysical and social factors into legal classifications, and making data and procedures publically available and easily accessible.

Addressing these challenges will help Indonesian companies, governments, and communities use land more efficiently, preserve valuable forests, and expand business prospects. With global demand for sustainable palm oil and other commodities on the rise, land swaps can help position Indonesia to meet market demands while using land sustainably.

INTRODUCTION

Indonesia has rapidly expanded its palm oil production over the past several decades to become the top producer of palm oil worldwide, with crude palm oil exports valued at US$ 21.6 billion in 2012.[6] However, the growth of the palm oil industry has not been without consequences. Conversion of forests to oil palm plantations is a major driver of forest loss, affecting biodiversity, greenhouse gas emissions, and local livelihoods.[7]

To address these concerns, industry and government leaders have announced goals to expand palm oil production while avoiding forest loss and social conflicts.[8] Realizing these goals could contribute to economic growth and job creation, enhance the competiveness of the Indonesian palm oil industry in the growing global market for more sustainable palm oil, and contribute to national ambitions to reduce greenhouse gas emissions.[9]

Whether these goals are achieved will depend largely on where new oil palm plantations are established and how local rights and interests are respected during site selection processes.[10] Site selection in turn is highly dependent on government spatial planning and permitting processes, which determine where companies can legally establish plantations.

Both industry and Indonesian government standards for certified sustainable palm oil include provisions designed to contribute to these goals. The Roundtable on Sustainable Palm Oil (RSPO), a multistakeholder organization, has developed a voluntary, market-based certification standard that includes requirements to maintain "high conservation value" areas and to obtain the "free, prior, and informed consent" (FPIC) of local people.[11]

Industry and government leaders have announced goals to expand palm oil production while avoiding forest loss and social conflict. Whether these goals are achieved will depend on where new plantations are established and how local rights and interests are respected during site selection.

The Indonesian Sustainable Palm Oil certification system, a recently developed legal standard, includes provisions for avoiding social conflicts and loss of natural forest and biodiversity. These provisions are based on concepts in Indonesian regulations.[12]

Companies can get a head start on meeting these standards by identifying potentially suitable areas for expansion using an approach developed by the World Resources Institute (WRI) and Sekala[13] under the Sustainable Palm on Low Carbon Degraded Land or POTICO Project (Box 1). This approach[14] consists of a desktop study and field assessments and includes economic, environmental, social, and legal considerations. The approach and spatial data are available at an interactive website.[15]

However, companies face the remaining challenge of ensuring that an area identified as suitable for a plantation under sustainability standards is also legally eligible for the permits required for the proposed new land use.[16] In Kalimantan, the Indonesian portion of the island of Borneo, a Project POTICO desktop study identified 14.6 million hectares as potentially suitable for palm oil expansion, but 5.3 million hectares of this total were not legally classified to allow for plantation development (Table 1).[17] Although field assessments are necessary to reject or confirm the suitability of each site, this analysis suggests that large potentially suitable areas are not eligible for development because of their legal classification.

Meanwhile, 8.6 million hectares found not suitable by the Project POTICO desktop study—including forested areas—were legally classified to allow for conversion to oil palm plantations (Table 1).[18] In some instances, the government has already issued permits to companies to begin plantation development in these areas. For example, in the Project POTICO pilot field site in West Kalimantan, a palm oil company was issued a permit in a heavily forested peat swamp on land legally classified for plantation development. Conversely, a nearby area of degraded land that met Project POTICO suitability criteria was legally off-limits for plantation development.[19] This Project POTICO pilot site is described in "Application: Testing Methods in the Field," below.

The government has recognized this problem and in June 2012 proposed a "land swap" policy to help address inconsistencies in land classification. The policy is part of a draft national "REDD+ Strategy" aimed at reducing emissions from deforestation and for-

BOX 1

PROJECT POTICO: SUSTAINABLE PALM OIL ON LOW CARBON DEGRADED LAND

The World Resources Institute's Project POTICO supports sustainable palm oil production and improved forest management in Indonesia. Our pilot project in West Kalimantan links the expansion of oil palm cultivation on degraded land with sustainable forest management, while respecting local rights and interests. Our research and outreach activities support market and policy incentives for sustainable palm oil production and improved forest management in Indonesia.

Palm oil has potential to contribute to Indonesia's development goals in line with Indonesia's emissions-reduction strategy if expansion follows sustainable practices such as respecting local people's rights and avoiding deforestation. Sustainable palm oil refers to palm oil produced in accordance with established standards such as those of the Roundtable on Sustainable Palm Oil (RSPO).

Web Tools to Support Sustainable Palm Oil

WRI has developed two web applications to enable key stakeholders such as palm oil producers , investors, and government decisionmakers to make improved land-use decisions concerning sustainable palm oil. Building off WRI's Interactive Atlases, these web tools will provide land use and land cover data for the Indonesian island of Kalimantan. The Forest Cover Analyzer[a] enables users to assess forest cover change and deforestation risks related to sustainable palm oil production in areas of their choice in Kalimantan. The Suitability Mapper[b] enables users to prioritize potentially suitable sites for sustainable palm oil production for further investigation in the field.

Notes:

a. See http://www.wri.org/applications/maps/forest-cover-analyzer/.
b. See http://www.wri.org/applications/maps/suitability-mapper/.

TABLE 1

POTENTIAL SUITABILITY VERSUS LEGAL AVAILABILITY IN KALIMANTAN INDONESIA

LEGAL AVAILABILITY	POTENTIAL SUITABILITY FOR OIL PALM BASED ON POTICO ANALYSIS (MILLION HA)	
	POTENTIALLY SUITABLE	NOT SUITABLE
Legally available for oil palm (nonforest estate or convertible production forest)	9.3	8.6
Not available for oil palm (all other legal land use classifications)	5.3	30

Source: POTICO Suitability Mapper. Available online at http://www.wri.org/project/potico/about-suitability-mapper.

est degradation. However the details of the draft policy are undefined. For example, it is unclear whether "land swap" refers to changes in legal land-use classifications or permits, or both, and what criteria would be used to determine whether a land swap can be implemented.

As the government continues to refine its policies, companies seeking to develop new plantations in suitable areas need to understand the existing options for changing legal land-use classifications. This brief summarizes the existing legal methods for changing current land-use classifications, which were identified through a desktop legal review. It offers a Project POTICO case study of the application of these methods, and discusses challenges to their implementation. Finally, it sets out recommendations for palm oil companies and Indonesian policymakers grappling with land-use classification challenges. A detailed legal appendix is included for reference.

WRI recognizes that the proposed methods for changing legal classifications were not designed to support local interests and land-use rights. This brief references some of the important social issues and challenges associated with changing legal land classification; however it does not attempt to provide a comprehensive analysis of social issues related to Indonesian land use.

Although this brief focuses on palm oil production, its findings are relevant to any developer or community group seeking legal recognition for a project aiming to pursue more sustainable land management, whether for oil palm cultivation, forestry activities, or other land uses.

METHODS FOR CHANGING LEGALLY ALLOWABLE LAND USES

This section summarizes existing legal methods for changing allowable land uses, including methods for changing land-use classifications to allow nonforestry uses (e.g., oil palm plantations) where they were previously disallowed, as well as methods for changing classifications to disallow nonforestry uses where they were previously allowed. Details on each method, as well as background on the Indonesian legal context relevant to land-use classifications and land rights, are in Appendixes A and C.

In Indonesia, all land is legally classified according to its allowable uses. An area's land-use classification determines its eligibility for rights and permits defining its allowable uses. Appendix A2 describes the history and legal context of the current classification system.

All land in Indonesia is classified as either forest estate (*kawasan hutan*) or nonforest estate (*areal penggunaan lain*, or APL). Forest estate is further classified into three functional categories that determine allowable land uses, from the most restrictive category of "conservation forest," through "protection forest," which allows use of forest products, to "production forest," which allows commercial timber harvesting.[20] Table 2 summarizes these legal classifications and their allowable land uses. For more detailed information on forest classifications, see Appendix B.

In 2011, about 70 percent of Indonesia's total land area (187.6 million hectares) was classified by the Ministry of Forestry as forest estate (131 million hectares).[21] By convention, nonforest estate is outside the jurisdiction of the Ministry of Forestry and generally under the control of the district in which it is situated.[22] In nonforest estate areas—as for other land classes—the legal basis for governing land use is the Basic Agrarian Law (Law 5 of 1960).[23]

A desktop review of Indonesia's laws and regulations identified three types of methods to legally change allowable land uses:

1. **Single reclassifications:** Methods that change the land-use classification of a single area.
2. **Multiple reclassifications:** Methods that change (or "swap") the land-use classifications of multiple areas simultaneously.
3. **Local/special designations:** Methods that change the allowable land uses in a designated local area, without changing the land-use classifications.

The following sections describe the mechanisms, laws, and regulations governing these types of methods. The procedures applicable in any situation depend on initial land classifications, intended uses, and project goals. It is important to note that changing legally allowable land uses is not the same as changing existing usage rights (i.e., permits); additional processes are required to change usage rights, which must be followed for specific development or conservation projects. Table 3 summarizes the legal processes available to reclassify land use.

Single Reclassifications

Several legal methods can be used to change the land-use classification of a single area. These methods can be used either to allow nonforestry uses (e.g., oil palm plantations) that were previously disallowed, or to disallow nonforestry uses that were previously allowed. Note that two or more single reclassifications pursued independently but simultaneously could achieve the goals of a multiple reclassification or "land swap." Appendix C1 provides additional details about the methods discussed in this section.

The most common single reclassification method used to date is the **"forest estate release mechanism" (pelepasan kawasan hutan)** which allows the conversion of convertible production forest to nonforest estate.[24] This method applies only to provinces with at least 30 percent of their area classified as forest estate.[25] As of 2007, 4.6 million hectares of land formerly classified as convertible production forest had been reclassified as nonforest estate for nonforestry uses such as oil palm plantations.[26]

A second single reclassification method, **"forest estate review" (penilaian ulang kawasan hutan)** allows for the reclassification of land in the forest estate category. When an area that is potentially suitable for a particular crop is classified as a functional category within a forest estate other than convertible production forest, this method can be used to reclassify the area as convertible production forest, which makes it eligible for reclassification to nonforest estate.[27] The forest estate review method also allows a single reclassification of a forested area classified as convertible production forest to one of the classifications that is not eligible for removal from the forest estate category using the forest estate release mechanism.[28]

The forest estate review process involves re-evaluating the legal classification of the area based on a scoring system that includes slope, soil type, and rainfall intensity.[29] Current land cover (forested or nonforested), peat depth, and land-use information are not included in the scoring system.

Nonforest estate areas can be reclassified to become part of the forest estate through a **"forest estate gazettement"** process **(pengukuhan kawasan hutan)** conducted by the Ministry of Forestry. This four-step process is based on a forest

TABLE 2

LAND-USE CLASSIFICATIONS BY FUNCTION

MAIN CLASSIFICATION	SUBCLASSIFICATION	FUNCTION	CRITERIA	PERMITTED ACTIVITIES
Forest Estate (*Kawasan Hutan*)				
Conservation Forest (*Hutan Konservasi; HK*)	Natural Reserve (*Hutan Suaka*)	Preserve animal and plant biodiversity as well as its ecosystem, also functions as an area for life-supporting systems.	Varies according to its subclassification (natural reserve, wildlife reserve)	Research, science, education, and limited tourism
	Nature Conservation Area (*Hutan Pelestarian Alam*)	Protect life-supporting systems, preserve biodiversity and sustainable utilization of natural resources and their ecosystems.	Varies according to its subclassification (national park, grand forest park, nature recreational park, hunting park)	Research, science, education, cultivation activities, cultural activities, and limited tourism
Protection Forest (*Hutan Lindung; HL*)	-----	Forest estate with main function of protecting life-supporting systems for hydrology, preventing floods, controlling erosion, preventing sea water intrusion, and maintaining soil fertility.	Weighted score[a] of >175 or, (1) slope class of 40% or more; (2) 2000+ m above sea level; (3) soil is extremely vulnerable to erosion with slope class of 15% or more; (4) water catchment area; (5) coastal protection area	Forest area utilization activities (cultivating medicinal/decorative plants, fungi, apiculture, swiftlet nests, capturing wildlife, cattle feed) Utilization of environmental services (water flow, ecotourism, biodiversity, environmental protection, carbon absorption and storage) Extraction of nontimber forest products (rattan, bamboo, honey, resin, fruits, fungi)
Production Forest (*Hutan Produksi; HP*)	Limited Production Forest (*Hutan Produksi Terbatas; HPT*)	Forest estate with main function of generating forest products via selective/limited logging scheme	Weighted score 125–174. Must be outside of protection forest, conservation forest, and hunting areas	Timber extraction through selective logging
	Permanent Production Forest (Hutan Produksi Tetap; HP)	Forest estate with main function of generating forest products.	Weighted score <125. Located outside of protection forest, conservation forest and hunting areas	Clear cutting forests and industrial timber plantations
	Convertible Production Forest (*Hutan Produksi Konversi; HPK*)	Forest estate with main function of generating forest products but spatially reserved for use of development other than forestry	Forest estate area that has been spatially designated for nonforest development purposes	Clear cutting and industrial timber plantations, can also be released to be nonforest land (areal penggunaan lain – APL).
Nonforest Estate (*Areal Penggunaan Lain; APL*)		**Land outside the forest estate designated for nonforestry use such as agriculture, settlement, etc.**		

Source: Compiled from Law 41 of 1999 on Forestry, Minister of Forestry Regulation P.50 of 2009, Minister of Forestry Regulation 37 of 2007, and Government Regulation 68 of 1998

[a] "Weighted score" refers to the calculation of an "erosion sensitivity factor" based on a combination of slope, soil type, and rainfall intensity. A higher "weighted score" equates to a higher "erosion sensitivity factor."

inventory and involves the review of national, provincial, and district spatial plans.[30] A forest estate gazettement process can be either "partial" or "provincial." The process for a partial forest estate gazettement is detailed in a Ministry of Forestry regulation.[31] As of July 2013, there was no implementing regulation to explain how to conduct provincial forest estate gazettement process.[32]

Multiple Reclassifications

Several legal methods exist for simultaneously changing the land-use classifications of two or more areas. In general, increasing the number and size of the areas involved increases the complexity of the procedures and decreases the likelihood that site- or community-specific concerns about land rights will be adequately addressed. Appendix C2 provides additional details about the methods described in this section.

The legal procedure that allows for the simultaneous reclassification of two areas is known as the **"forest exchange mechanism" (tukar-menular kawasan hutan)**. The Ministry of Forestry describes the procedure as a "land swap."[33] In this usage, land swap refers purely to changing classifications, not moving existing permits. The forest exchange mechanism can be applied to the reclassification of nonforest estate to permanent production forest or limited production forest, and vice versa.[34]

The forest exchange mechanism is applicable in provinces where the forest estate is less than 30 percent of the land area and the forest estate release mechanism does not apply. In these provinces, the minimum exchange ratio of forest estate to nonforest estate is 1:2, meaning that at least two times more nonforest estate land must be reclassified as forest estate than forest estate land reclassified as nonforest estate. In provinces where the forest estate is more than 30 percent of the land area, the minimum exchange ratio is 1:1.[35] Very few precedents for the application of this procedure exist.[36]

A **spatial planning revision process** under Spacial Planning Law 26 of 2007 can change many classifications at once.[37] Spatial plans are made at district and provincial levels through multiple processes and incorporated into national plans. Spatial plans made under this law are valid for 20 years and should be reviewed every five years by the district and provincial government. Associated processes, laws, and regulations are described in Appendix C2.

A July 2012 amendment to the forest exchange mechanism regulations creates an **expedited forest exchange** for companies that were issued permits prior to the 2007 spatial planning law , which now conflicts with the current legal classifications.[38] For instance, a palm oil company with a permit for land classified as nonforest estate prior to 2007, but reclassified as forest estate under the spatial planning law, could use the expedited process to reclassify the permitted area as nonforest estate. This process, which involves a legal classification change linked to changing permits, could also be considered a "land swap."

An alternative method for changing multiple classifications at once is through a government-initiated **forest audit mechanism**, in which the Ministry of Forestry conducts a rescoring exercise applicable to many areas.[39]

Local/Special Designations

There are also procedures for designating localized special areas to change allowable land uses without changing their legal land-use classifications. Appendix C3 provides additional details about the methods described in this section. A **"forest with rights" (hutan hak)** process is available in forested areas of a nonforest estate with demonstrable[40] local rights. The local regent/mayor can request a *hutan hak* designation for an eligible area. If the forested area serves a conservation or protection function, an additional process can be used to reclassify the area as forest estate after compensating local rights holders.[41]

An **"enclave solution"** allows for the creation of relatively small enclaves within forest estate areas where local people can legally conduct nonforest activities.[42] In nonforest estate areas, regents and mayors can issue a **local conservation area** stipulation to restrict uses, for example, to uses allowed in areas classified as "conservation forest."[43]

Areas that are legally stipulated as **"village forest" (hutan desa)** or **"community forest" (hutan kemasyarakatan)** are also within the forest estate. These lands have Ministry of Forestry functional classifications, but their use is limited to communities.[44]

TABLE 3

SUMMARY OF PROCEDURES FOR CHANGING ALLOWABLE LAND AREAS IN INDONESIA

PROCEDURE	INITIAL CLASSIFICATION	FINAL CLASSIFICATION	COMMENTS
Single Reclassification			
Forest estate release (*pelepasan kawasan hutan*)	Convertible production forest	Nonforest estate	Most common method for reclassifying land to date. Initiated by a minister-level government official, regent, mayor, governor, head of corporation, or head of a foundation
Forest estate review (*penilaian ulang kawasan hutan*)	Conservation forest, protection forest, limited production forest, permanent production forest, or convertible production forest	Conservation forest, protection forest, limited production forest, permanent production forest, or convertible production forest	Can be used in combination with forest estate release mechanisms. Initiated by regent or mayor if area is within one district or city, or by governor if area is within multiple districts
Forest estate gazettement (*pengukuhan kawasan hutan*)	Nonforest estate	Conservation forest, limited production forest, permanent production forest, convertible production forest, protection forest	Four -step process to designate nonforest estate into forest estate. Conducted by the Ministry of Forestry.
Multiple Reclassification			
Forest exchange mechanism (*tukar-menukar kawasan hutan*)	Limited production forest or permanent production forest and nonforest estate	Nonforest estate and limited production forest or permanent production forest	Simultaneous reclassification of two areas. Initiated by the Minister of Forestry, or a government official equivalent to a minister, governor, regent, mayor, head of governmental or private business entity or head of a foundation
Expedited forest exchange (*tukar-menukar kawasan hutan yang dipercepat*)	Limited production forest or permanent production forest and nonforest estate	Nonforest estate and limited production forest or permanent production forest	Existing permit required
Spatial planning revision process (*revisi rancangan tata ruang dan wilayah*)	Conservation forest, protection forest, limited production forest, permanent production forest, convertible production forest and/or nonforest estate	Conservation forest, protection forest, limited production forest, permanent production forest, convertible production forest and/or nonforest estate	Plans created for district, province, and national spatial plans. Multiple decisionmakers involved in process. Revised every five years.
Forest audit mechanism (*mekanisme audit kawasan hutan*)	Conservation forest, protection forest, limited production forest, permanent production forest, or convertible production forest	Conservation forest, protection forest, limited production forest, permanent production forest, or convertible production forest	Initiative led by Ministry of Forestry in which forest estate rescoring is conducted for many areas.

TABLE 3

SUMMARY OF PROCEDURES FOR CHANGING ALLOWABLE LAND AREAS IN INDONESIA (CONT.)

PROCEDURE	INITIAL CLASSIFICATION	FINAL CLASSIFICATION	COMMENTS
Local/Special Designation			
Forest with rights (*hutan hak*)	Nonforest estate	No change	Allows forest uses in APL; can be used as first step to reclassify APL as forest estate. Initiated by regent/mayor.
Enclave solution	Limited production forest, permanent production forest, or convertible production forest	No change	Allows nonforestry uses within forest estates. Initiated by regent or mayor.
Local conservation area (*area konservasi lokal*)	Nonforest estate	No change	Restricts uses of APL to conservation
Village forest or community forest (*hutan desa or hutan kemasyarakatan*)	Limited production forest, permanent production forest, or convertible production forest	No change	Restricts uses within forest estate to communities

APPLICATION: TESTING METHODS IN THE FIELD

In 2009, under Project POTICO, WRI and Indonesian partner organization Sekala initiated a pilot project to facilitate a "land swap." In the original conception of the pilot, Project POTICO considered a "land swap" a change in legally permitted management rather than a change in legal land classifications. In other words, a company with a permit on forested land would agree to not develop the area and instead, develop a similarly sized area that was not forested, but rather was considered "degraded"[45] in accordance with the Roundtable on Sustainable Palm Oil (RSPO) certification requirements.

Developing the degraded land would require obtaining a permit, as well as the free, prior, and informed consent of local people.[46] At the same time, the company would work with local communities and government to develop a sustainable management plan for the original permitted area. A successful swap would require a method for changing legal classifications if the initial legal classifications were inconsistent with the desired final land uses (e.g., oil palm on the degraded land, sustainably managed community forestry on the forested land) (Figure 1).

In the pilot site, PT Smart, one of the world's largest publicly listed palm oil producers, held a location permit (*izin lokasi*) on forested peatland that was classified as nonforest estate.[47] PT Smart was willing to forego developing that area for oil palm and to investigate alternative management options for maintaining the forest. PT Smart had publicly committed to fulfilling the RSPO principles and criteria in new plantation developments; it has since announced specific forest conservation measures that go beyond these requirements.[48]

WRI and Sekala worked with PT Smart to identify a potentially suitable degraded area nearby where communities had expressed interest in oil palm plantation development. The partners identified the area through a method that included both

a desktop analysis and rapid field assessments, followed by more in depth surveys and discussions with local community members, government officials, and nongovernmental organizations (NGOs) once priority sites had been identified.[49] Even before WRI and Sekala's involvement, local community representatives had, on multiple occasions, approached PT Smart to inquire about development in the area.

Despite community interest and the potential suitability of the area, existing legal land-use classification complications had dissuaded PT Smart from pursuing development plans prior to WRI and Sekala's involvement.

Project POTICO considered a "land swap" a change in legally permitted management. A company with a permit on forested land would agree to not develop the area and instead, develop a similarly sized area that was not forested.

FIGURE 1

POTICO "LAND SWAP" CONCEPT

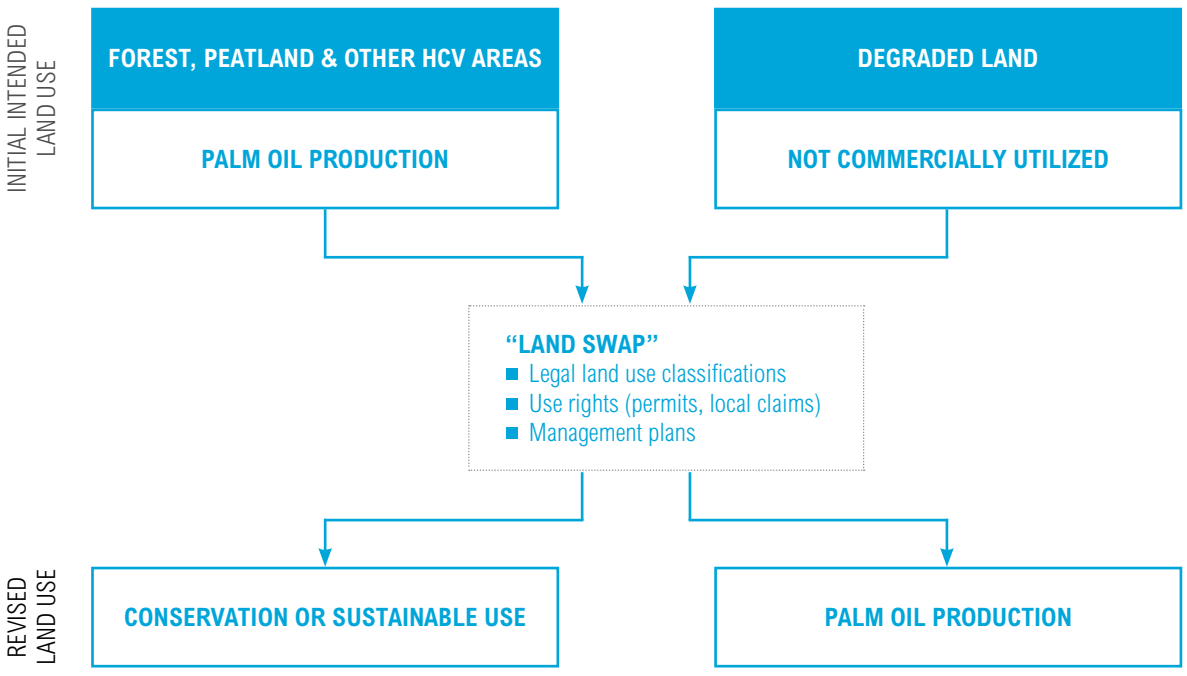
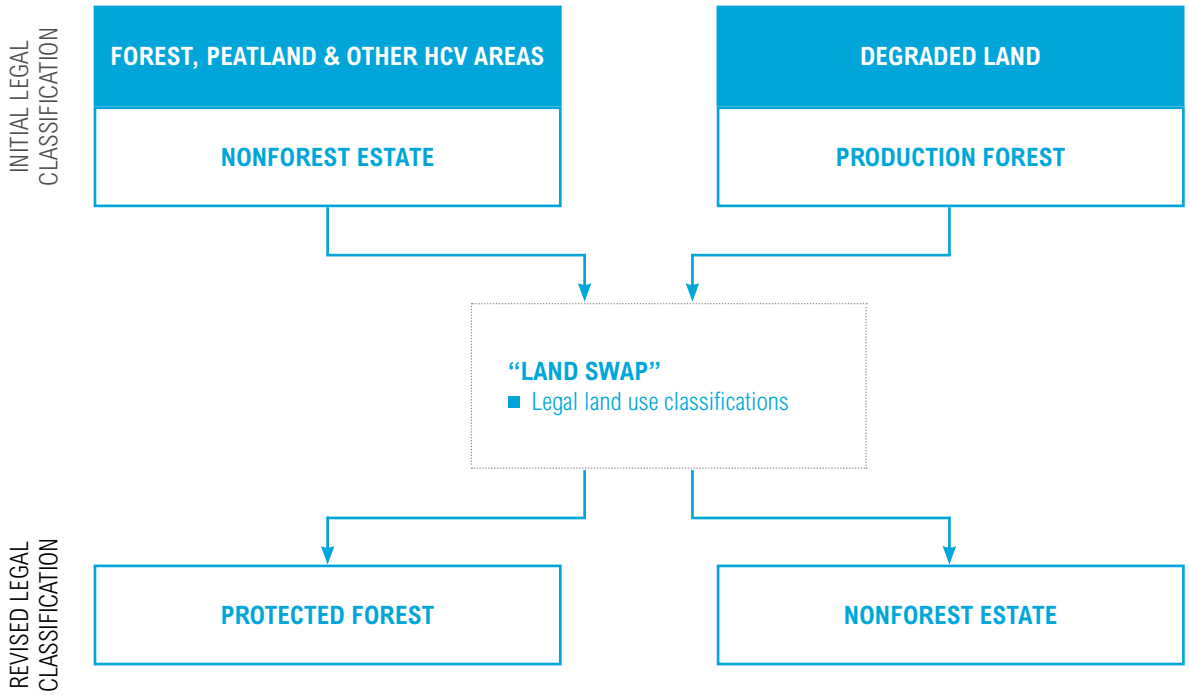


FIGURE 2

PROPOSED LEGAL LAND-USE CLASSIFICATION CHANGES FOR POTICO PILOT SITE IN KAPUAS HULU, WEST KALIMANTAN



The site was legally classified as limited production forest and production forest and therefore would need to be reclassified to nonforest estate to allow for legal oil palm cultivation (Figure 2).

To facilitate the pilot "land swap" that would change the legally permitted management of both the forested and degraded sites, WRI and Sekala investigated each of the methods for changing legal land classifications identified in the desktop review.

Initially, single reclassifications were not considered attractive. The forest estate release mechanism did not apply because the degraded area was not classified as convertible production forest. WRI / Sekala considered a multiple reclassification more consistent with the project goals, which included maintaining the forested area as forest.

WRI and Sekala first considered using the forest exchange mechanism, but PT Smart and the POTICO field team determined the process would be too long, complicated, and expensive. The spatial planning process was in its five-year review period (see process in "Multiple Reclassifications," above),[50] and the team opted to take advantage of the short-lived opportunity to reclassify the area through this larger district, province, and nationwide spatial planning review process. The team also viewed the provisional spatial planning process as an opportunity to increase community participation in the government process.[51] WRI and Sekala engaged district, provincial, and national decisionmakers by providing detailed recommendations that reflected current land cover, land use, and conservation values, as well as perspectives from the local communities and palm oil companies. This engagement process included facilitating discussions among elected representatives of

local communities, PT Smart, and local government officials.

WRI and Sekala's recommendations were incorporated into the 2010 drafts of district and provincial spatial plans, largely because of the engagement of other stakeholders, including NGOs working to improve spatial planning in the area. PT Smart's assurance that it would support reclassification of the forested area despite holding a use permit was critical to the incorporation of WRI and Sekala's recommendations in the draft plans.

Despite this initial success, the national government had not yet approved the provincial plan when this issue brief was finalized (July 2013) and it was unclear when or whether it will do so. Since the national process includes review of all provincial maps, the timeline is long, unclear, and prone to delay because of politics unrelated to the specifics of any given field project. The POTICO team has found it difficult to determine where the plan is in the process, and who in the government is responsible for taking the next steps. See Appendix C2 for additional details.

While the spatial planning process stalled, the project team conducted several workshops with community members, government officials, and PT Smart to discuss potential development opportunities, both for oil palm and other options. Workshop participants reviewed a sample cooperation agreement provided by PT Smart outlining the development and management details of a plantation partnership.[52] The team also facilitated a detailed community mapping process in both the forested and degraded areas with local facilitators to help prepare for possible future development negotiations guided by the principle of free, prior, and informed consent.

Over three years—with approval of the provincial spatial plan uncertain—the team gradually shifted its approach from trying to implement a land "swap" through a multiple reclassification, to using local/special designations, which could be pursued simultaneously to achieve the pilot project's original goals.

The POTICO team has recently begun to investigate an enclave solution suggested by the local government. As described in "Methods for Changing Legally Allowable Land Use," above, this option creates small enclaves within forest estate areas where local people can legally conduct nonforestry activities.[53] This change could allow communities to cultivate oil palm while maintaining their permanent production forest and limited production forest legal classifications in the "degraded" area. The creation of enclaves also aligns with recent discussions (December 2011) with local communities that reflect a growing interest in smallholder development. With sufficient local political and community will, enclaves may be a viable solution. Whether it is financially viable for the communities to become smallholder developers depends largely on the provision of extension services by larger palm oil companies in the area, as is the case with most smallholder development scenarios.

Furthermore, work remains to identify a legal and financially viable management plan for the forested area within the existing oil palm concession that will effectively maintain its conservation values.[54] There is little risk that PT Smart, which holds the concession for the area, will convert the forest in the near term: the company is committed to avoiding deforestation and is open to alternative management options. However, this is only the case while PT Smart retains the permit. As long as the forested area remains part of the nonforest estate, there is a risk that PT Smart's permit for oil palm will be revoked and reissued to a company with no interest in conservation.[55]

Although the pilot project is ongoing, it has informed WRI's analysis of the existing legal reclassification methods identified in the desktop legal review. Findings from this analysis are discussed in the next section.

DISCUSSION OF FINDINGS

WRI's analysis found multiple methods in Indonesian law for changing legal land-use classifications. Companies could, in theory, use many of these methods to expand certified sustainable palm oil production in areas that were previously legally off limits. These methods could be used to conserve forested areas that are currently legally available for agriculture.

However, in practice, companies face many challenges to changing legal land-use classifications. These challenges are problematic both for project developers interested in ecosystem restoration concessions[56] in forested areas and for local people interested in strengthening their land management rights.

Overall, companies, project developers, and communities face substantial legal challenges in implementing financially viable, clear procedures for changing legal classifications

consistent with sustainability standards for avoiding forest loss and social conflicts.

Three categories of major legal challenges are described below. Although the Indonesian government has recognized many of these challenges and has begun to take steps to address them (for example, through proposed national REDD+ strategies), these challenges continue to hinder companies and other stakeholders.[57]

Challenge 1: Length and Cost of Procedures

All the processes identified require many steps to attain approvals from multiple government agencies at different levels, adding substantial time and cost to the already lengthy bureaucratic procedures for acquiring a land-use permit.

For example, according to the law governing the forest exchange mechanism, the Ministry of Forestry's bureaucratic process can take up to 2,273 days—over six years—from the time the application is submitted.[58] This does not include time that the National Parliament might take to consider the application. A combination of changing classifications within the forest estate followed by the forest estate relinquishment mechanism could take two and a half years within the Ministry of Forestry alone.

In both cases, the applicant bears the majority of the cost, including the cost of the government-appointed research team and the cost of delineation. The cost of implementing the forest exchange mechanism procedures in the POTICO field project was estimated at more than US$200,000—and amount that PT Smart determined to be prohibitively expensive.[59]

Challenge 2: Lack of Legal Clarity

Uncertainty regarding the legality of existing procedures, classifications, permits, and customary rights is a major hindrance to implementing procedures to change legal classifications. Other challenges include:

- *No single legal classification map.* A prerequisite for implementing a clear process for changing legal classifications is clear information and agreement on the initial legal classifications. However, there is currently no single government-approved map that clearly defines which areas are forest estates. Although the Ministry of Forestry has produced a single map, it is not harmonized with the many spatial planning maps created by various jurisdictional levels, which are already being used at a local level to guide permitting decisions.[60]

  In addition, as of 2010 about 89.2 percent of the land classified as forest estate by the Ministry of Forestry had not yet been "stipulated" following the full delineation process required by law.[61] A Constitutional Court decision in February 2012 cast uncertainty on the legal status of these areas, but the implications of the decision remain unclear.[62] In response to the decision, the Ministry of Forestry issued a memo to governors, district heads, and local forestry agencies stating that all designation of forest area prior to the Constitutional Court's decision and the legal implications are still valid.[63]

Overall, companies, project developers, and communities face substantial legal challenges in implementing financially viable, clear procedures for changing legal classifications consistent with sustainability standards for avoiding forest loss and social conflicts.

- *Lack of publicly available, easily accessible data on legal classifications, permits, and rights.* Without publicly available, easily accessible data on legal classifications, permits, and rights, companies and individuals are disadvantaged when making planning decisions, and government officials can profit by selectively sharing information. Many district-, province-, island-, and

national-level spatial planning maps are not publicly available. Although the Ministry of Forestry has made legal classification and permit data available on a public website, these maps are sometimes difficult to access and are often inconsistent with provincial and district maps of permits.[64] None of the maps provides information on local or customary rights to land.

- *Convoluted, frequently changing procedures and missing instructions for implementation.* Convoluted procedures with many bureaucratic steps, often with undefined approval criteria, provide rent-seeking opportunities.[65] This situation is particularly problematic when combined with ongoing jurisdictional political wrangling at multiple levels of government. Constant changes to procedures through amendments contribute to ongoing confusion and lack of long-term legal certainty.[66] Meanwhile, some procedures lack instructions for implementation.[67]

- *Inconsistent treatment of customary land rights and lack of mechanisms for resolving land disputes.* Ongoing, costly social conflicts resulting from a lack of mechanisms to recognize customary land rights and resolve land-use claims continue to plague the palm oil industry. A study by Sawit Watch, an Indonesian NGO, noted 660 ongoing land conflicts related to the palm oil industry in Indonesia.[68] There remains a lack of clarity regarding jurisdictions and land rights, and different laws treat traditional land rights in contradictory ways.[69] In general, Indonesian laws concentrate control over land, water, and natural resources in the government.[70]

- *Little or no information on successful legal precedents.* With the exception of the forest release mechanism, most of the methods identified in the review have not been widely implemented.[71] Few documented "success" stories of legal classification changes following many of the procedures are available to the public. Of the legal precedents that do exist, many are small scale or appear to be special cases whose outcomes depended on local political will and/or civil society support.[72]

Challenge 3: Inconsistent Goals to Avoid Forest Loss and Social Conflicts

In general, the methods for changing legal classifications identified have not been specifically designed to support efforts to both maintain high conservation value areas and respect local land use rights and interests.[73] As a result, diligently following existing legal procedures can fail to contribute to, or even detract from, best management practices for meeting the twin goals of maintaining high conservation values and avoiding social conflicts.

Regarding conservation values, procedures for determining land-use classifications within the forest estate do not include important biophysical characteristics such as current land cover and depth of peat soils. Therefore, there is no legal mechanism for ensuring that these factors are taken into account when allocating land-use categories relevant to achieving goals regarding reducing greenhouse gas emissions from deforestation or maintaining biodiversity conservation.

Likewise, land-use reclassification procedures do not adequately address the involvement of local communities and do not allow communities or individuals to initiate the reclassification process. Although some procedures mention either compensation to communities or require public participation, these provisions are usually vague and often ignored in practice. When communities are not involved in legal classification decisions, and are subsequently not involved in permitting decisions, costly ongoing social conflicts are likely to arise. Although some of these problems can be avoided when companies follow their own due diligence procedures, the lack of legal clarity regarding local land use rights is a fundamental challenge facing companies intent on following the principle of free, prior, and informed consent.

As long as these environmental and social factors remain unaddressed in legal classification and reclassification procedures, companies will continue to receive permits that are likely to be inconsistent with the goal of achieving more sustainable palm oil production without forest loss and social conflicts.

RECOMMENDATIONS

Fully addressing the challenges identified above will require broad policy and legal reforms targeting spatial planning and land use permitting. Nonetheless, companies and policymakers can take immediate steps regarding legal classification challenges to more sustainable implementation of palm oil projects. Based on the analysis in this brief, WRI

recommends the following actions:

Recommendations for Palm Oil Companies

- *Understand legal reclassification procedure options and share implementation experience.* By implementing relevant options and documenting and sharing experiences, companies can help provide positive legal precedents and pave the way for replication. Likewise, challenges and unsuccessful attempts to pursue reclassification can provide insights regarding potential need for procedural reforms. Companies can share their experiences by publishing case studies with the help of research institutions like WRI or through platforms such as the RSPO.

- *Go beyond legal compliance and follow best practices.* This legal analysis demonstrates that following legal procedures to the letter does not necessarily guarantee—and may sometimes interfere with—achieving goals such as maintaining high conservation values and avoiding social conflicts. Therefore, companies should take steps that are not required in the law to assess risks. Such due diligence should start as early as the preliminary site selection process, when deciding whether or not to accept a location permit (*izin lokasi*). To do this, companies should seek additional guidance from initiatives such as the RSPO, social organizations,[74] and research institutions such as WRI.[75]

- *Engage with initiatives like the RSPO and the Indonesian Sustainable Palm Oil to support improved land-use classification policies.* Multistakeholder initiatives provide opportunities for companies to share and learn best practices as well as to contribute to efforts to influence government policies in ways that are consistent with these best practices.

Recommendations for Indonesian Policymakers

- *When designing "land swap" policies, clarify objectives and definitions, address existing laws and regulations, and simplify procedures.* The term "land swap" has been used in different ways to refer variously to changing legal classifications, changing permits, or changing both. New policies using this term should employ clear definitions that are consistent with policy objectives. In addition, to avoid creating further confusion, new policies should account for existing laws and regulations such as those described in this brief, and consider the need for simple, timely, and coherent procedures.

- *Consider redesigning legal classification and reclassification procedures to incorporate appropriate biophysical and social factors relevant to maintaining high conservation values and avoiding social conflicts.* To ensure that new policies are consistent with the Indonesian government's stated goals related to reducing greenhouse gas emissions, conserving biodiversity, and poverty reduction, the redesign of legal classification and reclassification procedures should ensure that relevant biophysical factors (such as land cover and peat) and social factors (such as current land uses and claims) are incorporated into legal procedures.

- *Make data and procedural information publicly available and easily accessible.* Publicly available and easily accessible data on biophysical factors such

Companies and policymakers can take immediate steps regarding legal classification challenges to more sustainable implementation of palm oil projects.

as land cover and peat as well as legal factors such as classifications, permits, and rights can help companies, government officials, and communities make better decisions about more sustainable palm oil production. Government initiatives such as OneMap[76] are already making progress and should be strengthened. In addition to providing maps, Indonesian policymakers can make information about procedures more accessible. For example, policymakers can provide regular public updates about the spatial planning processes and legal status of each of the spatial planning maps created at the district, provincial, island, and national levels. Information about the status of legal classification procedures should be made readily available when requested using Indonesia's freedom of information act. The government should also publish and make publically available guidance documents summarizing legal procedures, including logistical information such as timelines and relevant contacts.

Through these actions, companies and policymakers can substantially contribute to achieving clearer legal reclassification procedures to support sustainable palm oil in Indonesia.

ENDNOTES

1. Indonesia Investments Website. Table: "Indonesia's Palm Oil Production and Export 2007–13." http://www.indonesia-investments.com/doing-business/commodities/palm-oil/item166
2. A recent study in Nature Climate Change indicates that 90 percent of lands converted to oil palm from 1990 to 2010 in Kalimantan were forested. Carlson et al. 2012.
3. Ministry of Forestry. Indonesian Forestry Statistics 2012. http://www.dephut.go.id/files/BUku%20Statistik%20Juli%202012_terbaru.pdf
4. "Suitability" in this calculation is in terms of environmental and crop productivity considerations only. Additional social and legal considerations must also be included in assessing suitability.
5. Greenpeace's scorecard lists major oil palm producer's commitments to environmental and social responsibility. http://www.greenpeace.org/international/en/publications/Campaign-reports/Forests-Reports/Palm-Oil-Scorecard/
6. Indonesia Investments Website. Table: "Indonesia's Palm Oil Production and Export," and "Indonesia's Crude Palm Oil Sector." http://www.indonesia-investments.com/news/news-columns/indonesias-crude-palm-oil-sector-cpo-price-expected-to-rebound/item836
7. A recent study in Nature Climate Change indicates that 90 percent of lands converted to oil palm from 1990 to 2010 in Kalimantan were forested. Carlson et al. 2012.
8. For example, the Roundtable on Sustainable Palm Oil has established Principals and Criteria: Criterion 5.2 on the identification of rare, threatened, or endangered species and high conservation value habitats, Criterion 6.1 on identification of social impacts of plantation in plantation and mill management, Criterion 7.1 on comprehensive and participatory independent social and environmental impact assessment, Criterion 7.3 on requirement of new plantation to maintain or enhance and high conservation values, Criterion 7.5 and 7.6 on requirement of new plantations to address local people's rights and interests in FPIC; Golden Agri Resources (GAR) has initiatives in its Forest Conservation Policy aiming to achieve no-deforestation footprint on its products. See http://www.rspo.org/blog/topic/33/rspo_pandc_specific_by_principle for complete RSPO P&C and http://goo.gl/iooVz for GAR's Forest Conservation Policy.
9. Indonesia's government sets target to reduce its greenhouse gas emissions by 26 percent—or 41 percent with international assistance—while maintaining 7 percent economic growth and 8-10 percent poverty reduction as stated by Presidential Decree 61 of 2011 (National Action Plan on Greenhouse Gas Emission Reduction) and National Medium-Term Development Plan See http://www.sekretariat-rangrk.org/ and <http://bappenas.go.id/get-file-server/node/8943/>
10. See Gingold. 2011. World Bank Group, "Palm Oil and Poverty." World Resources Institute webstory. http://www.wri.org/stories/2011/03/world-bank-group-palm-oil-and-poverty
11. The Roundtable on Sustainable Palm Oil (RSPO) was established in 2004 to "promote the production and use of sustainable palm oil for People, Planet, and Prosperity" (www.rspo.org). The "high conservation value" approach refers to six high conservation values, "which cover the range of conservation priorities shared by a wide range of stakeholder groups, and include social values as well as ecological values" (www.hcvnetwork.org). According to the RSPO's guidance document for companies, developed by the Forest People's Program, free, prior, and informed consent (FPIC) " implies informed, noncoercive negotiations between investors and companies or the government and indigenous peoples / customary law communities prior to oil palm estates, timber plantations or other enterprises being established and developed on their customary lands" (http://www.rspo.org/en/document_fpic).
12. Indonesian Sustainable Palm Oil Principles & Criteria refers to Minister of Agriculture 19/2011, second attachment. http://www.deptan.go.id/Permentan2011/5.Permentan%20No.19%20Tahun%202011/Lampiran%20II%20Permentan%20No.19%20Tahun%202011.pdf. FPIC is not part of Indonesian government regulations and therefore not part of the Indonesian Sustainable Palm Oil certification system.
13. Sekala aims to develop realistic, tangible, and innovative solutions for environmental problems to generate benefits for local people and the environment. Established in Bali in 2005, Sekala works at local, provincial, and national levels across Indonesia, focusing on land-use planning, forest governance, community mapping, capacity building, conflict resolution, remote sensing, and spatial analysis.
14. Gingold 2012. "How to Identify Degraded Land for Sustainable Palm Oil in Indonesia" by WRI and Sekala describes a quick and cost-effective method for identifying potentially suitable "degraded land" for sustainable palm oil production in Indonesia and presents results from the application of the method in West Kalimantan and Central Kalimantan. The method consists of a desktop analysis as well as field assessments.
15. Access the Suitability Mapper at http://www.wri.org/project/potico/about-suitability-mapper. The POTICO method and associated interactive website are intended as a first step in a site selection process. Additional analyses beyond the scope of this method, such as social and environmental impact assessments and comprehensive FPIC procedures, are fundamental to best-practice site selection procedures.
16. Details regarding land-use classifications and corresponding allowable land uses are provided later in this brief. For full details on land tenure and legal status of lands in Indonesia see Appendix A2. For details on forest estate and permit classifications see Appendix B.
17. In Indonesia, all land is legally classified according to its allowable uses. An area's land-use classification determines which rights and permits for which allowable uses can be recognized or issued. In this example, the 5.3 million hectares that were identified as potentially suitable by the POTICO desktop study but not legally classified to allow plantation development were classified as anything other than nonforest estate (area penggunaan lain; APL) or convertible production forest (hutan produksi konversi; HPK). POTICO suitability criteria for desktop analysis include environmental criteria (land cover, peat, conservation areas with buffer zones, water resource buffers) and crop productivity criteria (topography, climate, soil). See http://www.wri.org/project/potico/about-suitability-mapper.
18. Areas legally classified as either nonforest estate (areal penggunaan lain; APL) or convertible production forest (hutan produksi konversi; HPK)
19. POTICO suitability criteria for desktop analysis include environmental criteria (land

cover, peat, conservation areas with buffer zones, water resource buffers) and crop productivity criteria (topography, climate, soil). See http://www.wri.org/project/potico/about-suitability-mapper.

20. The three main functional categories of forest estate codified in Law 41 of 1999 on forestry are conservation forest, protection forest, and production forest. Each of these categories has subcategories, which further define the specific function of each forest. For more information on legal categorization, see: http://www3.bkpm.go.id/file_uploaded/Law_4199.htm.
21. Despite this number, only 10.8 percent of the area has been formally stipulated (ditetapkan) as forest estate and inserted into the state gazette (dikukuhkan). The rest of the nonstipulated forest estate was merely designated (ditunjuk) by the Ministry of Forestry. See Indonesia Forestry Statistics, http://www.dephut.go.id/files/BUku%20Statistik%20Juli%202012_terbaru.pdf and National Forestry Plan, http://www.dephut.go.id/files/DitRenHut_RKTN_2011.pdf.
22. In urban areas, nonforest estate lands may be under the jurisdiction of mayors.
23. Accessible at http://portal.djmbp.esdm.go.id/sijh/UU%205%20Tahun%201960_%20UUPA.pdf. It should be noted that by content, the Agrarian Law applies to all land, not only to nonforest estates. There is no law or regulation that stipulates that the Agrarian Law should be applied only to nonforest estates.
24. The mechanism is recognized by Government Regulation 10 of 2010 on Procedures of Changing the Allocation and Functions of Forest Estate, paragraph 3, Article 19. See http://www.dephut.go.id/files/pp10_10.pdf. Minister of Forestry Regulation 33 of 2010 for further details of this process.
25. Most of the provinces meet the 30 percent minimum requirement of forest estate to change its forest estate function classification into convertible production forest and/or to conduct forest estate relinquishment mechanism. Only 7 out of 33 provinces (DKI Jakarta, West Java, Central Java, East Java, DIY Yogyakarta, Banten, and Bali) are unable to meet the 30 percent forest estate requirement. Of these seven provinces, only two (Central Java and East Java) have significant forested area.
26. Total area reclassified is before the spatial planning revision process. Through this revision process, about 15.7 million hectares of forest have been suggested to be converted to nonforest estate in 2010. By the end of December 2010, there were already 520 forests estate relinquishment applications at the Ministry of Forestry with an average area of 200,000 hectares per applicant. See Kesatuan Pengelolaan Hutan pp. 17-18 at http://www.dephut.go.id/files/Buku%20Pembangunan%20KPH%2016%20Des%202011.pdf.
27. For forest to be relinquished to nonforest estate, the area must fulfill the scoring requirement of convertible production forest. According to Ministry of Agriculture Decree 837/Kpts/Um/11/1980, the convertible production forest score must be less than 125 and reserved for nonforestry purposes. See http://www.satgasreddplus.org/download/Forest%20Lands%20Suitability001.pdf.
28. This method could facilitate the development of community forestry or ecosystem restoration projects. If a forested area is classified as convertible production forest, it can be reclassified within the forest estate, for example to permanent production forest, using the forest estate review method.
29. Government Regulation 44 of 2004 on Forestry Planning stated the scoring of a forest's biophysical variables is required to determine forest function. See http://www.jkpp.org/downloads/PP_No44-2004.pdf.
30. See Appendix C1.1. There is no legal requirement for the Ministry of Forestry to stipulate according to national, provincial, or district spatial plans (Article 16 of Government Regulation 44 of 2004). As little as 10.8 percent classified as forest estate by maps from the Ministry of Forestry have actually gone through the steps in this stipulation process.
31. Ministry of Forestry Regulation 32 of 2001. See Appendix C1 for more information
32. See Appendix C1. Processes explained in Government Regulation 44 of 2004 and Minister of Forestry Decree 32/Kpts-II/2001.
33. See Article 10 of Government Regulation 10 of 2010 on Procedures of Changing the Allocation and Functions of Forest Estate at http://www.dephut.go.id/files/pp10_10.pdf.
34. Ibid.
35. See Article 12 of Government Regulation 10 of 2010 on Procedures of Changing the Allocation and Functions of Forest Estate at http://www.dephut.go.id/files/pp10_10.pdf.
36. One example of the forest exchange mechanism is Surat Menteri Kehutanan No.S.13/Menhut-II/2005, which was used to change the status of Baloi Dam Forest Estate in Batam.
37. See "Revision of spatial planning" in Article 16 of Law 26 of 2007 on spatial planning at http://hukum.jogjakota.go.id/upload/UU%20No.26-2007ttg%20Penataan%20Ruang.pdf.
38. Government Regulation 10 of 2010 was amended with Government Regulation 60 of 2012. http://www.depdagri.go.id/media/documents/2012/08/27/p/p/pp_no.60-2012.pdf.
39. According to Minister of Forestry Regulation P-10/Menhut-II/2010 on Mechanism & Procedure of Forest Estate Audit, the audit is conducted through updating the audited forest estate data according to its designation status, rescoring the forest estate and analyzing the overlay of spatial data. See: http://kehutanan.kalbarprov.go.id/joomla15/images/peraturan/P10_2010.pdf
40. Land rights can be evidenced by recht title/land ownership in the form of (1) Certificate of Ownership or quotation from Letter C Book or Girik Letter (Surat Girik) from local authorities (issued by the head of the relevant subdistrict/village to the "landowner" evidencing payment of local land taxes) or other information that is recognized by National Land Agency; (2) Certificate of Right to Use (Sertifikat Hak Pakai); and (3) other letters/documents admitted as evidence of land acquisition or other proof of land ownership. See "Procedures on Community Based Development of Forest Management Program," p. 32 at http://www.redd-indonesia.org/pdf/Buku_Saku_PHBM_web.pdf.
41. See Article 19 of Minister of Forestry Regulation P.26/Menhut-II/2005 on Guideline for the Use of Forest with Rights.
42. A five-step procedure, conducted by the district-level Ministry of Forestry official, determines enclave eligibility. First, the social and biophysical features of the area are assessed through a site verification. Second, a feasibility study evaluates the physical feasibility; social feasibility; and economic, cultural and legal and settlement history. Third, a variable measurement of the enclave candidate area is made using a scoring mechanism. Fourth, the determination of settlement (whether the area can be

stipulated as enclave area or to be resettled) is made. Fifth, the area is designated an enclave. See http://bpkh8.net/pemolaan-kawasan-hutan/identifikasi-calon-enclave/ for detail of the procedures.

43. Presidential Decree 32 of 1990 on Management of Protected Areas serves as the legal grounds to enact a local conservation area with the authority of the governor and district head (Bupati), stipulated by provincial government regulation (peraturan daerah tingkat I – Perda). See Article 34 of Presidential Decree 32 of 1990 for details of the procedure at http://www.jkpp.org/downloads/Keppres_32_1990.pdf
44. See Appendix B "Categories of Forests."
45. In the context of Project POTICO, the term "degraded" refers to an area with low carbon stocks and low biodiversity levels. The degraded area identified for this application was selected as "potentially suitable" based on a full range of environmental, economic, social, and legal criteria developed under Project POTICO. Details on this method can be found in the working paper, "How to Identify Degraded Land for Sustainable Palm Oil in Indonesia," at http://pdf.wri.org/working_papers/how_to_identify_degraded_land_for_sustainable_palm_oil_in_indonesia.pdf
46. Obtaining the free, prior, and informed consent of local people is a requirement of the RSPO's Principles and Criteria. The RSPO provides a guidance document to companies at http://www.rspo.org/en/document_fpic
47. Location permit (izin lokasi) is a permit given to company to acquire the land needed for investment and it also serves as permit to transfer rights and to utilize the land for business purposes. The permit is given by the National Land Agency. For more information on location permit, refer to Head of National Land Agency (BPN) Regulation 2 of 1999 at http://hukum.unsrat.ac.id/men/menagraria_2_1999.pdf
48. See Greenpeace Scorecard on Palm Oil Producers http://www.greenpeace.org/international/en/publications/Campaign-reports/Forests-Reports/Palm-Oil-Scorecard/
49. Gingold et al. 2012.
50. This process had just begun, according to Spatial Planning Law of 2007. This law states that national, provincial, and district spatial plans must be constructed and approved.
51. Comprehensive procedures for obtaining free, prior, and informed consent of local communities with regard to potential legal land-use classification changes are not included as part of existing legislation related to the spatial plan revision process. However, WRI and Sekala were able to introduce perspectives from the local community that might have otherwise not been considered, facilitate discussions between decisionmakers and local community members, and inform communities of the process and its potential implications.
52. Plantation partnership refers to an inti/plasma scheme. Under Article 11 of Minister of Agriculture Regulation 26 of 2007, at least 20 percent of an area permitted for oil palm development (hak guna usaha) must be "plasma," which is owned by the local community, although frequently developed and managed by the palm oil company. An inti is the rest of the plantation (at most 80 percent) owned and managed by the palm oil company. The cooperation agreement provides details of how the development and management of the plasma area would occur.
53. See Appendix C , "Enclave Area Designation."
54. Including both social and environmental values.
55. RSPO 2012, 33.
56. The concession is given under the Business License for the Utilisation of Forest Timber Products through Restoration of the Ecosystem (Izin Usaha Pemanfaatan Hasil Hutan Kayu-Restorasi Ekosistem - IUPHHK-RE). This type of concession can be given by the Ministry of Forestry as a business license to develop a zone in natural forest categorized as production forest that has critical ecosystem functions that need to be preserved through maintenance, protection, and restoration of the forest ecosystem. Activities allowed by this permit include assisted regeneration and enrichment planting of local species, breeding of fauna, and releasing of flora and fauna to their natural habitat to restore biotic elements (flora and fauna) and abiotic elements (soil and water) to a region with native species to achieve biological and ecosystem balance. For more detailed information on this permit, refer to Minister of Forestry Regulation 50 of 2010, http://lpp.dephut.go.id/SFile/peraturan/p1.pdf, and Procedures for Requesting IUPHHK-RE, http://www.dephut.go.id/files/Tata%20Cara%20Permohononan%20Dan%20Pemberian%20%20IUPHHK-RE.pdf
57. For example, proposed REDD+ policies and the Ministry of Forestry plans have called for fast-tracking the forest estate delineation process and developing dispute resolution mechanisms. Amendments to the forest exchange mechanism in 2012 to allow fast tracking for areas that have permits issued before the Spatial Planning Law of 2007 , which are inconsistent with Ministry of Forestry classifications under the 1999 law.
58. This number is the sum of all the time frames detailed in the regulations related to this process.
59. For the 12,000 hectare pilot project area, cost estimates for technical assistance and boundary delineation were US$26,000 and US$208,000, respectively. This does not include over US$50,000 in costs for facilitating workshops as a precursor to a negotiation process with the communities in the area.
60. Many maps are created, including district level, province level, and island level, all of which in theory are approved at a national level including by the Ministry of Forestry. In theory these maps should be completed and harmonized as per Spatial Planning Law 26 of 2007. For a legal history see Appendix B. In practice, map harmonization has been difficult to achieve and inconsistencies continue between maps, leading to confusion regarding who has jurisdiction over which areas. Since the enactment of the Spatial Planning Law in 2007, only 8 out of 33 provincial spatial plans and 19 out of 398 district spatial plans have been passed by law.
61. See National Forestry Plan p. 8, at http://www.dephut.go.id/files/DitRenHut_RKTN_2011.pdf and Appendix B for details on forest gazettement process.
62. See Wells et al. 2012. The "MK Court decision" in 2012 resulted in a Supreme Court decision that forest estate must be "stipulated" and not simply "designated" – but it is unclear what the implications of this are in practice.
63. See Note from Minister of Forestry 2012 at http://www.dephut.go.id/files/SE.3_Menhut_II_2012_Putusan%20Mahkamah%20Konstitusi_edited_0.pdf.
64. Direktorat Jenderal Planologi Kehutanan website, http://appgis.dephut.go.id/appgis/
65. Or that have implementing instructions that are vague and highly dependent on individual politician decisions without clear criteria and therefore potential for arbitrary decisions (e.g., get a letter of recommendation from regent).
66. Amendments to the forest exchange mechanism in 2012 to allow fast track for areas

that have permits that were issued before the Spatial Planning Law of 2007, which are inconsistent with Ministry of Forestry classifications under the 1999 law. However much confusion remains and rapidly changing amendments, policies, etc., are hard to follow.

67. For example, Government Regulation 2010 has a whole option that is not described in detail by ministerial decree.
68. Kompas.com News. "8.000 Konflik Agraria Belum Diselesaikan." http://nasional.kompas.com/read/2013/02/08/01585120/8.000.Konflik.Agraria.Belum.Diselesaikan.
69. Colchester et al. 2006.
70. There are laws that acknowledge private property rights and customary rights to land, however, these rights come after "public and state interest" (kepentingan umum dan negara) in which the state is given authority to determine what constitutes public and state interest. For more information about the hierarchy of laws, traditional rights issues, etc., see Appendix A.
71. The official data on forest estate release are accessible at http://www.dephut.go.id/index.php?q=id/node/7604 and http://www.dephut.go.id/files/Statistik%202011Ditjen%20Planologi%20Kehutanan.pdf.
72. Hutan Desa in Lubuk Beringin, Jambi, is an example of the first Hutan Desa case recognized by the Ministry of Forestry. For more information see Akiefnawati et al. 2010.
73. There are no specific references to "high conservation values" or "free, prior, and informed consent" in existing Indonesian law. For more information on FPIC and palm oil in Indonesia, refer to http://www.forestpeoples.org/topics/palm-oil-rspo/publication/2012/conference-paper-free-prior-and-informed-consent-and-oil-palm-.
74. Such as Sawit Watch (www.sawitwatch.or.id/) and Forest Peoples Program (www.forestpeoples.org)
75. WRI provides online tools to help assess such risks: The Suitability Mapper at http://www.wri.org/applications/maps/suitability-mapper/, and Forest Cover Analyzer at http://www.wri.org/applications/maps/forest-cover-analyzer/ .
76. Currently under development and scheduled to be released by the end of 2013. For more information, see http://www.satgasreddplus.org/download/120905%20ONEMAP%20Midway%20Workshop%202012.pdf

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