

APPENDICES A-C

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.

For the full issue brief, visit: www.WRI.org/publication/how-to-change-legal-land-use-classifications-to-support-sustainable-palm-oil-in-indonesia.

APPENDIX CONTENTS

- Appendix A. Legal Hierarchy and Legal Status of Lands in Indonesia
- 2 A1. Legal Hierarchy in Indonesia
- 2 A2. Land Tenure and Legal Status of Lands in Indonesia
- 5 Appendix B. Forest **Estate and Permits** Classifications
- 5 B1. Forest Estate Main Classifications by **Function**
- B2. Permits 8
- 11 Appendix C. **Changing Legal Status of Lands** in Indonesia
- 11 C1. Single Reclassifications
- 12 C2. Multiple Reclassifications
- 17 C3. Local/Special Designations

APPENDIX A. LEGAL HIERARCHY AND LEGAL STATUS OF LANDS IN INDONESIA

A1. Legal Hierarchy in Indonesia

To understand how the laws discussed in this paper relate to one another, it is important to first understand Indonesia's legal hierarchy. Since the Indonesian transition to democracy, laws pertaining to the formation and structure of laws and regulations have changed three times. In August 2011, the Indonesian government enacted Law No. 12 of 2011 on Establishment of Laws and Regulations. Figure 1 illustrates a simplified version of the hierarchy of laws as stipulated by the legislation.

A2. Land Tenure and Legal Status of Lands in Indonesia

A2.1 LAND TENURE IN INDONESIA

Indonesia's land tenure system is based on its Constitution of 1945. Article 33(3) of the Constitution states that, "Land, water and natural resources contained therein shall be controlled by the State and should be utilized for the maximum welfare of the people." This article does not grant land ownership to the State, but authorizes the State to control and manage everything related to land.

Although the State has the right to control and manage land in Indonesia, private ownership exists and is recognized. Nonetheless, the Constitution has only explicitly acknowledged private property since its second amendment in 2000. Article 28(8) of the Constitution states that, "Every person has the right to own property and that this property cannot be taken away unrightfully by anybody." Private property rights are deemed secondary to the State's right to control and manage land.

A2.2 LEGAL STATUS OF LANDS IN INDONESIA

All land, water, and natural resources in Indonesia are designated as either within the forest estate (kawasan hutan) or non-forest estate (area penggunaan lain; APL). Forest estates fall under the jurisdiction of the national Ministry of Forestry. In contrast, non-forest estates fall under the jurisdiction of the local district government under local autonomy policy.

The legal basis for the land use of non-forest estates is Law No. 41 of 1999 on Basic Agrarian Law. Under this law, the government can grant individuals and legal entities rights (often in the form of permits) to manage and use natural resources. These rights include certification of ownership, time-limited land tenure rights for commercial use (Hak Guna Usaha), the right to construct buildings (Hak Guna Bangunan), and the right to lease lands from the State or from a private land holder (Hak Pakai). Preexisting claims to land and water based on rights conferred by the State must be acknowledged according to Indonesian law. However, for the greater good of the people and with proper compensation as defined in Indonesian regulations, the State may annul any claim.

The Basic Agrarian Law is the foundation for other laws related to the management of natural resources in Indonesia, including laws and regulations concerning agriculture, mining, maritime, the environment. Laws and regulations addressing these issues cannot contradict the Basic Agrarian Law. Although the Basic Agrarian Law could be interpreted as regulating all land in Indonesia (including forest estate), in practice, the law applies only to land outside the forest estate, which accounts for around 55.4 million hectares, or 31 percent of total land in Indonesia.

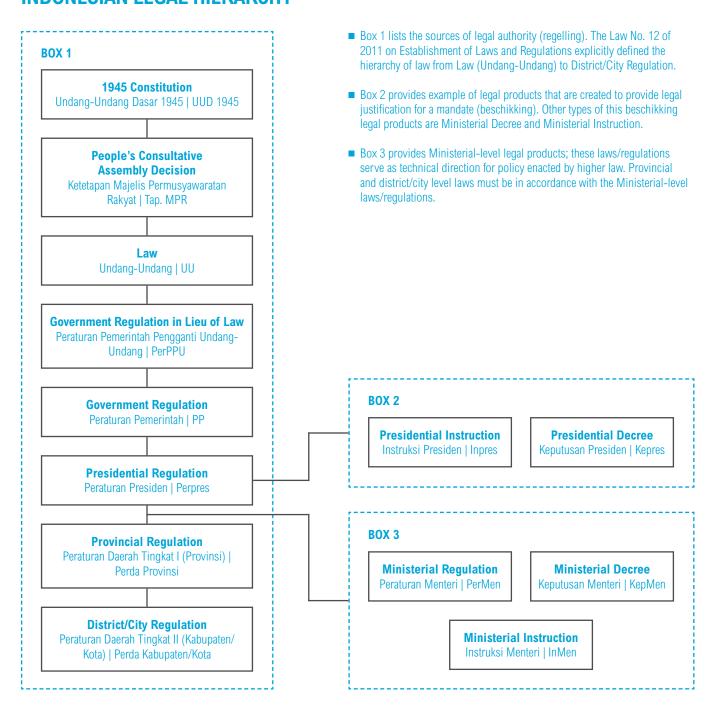
Law No. 41 of 1999 on Forestry regulates the use of land within the forest estate.

According to this law, the forest estate is as an area that is stipulated by the Ministry of Forestry. The law establishes a four-step process that the Ministry of Forestry must follow in designating forest estate lands to ensure the legality of a forest estate area. The gazettement process entails the designation of the forest estate, boundary demarcation of the forest estate, mapping of the forest estate, and stipulation of the forest estate. (See appendix C1 for additional details.)

There are many areas in Indonesia that are officially treated as forest estate but have not been subject to this four-step process. Only 10.8 percent of the areas that the Ministry of Forestry claims as forest estate have actually been subject to the entire designation process. In other words, 89.2 percent of the forest estate was merely designated as forest estate by the Ministry of Forestry.

Article 1 of the Forestry Act defines what constitutes a forest estate. It establishes that forest estate areas can simply be stipulated by the Ministry of Forestry, and is the primary legal

INDONESIAN LEGAL HIERARCHY



basis for determining forest estate in Indonesia. The designation process, however, has been historically ignored. The constitutional court ruling no 45 was passed in February 2012, mandates the four-step designation process for all Forest Estate areas.

A2.3 BRIEF HISTORY OF LAND-USE PLANNING IN INDONESIA

The Agreed Map on Forest Functions (Tata **Guna Hutan Kesepakatan or TGHK)**

The first nationwide attempt at land-use planning in Indonesia took place in 1981. At that time, the Ministry of Forestry (then still a directorate under the Minister of Agriculture) convened several government agencies—such as the Ministry of Agrarian Affairs, the Ministry of Internal Affairs, and the Ministry of Agriculture—to create a consolidated map. This map would define land categorized as Forest Estate. The activity was formalized by the Ministry of Interior Memo No. 522.12/4275/Agr.,1982 and resulted in 1984 in the first Forest Estate maps at a scale of 1:500,000—known as Tata Guna Hutan Kesepakatan (TGHK). Based on these maps, the total area of the Forest Estate covered more than 70 percent Indonesia's total land area of 192 million hectares. The vast majority of Indonesian land is still held by the Ministry of Forestry today.

Regional Physical Planning Project for Transmigration (RePPProT)

The next large-scale mapping effort was conducted in 1987 with the Regional Physical Planning Project for Transmigration (RePPProT). The United Kingdom's Overseas Development Administration funded the project, which set out to produce more accurate information for land-use planning. The previous TGHK maps were updated and the new "consensus TGHK" maps, with a 1:250,000 scale, became the new Forest Estate base map of the Ministry of Forestry.

Spatial Planning Laws

Until 1992, the central government's wishes drove land-use planning. It was only with Law 24 of 1992 that spatial plans became more decentralized — to the provincial level and to some extent, the district level. Law 24 provided for the development of actual spatial plans at the national, provincial, and district level. However, maps produced as a result of these spatial planning efforts often overlapped or otherwise conflicted with the TGHK maps of the Ministry of Forestry. An attempt to "integrate" the Ministry of Forestry TGHK maps and spatial plans at the provincial and district level started in 1994 but had little success.

Law No. 32 of 2004 aimed to regulate the division of power and control between the district. provincial, and national levels of government. The law required district governments to coordinate their spatial plans with the provincial and national government. In 2007, the national government issued a law replacing the 1992 spatial planning law. Law No. 26 of 2007 sought to create a national set of spatial plans, coordinated between the national, provincial and district levels. The law sought to clarify the role that each government level played and to solve spatial planning problems such as unclear definitions and overlapping maps of various government institutions. The Directorate General of Spatial Planning under the Ministry of Public Works is responsible for spatial planning activities at the national, provincial and district level. However, each level must create its own spatial plans.

Based on Law No. 26 of 2007, there are three levels of spatial plans in Indonesia: national, provincial, and district. National spatial plans are made first, followed by provincial spatial plans, which must reference the national plans. District spatial plans must reference both national and provincial spatial plans. The national spatial plan formulates long-term, large-scale plans with 1:1,000,000 scale maps. Provincial spatial plans create medium-term and medium-scale plans with maps constructed with a 1:250,000 scale. The district spatial plans work at a short-term and small-scale level with a 1:50,000 scale maps.

Spatial plans based on Law No. 26 of 2007 are valid for 20 years and should be reviewed every five years. The national spatial plan was made and enacted through Government Regulation No. 26 of 2008. After the passage of the law in 2007, all 33 provinces in Indonesia were given two years to revise and finalize their spatial plans. The 398 districts were given three years to adjust and construct their spatial plans.

APPENDIX B. FOREST ESTATE AND PERMITS CLASSIFICATIONS

B1. Forest Estate Main Classifications by Function

FOREST CLASSIFICATION BY FUNCTIONS

MAIN CLAS- SIFICATION	SUBCLASSI- FICATION	FUNCTION	CRITERIA	PERMITTED ACTIVITIES
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)
	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
Production Forest (Hutan Produksi; HP)	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).

Compiled from: Law No. 41 of 1999 on Forestry, Minister of Forestry Regulation No. P.50 of 2009, Minister of Forestry Regulation No. 37 of 2007, Government Regulation No. 68 of 1998.

LAND USE DESIGNATIONS WITHIN PRODUCTION FORESTS

LAND USE TYPE/ DESIGNATION	DEFINITION	PERMITTED ACTIVITIES
Planted Industrial Forest	Planted forest built by forest companies with the intent to harvest timber for the forest products industry.	Land preparation, planting, maintenance, harvesting and marketing of timber forest products.
Planted Citizen Forest	Planted forest within production forest that was built by communities to increase the potential and the quality of the production forest by implementing silviculture in order to ensure the sustainability of forest resources	Land preparation, planting, maintenance, harvesting and marketing of timber forest products.
Rehabilitated Planted Forest	Planted forest within production forest that was built through land and forest rehabilitation within production forest areas in order to restore, maintain, and improve land and forest functions, with the ultimate goal of maintaining their life-supporting roles	Utilization of timber forest products by selling forest "stands," which are a group of rehabilitated trees that stands on one unit of forest space within a designated production forest.
Community Forest In Production Forest	Forest estate (without rights) primarily used to benefit the community	Forest area utilization activities: cultivating medicinal/decorative plants, fungi, apiculture, swiftlet nests, capturing wildlife, cattle feed.
		Utilization of environmental services: water flow (potentially hydropower), ecotourism, biodiversity and environmental protection, carbon absorption and storage.
		Tree planting.
		Extraction of non-timber forest products: rattan, bamboo, honey, resin, fruits and fungi.
		Extraction of timber forest products (subject to Timber permit approval).
		Utilization of non-timber forest products: rattan, bamboo, resin, tree barks, leaves, palm, sago, aloe, mangrove palm, fruit and seeds.
Village Forest In Production Forest	Forest estate (without rights), managed by the village and utilized for the benefit of the village community	The use of environmental services: water and water resources, ecotourism, biodiversity and environmental protection, carbon absorption and storage.
		Utilization of timber and non-timber forest resources (subject to timber permit approval). Non-timber: rattan, bamboo, resin, tree barks, leaves, palm, sago, aloe, mangrove palm, fruit and seeds. Activities include the planting, harvest, enrichment and marketing of these products.

Compiled from: Government Regulation No. 6 of 2007, Minister of Forestry Regulation No. 13 of 2009, Minister of Forestry Regulation No. 37 of 2007, Minister of Forestry Regulation No. 49 of 2008.

FOREST CLASSIFICATION BY LAND RIGHTS

CLASSIFICATION	DEFINITION	PERMITTED ACTIVITIES
State Forest	Forest land that has not been assigned any rights of land.	Depends on functional type.
Forest With Rights	Forest land that has not been assigned any rights of land.	Depends on functional type.

Compiled from: Law No. 41 of 1999 on Forestry.

TABLE 4

ADDITIONAL LAND USE TYPES/DESIGNATIONS WITHIN THE FOREST ESTATE

CLASSIFICATION	DEFINITION	PERMITTED ACTIVITIES
Forest Estate For Special Purposes	The government can designate certain forest estate areas for special purposes	Public research and development, educational, religious, and cultural activities
Traditional Forest	State forests located in traditional people's jurisdiction areas	Extraction of forest products and traditional forest management
People's Forest	Forests on land with property or other rights, with an area larger than 0.25 ha and with more than 50% forest cover.	Depends on functional type

Compiled from: Law No. 41 of 1999 on Forestry, Government Regulation No. 6 of 2007.

PERMITS IN PROTECTED FOREST AREA

NO.	PERMIT TYPE	ACR.	DEFINITION	PERMISSIBLE ACTIVITIES	GRANTED BY
1	Permit for Area Utilization	IUPK	Permit to utilize protected forest or production forest areas	Cultivation: Medicinal and decorative plants, fungi, bees, breeding wildlife, animal rehab, green cattle fodder	Regent/mayor (under their jurisdiction); governor (across districts); minister (across provinces, areas undergoing IUPHHK ecosystem restoration)
2	Permit for Utilization of Environmental Services	IUPJL	Permit to utilize ecosystem services in protected and produc- tion forest areas	Enterprise(?) activities: Waterway services, water use, eco-tourism, biodiversity protection, environmental protection, carbon absorption and storage	Regent/mayor (under their jurisdiction); governor (across districts); minister (across provinces, areas undergoing ecosystem restoration)
3	Permit for Utilization of Non-Timber Forest Products	IPHHBK	Permit to harvest non- timber forest products as specified below for a certain volume and period of time	Gathering of non-timber forest products: rattan, honey, resin, fruits, fungi, swallow bird nests.	Regent/mayor (under their jurisdiction); governor (across districts)
4	Land Use in Protected Forest Area		Land use in forest areas aims to regulate the usage of parts of forest estate for non-forest development purposes	Non-forest activities: religious, defense and security, mining, electricity infrastructure, telecommunications infrastructure, water infrastructure, public roads, railway tracks, irrigation, public facilities, radio and TV infrastructure, sea/air traffic safety facilities	Minister (cannot be open mining concessions)
5	Village Forest Management Rights		Forest estate managed by village, utilized for the welfare of the village with no third-parties right/permits.	Area utilization activities, Environmental services utiliza- tion, extracting non-forest timber products	Minister of forestry designates area, governor (possibly mayor) grant the right to manage forest to village institution
6	Community Forest Utilization Permit	IUPHKm	Permit given to utilize forest resources in protected forest areas and/or forest estates	Area utilization activities: cultivating medicinal & decorative plants; Environmental Services Utilization: water services, ecotourism, biodiversity protection; Non-timber forest products: rattan, sago, mangrove	Regent/Mayor (under their jurisdiction); Governor (across districts)

PERMITS IN PRODUCTION FOREST AREA

NO.	PERMIT TYPE	ACR.	DEFINITION	PERMISSIBLE ACTIVITIES	GRANTED BY
1	Permit for Area Utilization	IUPK	Permit given to utilize protected forest or production forest areas	Cultivation: Medicinal & decorative plants, fungi, bees, breeding wildlife, animal rehab, green cattle fodder	Regent/Mayor (under their jurisdiction); Governor (across districts); Minister (across provinces, areas undergoing IUPHHK ecosystem restoration)
2	Permit for Utilization of Environmental Services	IUPJL	Permit given to utilize ecosystem services in protected and production forest areas	Commercial activities: Waterway services, water use, eco-tourism, biodiversity protection, environmental protection, carbon absorption and storage	Regent/Mayor (under their jurisdiction); Governor (across districts); Minister (across provinces, areas undergoing IUPHHK ecosystem restoration)
3	Permit for Utilization of Timber Forest Products, in Natural Forests	IUPHHK -HA	Permit to establish plantations in production forests by industries in order to increase potential and quality of the production forest in supplying industrial raw materials	Utilization of timber forest products: cutting, harvesting, transport, planting, maintenance, securing, processing and selling of timber forest products.	Minister, based upon recommendations from the Governor and Regent/Mayor
4	Permit for Utilization of Timber Forest Products, in Timber Plantation Forest or concession	IUPHHK -HTI	Permit to utilize production forest, including cutting, harvesting, transport, planting, maintenance, securing, processing and selling of timber forest products.	Utilization of timber forest products: cutting, harvesting, transport, planting, maintenance, securing, processing and selling of timber forest products. Also includes: soil and land preparation, seed germination, planting, maintenance, harvesting, management and marketing activities	Minister, based upon recommendations from the Governor and Regent/Mayor
5	Permit for Utilization of Timber Forest Products, in Ecosystem Restoration Areas	IUPHHK - RE	Permit to develop an area within natural/production forests that has important ecosystem properties, so that its function and its 'existence' could be maintained though -see permissible activities in order to reach its biological and ecosystem balance	Activities that restore the forest ecosystem though biological (planting, enriching, thinning, animal breeding, animal rewilding) and non-biological (soil, climate and topographic) means.	Minister
6	Permit for Utilization of Timber Forest Products, In Community Planted Forest Areas within Planted Forests	IUPHHK- HTR	Permit to utilize timber forest products in planted forests, within production forests that were built by individuals or cooperatives to increase the potential and quality of production forests by implementing silviculture practices in order to ensure the sustainability of forest resources	Soil and land preparation, seed germination, planting, maintaining, harvesting, managing and marketing activities	Governor, in the name of the Minister.

PERMITS IN PRODUCTION FOREST AREA

NO.	PERMIT TYPE	ACR.	DEFINITION	PERMISSIBLE ACTIVITIES	GRANTED BY
7	Permit for Utilization of Timber Forest Products, In Community Planted Forest Areas within Planted Forests	ІИРННВК	Permit to harvest non-timber forest products as specified in the permissible activities for a certain volume and period of time	Gathering of non-timber forest products: rattan, honey, resin, fruits, fungi, swallow bird nests.	Regent/Mayor (under their jurisdiction); Governor (across districts)
8	Permit for Harvest of Timber Forest Products	ІРННК	Permit to harvest timber forest products in production forests though harvesting, transporting and marketing activities within a certain time frame and volume	Harvesting, Transporting and marketing activities of timber products within a certain time frame and volume	Regent/Mayor (under their jurisdiction); Governor (across districts); Minister (across provinces)
9	Permit for Harvest of non- Timber Forest Products	IPHHBK	Permit to harvest non-timber forest products in protection and/ or production forests, including -see next cell- within a certain time frame and volume	Harvest non-timber forest products: Ratan, honey, fruits, resin, medicinal plants	Regent/Mayor (under their jurisdiction); Governor (across districts); Minister (across provinces)
10	Permit for Utilization of Community Forests	IUPHKm	Permit to utilize forest resources within protected and/or production forest areas)	Forest Area utilization activities: cultivating medicinal and decorative plants, fungi. Utilization of environmental services, utilization of non-timber forest products in natural forest, extracting timber forest products (only for public purposes), and extracting non-timber forest products.	Regent/Mayor (under their jurisdiction); Governor (across districts)
11	Permit for Utilization of Timber Forest Products within Community Forests	IUPHHK HKm	Permit to utilize timber forest products within IUPHKm in production forests	May only be granted for the utilization of timber products from their own planting.	Minister, may be delegated to the Governor
12	Lending and Utilization Permit in Production Forest	IPPK- HP	Permit to utilize forest estate for non-forest development purposes without changing the function and the designation of the forest estate	Non-Forest activities: religious, defense & security, mining, electricity infra- structure, telecommunica- tions infrastructure, water infrastructure, public roads, railway tracks, irrigation, public facilities, radio and TV infrastructure, sea/air traffic safety facilities, temporary natural disaster shelters	Minister, Governor for land smaller than 1 ha

APPENDIX C. CHANGING LEGAL STATUS OF LANDS IN INDONESIA

C.1 Single Reclassifications

C.1.1 FOREST ESTATE RELEASE MECHA-NISM (PELEPASAN KAWASAN HUTAN)

Government Regulation No. 10 of 2010 states that convertible production forest is the only class of forest that can be converted using the forest estate release mechanism. An exception is when the convertible production forest is located in a province where the size of the forest estate is less than 30 percent of the total size of the province. In that case, the specific convertible production forest cannot use the forest estate release mechanism but must use the forest estate exchange mechanism to convert its legal land status to non-forest land.

Requirements:

- The forest estate release mechanism can only be used for convertible production forests in provinces where the forest estate makes up at least 30 percent of the total land in the province. Whether the forest estate has forest cover on it is not considered. If the forest estate is not classified as convertible production forest, then the forest classification must be converted first to convertible production forest.
- The only people eligible to apply for a forest estate release are the Minister of Forestry or a government official equivalent to a minister, a governor or regent/mayor, a head of governmental or private business entity or a head of foundation (article 8).

Steps:

- The application for the forest estate release is submitted to the Minister of Forestry, along with the governor or regent/mayor's recommendation letter. Also attached is a map with a minimum scale of 1:100,000 of the requested forest estate.
- After the Minister of Forestry receives the forest estate release application, he or she can issue a letter of rejection or a "principle letter of approval" for the forest estate release (article 21).
- If the Minister issues a principle letter of approval, the holder of the letter must, within one year (with two possible six-month extensions):
 - Complete the boundary demarcation of the requested forest estate. This will result in a "Boundary Demarcation Statement Report" and a boundary demarcation map made

- and signed by the forest estate "boundary demarcation committee."
- Secure the requested forest estate (article 22).
- The applicant is prohibited from transferring the principle letter of approval to another party without the approval of the Minister of Forestry.
- Within the "principle approval" period, the applicant is prohibited from undertaking any activities in the proposed released forest estate area, unless the applicant acquires a dispensation letter from the Minister. Further provisions of obtaining this dispensation is regulated in Minister of Forestry Regulation Number P.33/ Menhut-II/2010 article 17.
- After the "principle letter of approval" is made out to the applicant, the Minister will make a decision on the forest estate release based on the Boundary Demarcation Statement Report and boundary demarcation map (article 24).
- If the Minister approves the forest estate release request, the authorized institution in charge of land affairs shall issue a certificate of land title (article 25).

Minister of Forestry Regulation No. 33 of 2010 explains Government Regulation No. 10 of 2010 in finer detail. This regulation specifically elucidates the forest estate release mechanism on convertible production forest.

Like in Government Regulation No. 10 of 2010, this regulation states that releasing a forest estate for development purposes outside of forestry activities can only be conducted on convertible production forests (article 2). Agriculture cultivation and plantation development are included in the definition of these "non-forestry activities" (article 3). Therefore, conversion of convertible production forests to non-forest land for the purpose of palm oil expansion is permitted according to Indonesian law.

According to Minister of Forestry Regulation No. 33 of 2010, a maximum 100,000 ha of land can be converted from convertible production forests to non-forest land for one company or one company group. Conversion will be done in phases with a maximum 20,000 ha of land converted in the first phase (article 4). The maximum amount of land,

however, doubles in size for the province of Papua and West Papua. When the first phase is complete, the provisional head official in charge of forestry issues will evaluate the conversion process that has taken place so far, until any additional land for the company is converted, in which another evaluation will be conducted. This evaluation will include a review of the company's attempt to issue a permit for time-limited land tenure rights for commercial use and an examination of the company's progress in developing its plantation.

Even though Government Regulation No. 10 of 2010 and Minister of Forestry Regulation No. 33 of 2010 were only recently enacted, the concept and process of the forest estate release mechanism is not novel in Indonesian law. Between 2003 and 2008, approximately 368,964 hectares of forest estate was converted to non-forest estate for agriculture development based on the forest release mechanism (SK Pelepasan Kawasan Hutan). Several ministerial decrees offer examples of how this mechanism has been used. Examples include:

- Surat Keputusan Menteri Kehutanan Nomor 666/Kpts-II/1992. This decree changed the status of the Batanghari Forest Estate, in Jambi to non-forest estate. This change in status used the forest estate release mechanism for purpose of developing a palm oil plantation for PT. Sawit Jambi Lestari. The total area converted was 11,700 hectares.
- Surat Keputusan Menteri Kehutanan Nomor 918/Kpts-II/1991. This decree changed the forest estate in Sungai Gelam, Jambi to non-forest estate. This change in status used the forest estate release mechanism for the development of PT. Borneo Karya Cipta's palm oil plantation. The total area converted was 1,000 hectares.

C.1.2 FOREST ESTATE REVIEW (PENILAIAN ULANG KAWASAN HUTAN)

Forest reclassification can take place when an area within the forest estate no longer meets the criteria of its classification. Government Regulation No.10 of 2010 explains the procedures for changing forest classification. It states that change can be conducted among different sub-classifications, such as between the different types of production forests. However, the change can also occur between the different main forest estate classifications (conservation forest, protected forest, and production forests).

Although the Minister of Forestry makes the final decision about forest classifications, various government stakeholders from the central, provincial, and district level are involved in the process leading to the final decision. Government Regulation No. 38 of 2007 regulates the division of power between the central, provincial and regional government. This regulation provides that the district government can recommend changes in forest estate classification. The provincial government provides "technical assistance" to the central government, in this case the Minister of Forestry, who will then decide whether to change the forest classification. This regulation, however, does not explain the specific "technical assistance" the provincial government can or should provide.

Technical directives regarding forest classification change are found in Minister of Forestry Regulation No. 34 of 2010. The regulation is relatively new, and no forest estate classification changes have been conducted under its authority. However, several classification changes based on the previous law regarding forest classification change have been conducted. Between 2003 and 2008, the Ministry of Forestry recorded 3,200,436 hectares of land that had undergone some kind of classification change within the forest estate. iii Specific examples are found in:

- Minister of Forestry Decree No.SK.03/Menhut-II/2005, which legally changed the Baloi forest estate classification in Batam from a protected forest to a production forest.
- Minister of Forestry Decree No.SK.255/Menhut-II/2004, which legally changed the Tesso Nilo forest estate classification in Pelawan and Indragiri Hulu districts in the province of Riau from a limited production forest to a conservation forest, sub-classified as national park. The total size of the classification change was 38,576 hectares.

C.1.3 FOREST ESTATE GAZETTEMENT (PENGUKUHAN KAWASAN HUTAN)

The Ministry of Forestry has the authority to designate areas as forest estate based on the Ministry's forest inventory research. Although the Ministry of Forestry should review the national, provincial, and district spatial plans during this process, there are no legal requirements that obligate the Ministry of Forestry to designate forest estate according to any spatial plans.iv

The gazettement of forest estate or pengukuhan kawasan hutan is set out in Law No. 41 of 1999. which regulates forestry planning. Under this law, a proposed forest estate area must progress through four processes to ensure the legality of a forest estate area. These processes are:

- 1. Forest estate designation or penunjukan kawasan hutan
- 2. Forest estate boundary demarcation or penataan batas kawasan hutan
- 3. Forest estate mapping or pemetaan kawasan hutan
- 4. Forest estate stipulation penetapan kawasan

Each process is explained in Government Regulation No. 44 of 2004 and Minister of Forestry Decree No.32/Kpts-II/2001.

The designation of forest estate is the first process conducted in gazetting forest estates. According to Minister of Forestry Decree No. 32 of 2001, the area must already be included in the forest estate designation map and provincial waterway maps stipulated by the Minister of Forestry. However, the area may also be part of the provincial or district-level spatial plans.^v

The outcome of the forest estate designation process is a Minister of Forestry Decree or Governor Decree, depending on the specific forest classification of the forest estate designation. A Minister of Forestry Decree is issued if the nonforest estate will be converted to forest classified as conservation forest, nature reserve forest. hunting park, protection forest, or production forest located between two or more provinces. A Governor Decree is required if the area will be converted to a protection forest or production forest that is located within the same province.vi

After the designation process, the regent or mayor of the area conducts the boundary demarcation process for the proposed forest estate. The regent or mayor creates a Boundary Demarcation Committee charged with demarcating temporary boundaries of the proposed area. This committee is also responsible for resolving all existing claims from any third party along the border and within the proposed area. vii The "ulayat," an individual, or a legal entity can raise a claim to the land. All parties that directly border the designated forest estate must also acknowledge the boundary demarcation of the proposed area.

The committee conducts a mapping of the forest estate, which results in a boundary demarcation map and a boundary demarcation report that the Minister of Forestry then ratifies. VIII This map and report is used by the Minister to stipulate the forest estate, which is the final step of the gazettement process. At this point, the legal status of land officially becomes forest estate.

According to Government Regulation No. 44 of 2004, an area can be gazetted as a forest estate even if all claims to the area have not been resolved. If such an event occurs where the area is designated as forest estate even with unresolved claims, the Minister of Forestry issues a letter explaining the unsolved claims along with any rights associated with the area. These issues are to be later settled by the Boundary Demarcation Committee.ix

An area is gazetted as forest estate after it has gone through this entire four-step process and a ministerial decree letter has been issued. Examples of these decree letters are:

- Surat Menteri Kehutanan No. SK.74/Menhut-II/2004 for the designation of the Sepakung Forest Estate with a total area of 100,000 hectares. Under this law the Sepakung Forest Estate is now part of the Hutan Ambarawa Kesatuan Pemangkuan Hutan Kedu Utara in Semarang, Central Java and is classified as a conservation forest with the sub-classification of a nature reserve (cagar alam).
- Surat Menteri Kehutanan No.SK 35/Menhut-II-2005 for the designation of the Senkilau Forest Estate in the district of West Kotawaringin, Central Kalimantan. Under this law the Senkilau Forest Estate has a total area of 8,114 hectares and is classified as a production forest.

C.2 Multiple Reclassifications

C.2.1 FOREST ESTATE EXCHANGE MECHANISM (TUKAR-MENUKAR KAWASAN HUTAN)

The concept of a "land swap" of land classifications between a forest estate area and a non-forest estate is found in Government Regulation No. 10 of 2010. This regulation states that "partial conversion" of forest estates can be conducted by using the "forest estate release" mechanism (pelepasan kawasan hutan) as described above and/or the "forest estate exchange" mechanism (tukar-menukar kawasan hutan). Forest classifications that qualify for forest estate exchange are:

- Convertible production forest in provinces where the size of the forest estate is less than 30 percent of the total area of the province
- Permanent production forests and,
- Limited production forests.

The forest exchange mechanism process is found in regulations including the Minister of Forestry Decree No. 70/Kpts-II/2001. This decree states that the forest estate exchange mechanism is the process for changing the status of forest estates to non-forest estate. Minister of Forestry Decree No. SK. 48/Menhut-II/2004 amended this law, which mainly eliminates the role of the local parliament in the forest exchange process.

Minister of Forestry Regulation No. 32 of 2010 is the most detailed ministerial regulation regarding forest exchange mechanism procedures at the time of writing. According to this regulation, forest estate classified as permanent production forests or limited production forests can be exchanged for non-forest estates. Thus the permanent production forests would be converted to non-forest estates, and non-forest estates would be converted to permanent production forests. If the total forest estate area of the province is more than 30 percent of the entire area of the province, the permanent production forests or limited production forests can be converted to non-forest estates, in exchange for a convertible production forest being converted into permanent production forests or limited production forests. Overall, the forest exchange mechanism forbids a reduction in the amount of forest estate within a province. This ministerial regulation states that the forest exchange mechanism can be applied for several reasons including for "permanent development purposes outside of forest activities." Agriculture cultivation and plantation development are included from this category.

These laws have provided the legal basis for implementing forest estate exchanges in the past. Between 2004 and 2008, the Ministry of Forestry recorded that approximately 22.678 hectares of land were exchanged using this mechanism.* An example of how this mechanism has been used is found in the ministerial of forestry letter, Surat Menteri Kehutanan No.S.13/Menhut-II/2005, which changed the status of the Baloi Dam Forest Estate in Batam.

Requirements (based on Government Requlation No. 10 of 2010):

- Persons who are eligible to apply for this process are the Minister of Forestry or a government official equivalent to a minister, a governor or regent/mayor, a head of governmental or private business entity or a head of foundation (article 8).
- The forest estate exchange mechanism may only be conducted on forest estates classified as convertible production forest for provinces with forest estates less than 30 percent of the entire province, permanent production forests, limited production forest (article 10 and 19).
- Forest estate exchange are conducted for (article 11):
 - □ Development purposes outside permanent forestry activities. This article states that "development outside permanent forestry activities" shall be identified by the Minister of Forestry after coordinating with other ministers:
 - ☐ The elimination of enclaves in order to improve forest estate management; and
 - Improving forest estate boundaries.
- Conversion ensures that the forest estate remains 30 percent of the river watershed area (Daerah Aliran Sungai / DAS), island and/or province with proportionate distribution. The forest estate exchange must also ensure that the forest estate remains manageable (article 12 [1]).
- Should the forest estate be less than 30 percent of the entire province, the forest estate exchange shall be conducted at a minimum ratio of 1:2. This means that the non-forest estate land exchanged is twice the forest estate area taken out of the forestry estate. The exception to this is if the forest estate exchange is being conducted to accommodate victims of natural disasters and is for "limited public interests." In this case, forest estate exchange may be done with a minimum ratio of 1:1 (article 12 [2]).
- If the size of the forest estate of the province is more than 30 percent of the total area of the province, the exchange may be conducted at a minimum ratio of 1:1 (article 12 [3]).

- The replacement land classified as non-forest estate (before the exchange) must meet the following requirements (article 12 [4]):
 - Clear location, size and boundaries of
 - ☐ The land directly borders an already existing forest estate.
 - ☐ The land is located within the same river catchment/waterways, island and/or province.
 - ☐ The land can be reforested using a conventional manner.
 - ☐ The land is not under dispute and free from all forms of charges and claim rights.
 - ☐ The land obtains a recommendation letter from the governor and regent/mayor.

Steps:

- The applicant submits a forest estate exchange request to the Minister of Forestry along with (Minister of Forestry Regulation No. 32, article 9):
 - □ A map of the forest estate with a minimum scale of 1:100,000.
 - □ A recommendation letter regarding the forest exchange from the governor or regent/ mayor, attached to a map with a minimum scale of 1:100.000 of the requested forest estate to be exchanged.
 - □ Map of the proposed replacement land with a minimum scale of 1:100.000.
- After completing all administrative and technical requirements stated in a forthcoming Minister of Forestry Regulation, the Minister of Forestry forms an integrated team (Government Regulation No. 10 of 2010 article 13[2]).
- Based on the research findings of the integrated team, the Minister of Forestry issues a principle endorsement letter or a rejection letter of the proposed land swap (article 13[6]).
- In the case when the integrated team finds that the forest estate conversion has a "substantial impact and broad coverage as well as strategic value" to the surrounding environment, the Minister must first seek the approval of the National Parliament (House of Representatives or Dewan Perwakilan Rakyat) before issuing the principle endorsement letter (article 14).

- The principle approval for the forest estate exchange shall be granted for a maximum period of two years from the date of issuance and may be extended twice, each time for a period of no longer than one year (article15[1]).
- During the principle approval period the applicant is required to (article 15[2]:
 - □ Settle the clear and clean process of the non-forest estates.
 - □ Sign the official forest estate exchange report
 - Bear cost of the border demarcation of the requested forest estate and the recommended replacement land.
 - Bear cost of reforestation for replacement land.
- When the applicant meets his or her obligations as stipulated in the principal agreement then (article 16):
 - ☐ The Minister of Forestry and the applicant shall sign the official forest estate exchange
 - Based on this report, the Minister of Forestry shall issue a decree to designate the specified replacement land into the forest estate or keputusan penunjukkan lahan pengganti sebagai kawasan hutan.
- Within a maximum of one year after the forest designation decree has been issued, the applicant must (article 17[1]):
 - □ Reforest the replacement land.
 - Conduct the "boundary demarcation" of the replacement land and the requested forest estate.
- The result of the "border demarcation" is written in a Boundary Demarcation Statement Report or Berita Acara Tata Batas and Boundary Findings Map signed by the Boundary Demarcation Committee (article 17[2]).

- Based on the Boundary Demarcation Statement Report and the Boundary Findings Map, the Badan Planologi under the Ministry of Forestry will prepare a draft Minister of Forestry decree that will include a map with a minimal scale of 1:100,000 of:
 - ☐ The forest estate area requested for release.
 - ☐ The non-forest estates area that will be converted into a forest estate, which borders directly with an already existing forest estate.
 - ☐ These maps must include the boundary demarcation of each area.
- The Minister of Forestry will then issue a decree of land designation for each area (article 17[3]).
- Before the Minister's decree to designate the replacement non-forest estates land as a forest estate and decree to convert the requested forest estate to non-forest estates is issued, the applicant is prohibited from engaging in any activities within the requested forest estate.
- Activities inside the requested forest estate may only be executed after securing exemption from the Minister of Forestry (article 18).

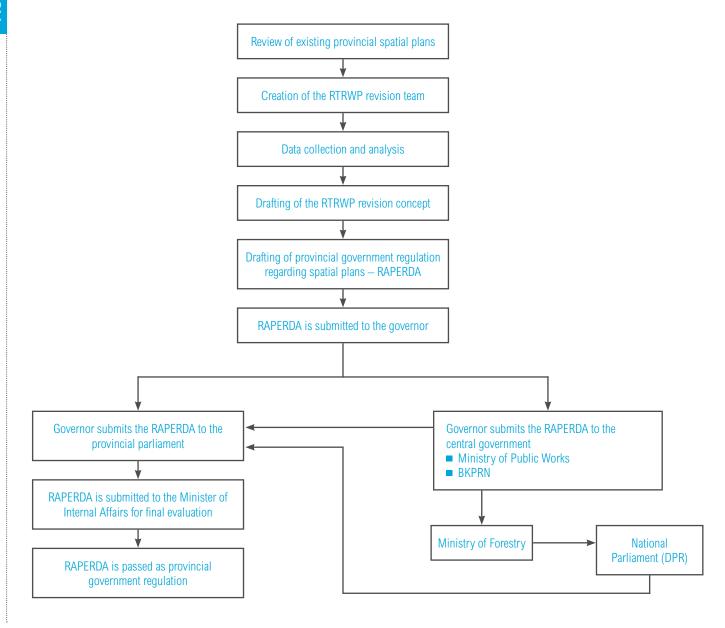
C.2.2 SPATIAL PLANNING REVISION **PROCESS**

Figure 2 depicts the provincial spatial plan revision process.

If the spatial plans indicate changes in the forest estate, the National Spatial Planning Coordinating Body (BKPRN) will require the Ministry of Forestry through the Directorate General of Public Works to review these proposals. This incorporates changes to the different classifications within the Forest Estate (perubahan fungsi kawasan hutan) and conversion of land located within the Forest Estate to non-forest estates (perubahan peruntukan kawasan hutan). Because of the vast majority of land located within the Forest Estate, this process is conducted by almost all provincial governments.

Minister of Forestry Regulation No. 28 of 2009 regulates the procedures that the provincial governor must follow to obtain "forestry substantive approval" for the province's spatial plans. The governor must submit the spatial plan documents along with maps of the proposed Forest Estate changes and satellite images that indicate the vegetation conditions and land cover of the areas from the last two years. The proposed land use, once the legal status of this area changes, should also be attached with these maps. The Ministry of Forestry then creates an integrated team to further examine the request. The findings of the integrated team are brought to the National Parliament (DPR), which is tasked with approving or rejecting changes in the Forest Estate. These results are sent back to the provincial governor and provincial parliament to be adjusted accordingly and passed as a draft subnational regulation.

PROVINCIAL SPATIAL PLANNING REVISION PROCESS



LIST OF REGULATIONS ON SPATIAL PLAN

PERMISSIBLE ACTIVITIES	GRANTED BY
Laws (Undang-undang)	 Undang-undang No. 26 tahun 2007 tentang Penataan Ruang Law No. 26 of 2007 regarding Spatial Planning Undang-undang No. 32 tahun 2004 tentang Pemerintah Daerah Law No. 32 of 2004 regarding the Local Government Undang-undang No. 32 tahun 2009 tentang Perlindungan Pengelolaan Lingkungan Hidup Law No. 32 of 2004 regarding Conservation and Management of the Environment
Government Regulations (Peraturan Pemerintah)	 Peraturan Pemerintah No. 15 tahun 2010 tentang Penyelenggaraan Penataan Ruang Government Regulation No. 15 regarding the Implementation of Spatial Planning Peraturan Pemerintah No. 26 tahun 2008 tentang RTRWN Government Regulation No. 26 of 2008 regarding the National Spatial Planns Peraturan Pemerintah No. 38 tahun 2007 tentang Pembagian Urusan Pemerintah, antara Pemerintah, Pemerintah Daerah Provinsi, Pemerintah Daerah Kabupaten/Kota. Government Regulation No. 38 of 2007 regarding the Administrative Division of the Government, between the Central Government, Provincial Government, and District/City Government. Peraturan Pemerintah No. 68 tahun 2010 tentang Bentuk dan Tata Cara Peran Masyarakat Dalam Penataan Ruang. Government Regulation No. 68 of 2010 regarding Community Participation in Spatial Planning
Presidential Decree (Keputusan Presiden)	 Keputusan Presiden No. 4 tahun 2009 tentang Badan Koordinasi Penataan Ruang Nasional (BKPRN) Presidential Decree No. 4 tahun 2009 regarding the National Spatial Planning Coordination Committee
Ministerial Regulations (Peraturan Menteri)	 Peraturan Menteri Pekerjaan Umum No. 11/PRT/M/ 2009 tentang Pedoman Persetujuan Substansi Minister of Public Works Regulation No.11 of 2009 regarding Guidelines for Substantive Approval Peraturan Menteri Pekerjaan Umum No. 15/PRT/M/2009 tentang Pedoman Penyusunan RTRWP Minister of Public Works Regulation No. 15 of 2009 regarding Guidelines for Constructing the Provincial Spatial Plans Peraturan Menteri Pekerjaan Umum No. 16/PRT/M/2009 tentang Pedoman Penyusunan RTRWK Minister of Public Works Regulation No. 15 of 2009 regarding Guidelines for Constructing the District Spatial Plans Peraturan Menteri Kehutanan No. P.28/Menhut-II/2009 tentang Tata Cara Pelaksanaan Konsultasi dalam Rangka Pemberian Persetujuan Substansi Kehutanan atas Rancangan Peraturan Daerah tentang Rencana Tata Ruang Daerah Minister of Forestry Regulation No. 28 of 2009 regarding Consultation Procedures on "Forestry Substantive Approval" for Draft Local Regulations regarding Local Spatial Plans. Peraturan Menteri Dalam Negeri No. 28 tahun 2008 tentang Tata Cara Evaluasi Rancangan Peraturan Daerah tentang Rencana Tata Ruang Daerah Minister of Interior Affairs Regulation No. 28 of 2008 regarding Procedures on Evaluating Draft Local Regulations of Local Spatial Plans. Peraturan Menteri Lingkungan Hidup No. 27 tahun 2009 tentang Pedoman Pelaksanaan Kajian Lingkungan Hidup Strategis (KLHS) Minister of the Environment Regulation No. 27 of 2009 regarding guidelines for the Implementation of the Strategic Environmental Assessment

C.3 Local/special designations

C.3.1 FOREST WITH RIGHTS (HUTAN HAK) RECLASSIFICATION

The regulations addressing "forests with rights" (hutan hak) sets out two procedures: one for designating non-forest estates land as hutan hak/ forest with rights and one for converting an area that is already designated as hutan hak to Forest Estate. Several regulations—including Law No. 41 of 1999, Government Regulation No. 34 of 2002 (amended by Government Regulation No. 6 of 2007), and Minister of Forestry Regulation No. 38 of 2009—provide the legal basis for this method. The key regulation related to hutan hak is Minister of Forestry Regulation No. 26 of 2005.

Requirements:

- Hutan hak is defined as a forest on land that is encumbered with land rights secured by a land title or rights/claims. A type of hutan hak, also commonly called hutan rakyat or people's forest, is a forested land appointed as hutan rakyat by the District Head or Mayor (article 1)
- Land with a land title or land rights in the form of a land certificate or permits, such as Hak Guna Usaha (HGU) and Hak Pakai, can be designated hutan hak according to its classification or function. There are three classifications for hutan hak: conservation function, protection function, and production function.
- The appointment of the function of hutan hak is based on the Indonesian government's spatial planning process (RTRWK) (article 2)
- The rights holder must use hutan hak consistent with its designated function. This utilization should generate optimal benefits for the rights holder without changing its function.
- The appointment of the function of hutan hak will go through the process of hutan hak inventory, hutan hak mapping, and hutan hak appointment. (article 5)
- Hutan hak with a conservation and protection function can be converted into a forest estate. (article 19)

Steps to incorporate hutan hak to forest estate:

The procedure to convert hutan hak with a conservation and protection function to a Forest Estate area (article 19) is the following:

The Regent/Mayor proposes the change in status to the Minister of Forestry with a recommendation letter from the governor. The Ministry of Forestry will approve or reject this request.

C.3.2 FOREST ENCLAVE MECHANISM

In some cases, people may reside within or use lands classified as forest estate for small-scale farming. To prevent uncontrolled expansion of these small-scale non-forestry uses of the forest estate, the government can designate certain areas within the forest estate as "forest enclave" to further clarify the demarcation of the forest estate. The identification of enclave areas is crucial for an accurate inventory of forest estate and any third-parties right attached to the land.

The government must follow five steps to identify areas eligible to be enclaved:

- Field verification. This includes the identification of primary data (village instrument, number of households and populations, proof of land ownership, land use patterns, history of settlement, facilities and infrastructure) and secondary data (forest function, topography of the area, types of soil, altitude).
- Feasibility study of the enclave candidate.
 Based on the field verification, a feasibility
 study analyzes the physical, social, economic,
 cultural, and legal feasibility of the area to be
 designated as forest enclave. This process
 should refer to Minister of Interior Instruction
 No. 15 of 1988 (InMendagri No. 15 Tahun
 1988).
- 3. Enclave scoring. After the completion of the feasibility study, the government conducts a quantitative descriptive analysis of the enclave candidates. Weighted scoring of the variables includes forest function, history of settlement, origin of the settlers, slope, type of soil, ownership of land, facilities and infrastructure, farming intensity, households number and altitude. If the total score of the area is greater than 265, the people and activities within the area should be resettled. If the total score is less than 265, the area is eligible to be enclaved. However, there are certain exception for this regulation:
 - a. An area should be maintained as forest if:
 - i. Slope is greater than 40 percent, with minimum area of 10 Ha;
 - ii. The area is classified as conservation forest;

- The area is classified as protected forest according to Minister of Interior Decree No. 15 of 1988;
- iv. The area is greater than 2,000 m above sea level;
- v. The soil type is very prone to erosion (regosol, litosol, organosol renzince);
- vi. The area serves specific function related to national defense; or
- vii. Other reasons as stated by Minister of Forestry.
- b. An area should be designated as forest enclave if:
 - i. There are demonstrable rights of ownership of the land;
 - ii. The area is a definitive Kota Kecamatan/village;
 - iii. The area serves a specific function designated by Ministry of Forestry.
- 4. Determination of enclave candidate.
 - a. If the area is considered eligible to be designated as forest enclave, the regent and governor of the province can ask the Minister of Forestry to establish the area as a "potential enclave." This proposal can be used as reference for the demarcation of forest estate.
 - b. If the area is not eligible to be designated as forest enclave, the government should resettle any resident/activities within the area into locations designated and prepared by the government.
- 5. Measurement and designation of forest enclave.
 - a. Boundary demarcation of the enclave candidates
 - b. Examination of boundary demarcation
 - c. Designation of definitive boundary of the enclave candidates
 - d. Examination of boundary demarcation by the Boundary Demarcation Committee
 - e. Memorandum of boundary demarcation by Minister of Forestry
 - f. Enclave designation

APPENDIX ENDNOTES

- This is consistent with the February 2012 Constitutional Court Ruling 45/2012, for more information about the analysis of the ruling, see http://www.daemeter.org/wpcontent/files/Policy Brief Constitutional Court Decision No 45 PUUIX 2011.pdf
- Statistik Kehutanan 2008, Planologi Kehuii. tanan, tabel I.2.2 http://www.dephut.go.id/ index.php?q=id/node/6122
- Statistik Kehutanan 2008, Planologi Kehutanan, tabel I.2.10 http://www.dephut.go.id/ index.php?q=id/node/6122
- Government Regulation No. 44 of 2004, iv. article 16
- Minister of Forestry Decree No. 32 of 2001, article 5
- Minister of Forestry Decree No. 32 of 2001. article 17
- vii. Government Regulation No. 44 of 2004, article 19
- viii. Government Regulation No. 44 of 2004, article 19
- Government Regulation No. 44 of 2004. article 22
- Statistik Kehutanan 2008, Planologi Kehutanan, tabel I.2.1 http://www.dephut.go.id/ index.php?q=id/node/6122

REFERENCES

Akiefnawati, R., G. B. Villamor, F. Zulfikar, I. Budisetiawan, E. Mulyoutami, A. Ayat, and M. Van Noordwijk. 2010. "Stewardship Agreement to Reduce Emissions from Deforestation and Degradation (REDD): Case Study from Lubuk Beringin's Hutan Desa, Jambi Province, Sumatra, Indonesia." International Forestry Review 12(4):349-60. http://www.bioone.org/doi/abs/10.1505/ ifor.12.4.349.

Carlson, K., L. Curran, G. Asner, A. Pittman, . S. Trigg, , and J. Adeney. 2012. "Carbon Emissions from Forest Conversion by Kalimantan Oil Palm Plantations." Nature Climate Change 3: 283-87. http://www.nature.com/nclimate/journal/ v3/n3/full/nclimate1702.html#/ref-link-10.

Colchester, Marcus, Norman Jiwan, Andiko, Martua Sirait, Asep Yunan Firdaus, A. Surambo. and Herbert Pane. 2006. Promised Land: Palm Oil and Land Acquisition in Indonesia: Implications for Local Communities and Indigenous Peoples. Forest Peoples Programme and Sawit Watch, Indonesia. http://www.forestpeoples.org/ topics/palm-oil-rspo/publication/2010/promisedland-palm-oil-and-land-acquisition-indonesiaimplicat.

Gingold, Beth, Anne Rosenbarger, Yohanes I Ketut Deddy Muliastra, Fred Stolle, I Made Sudana, Masita Dwi Mandini Manessa. Ari Murdimanto. Sebastianus Bagas Tiangga, Cicilia Cicik Madusari, and Pascal Douard. 2012. "How to Identify Degraded Land for Sustainable Palm Oil in Indonesia." Working Paper, April, World Resources Institute and Sekala, Washington DC. http://www. wri.org/publication/identifying-degraded-landsustainable-palm-oil-indonesia.

RSPO (Roundtable on Sustainable Palm Oil). 2012. "Report of the Field Investigation in Central Kalimantan of the RSPO Ad Hoc Working Group on High Conservation Values in Indonesia." http://www.forestpeoples.org/sites/fpp/files/publication/2012/08/final-report-field-investigationrspo-ad-hoc-wq-hcv-indo-july-20113.pdf.

Wells, Philip, Neil Franklin, Petrus Gunarso, Gary Paoli, Tiza Mafira, Dimas Riyo, Kusumo Ben Clanchy. 2012. "Indonesian Constitutional Court Ruling No. 45/PUU-IX/2011 in Relation to Forest Lands, Implications for Forests, Development and REDD+." Daemeter Consulting. http://www.daemeter.org/wp-content/files/ Policy Brief Constitutional Court Decision No_45_PUUIX_2011.pdf.

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