Land Use in Central Kalimantan

Combining development and sustainability goals for land optimization

Food, Fuel, Fiber and Forests,
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1. Analysis of key issues

Section summary

This section explores key issues affecting land use in Indonesia and Central Kalimantan and explains the challenges they present. We begin by identifying the factors contributing to confused and conflicted land use and spatial planning, including land tenure, administration and planning regulations (conflicting maps, community rights, issuance of IPKs, constitutional court ruling on the forest zone, presidential moratorium, etc). We then move on to identify regulations and market incentives that are failing to safeguard or dis-incentivising the protection of the forests and the environment, including the use of Environmental Impact Assessments (EIAs), regulations on peat, the presidential decision on protected zones, Indonesian sustainable Palm Oil (ISPO) and Timber Legality Verification System (SVLK), and voluntary market-based mechanisms, as well as more general regulations and fiscal incentives in place to pursue development goals, such as the identification of production forests for conversion. We also explore current valuation of ecosystem services and REDD+ and the role of business in pursuing more sustainable land use.

Case studies of innovative policies and regulations for more sustainable land use are also included to illustrate potential solutions.

1.1 Land use and spatial planning

Authority over forest licensing has undergone major shifts in Indonesia, from the central government between 1967-1998 to local governments (district and provincial) 1999-2002, and then back to the central government/Ministry of Forestry (MoF) from 2002 until the present.

1.1.1 Land administration and zoning

The Constitution of Indonesia provides the highest level of authority for state control over Indonesia’s land and natural resources. This is cemented within two key laws, Firstly, the Basic Agrarian Law (BAL) of 1960 that 1) recognizes state lands, 2) lands with rights, and 3) customary lands. Secondly, the New Forestry Law (NFL) of 1999 stipulates that the Ministry of Forestry (MoF) has “the authority to… regulate and organize all aspects related to forest, forest area and forest products” and state control of regions defined as Forest Zone (Kawasan Hutan). The Forest Zone is broken down into three classifications:

1. Protection and conservation forests
2. Production forests
3. Production forests for conversion

Once an area has been classified as a forest zone only the MoF can release it to a non-forest zone or alternate land use, although strategic areas must first be approved by parliament. Problems arise from inconsistencies between NFL and BAL.

Importantly the NFL, until its recent amendment by the Constitutional Court, included customary lands as part of state lands, and enabled the MoF to unilaterally declare areas as Forest Zone without consideration of pre-existing rights of the regional government (See Fact Box on M45). The NFL also made it difficult for indigenous groups to gain legal recognition of land rights in the past, a particular problem in rapidly developing areas such as Central Kalimantan. Land concessions were often granted to agricultural, forestry, and mining companies without considering the actual land uses and customary claims. Land disputes between companies and nearby communities are therefore common. Oil palm companies are required by law to engage local communities affected by their operations to explain development plans and likely impacts on communities, obtain their consent to plant on community-claimed land, and negotiate appropriate

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1 Law No.5/1960 on Basic Principles of Agraria
2 Law No. 41/1999
3 Constitutional Court ruling Number 35/PUU-X/2012)
4 Constitutional Court Case No. 45/PUU-IX/2011
Fact Box: MK 45*
In February 2012, Indonesia’s constitutional court ruled that the MoF must formally gazette land as part of the Forest Zone before exercising management authority over it (Ruling MK45). Prior to this ruling, the MoF was unilaterally designating land as Forest Zone to enable them to exercise active management of large tracts of land, avoiding carrying out the lengthy and participatory process of gazettment.

The court case that led to the decision was filed in part by five district heads from Central Kalimantan who claimed that the pre-existing system meant that large areas of their district had been unduly designated as Forest Zone, which prevented them from pursuing economic development for the hundreds of thousands of people living within that area. Economic development is required under the Indonesian constitution, however, previously local people had faced criminal sanctions for illegal occupation of the land and government officials faced prosecution for granting licenses to companies wanting to develop the land (e.g. S.255/Menhut-II/07 and Surat Edaran Menteri Kehutanan Nomor S.95/Menhut-IV/2010).

Although the new ruling is not considered retrospective, it raises concerns about the current extent of the Forest Zone and its legal status. It also raises questions about the future ability of the MoF to exert control over the land, highlighting changes in the balance of power between central and regional authorities. Other implications include questions around the authority of the districts to issue oil palm licenses, especially as there remain strong economic and political incentives for district officials to support investment in oil palm. These concerns are reinforced by the fact that the gazettment process has progressed very slowly. Only 11% of designated Forest Zone lands have been fully gazetted nationally, although the MoF has announced ambitious plans to gazette the remaining lands by the end of 2014. Local authorities also have the legal mandate to carry out the gazettment process, giving them leverage in negotiations with the MoF. This would provide them with power to ensure that all plantation licenses that have already been issued are excised from the Forest Zone. It is essential that community bargaining positions within this process are strengthened so as to provide clarity on local customary forests and land uses.

*For further information see Wells et al. 2012

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Fact Box: Land Use Zones
Approximately 130 million of the 187 million hectares of land in Indonesia has been assigned to forest zones. The rest is referred to as Areal Penggunaan Lain or APL (areas for other uses). This means that the Ministry of Forestry has the responsibility to assign land use rights for 70% of Indonesia’s land.
compensation. These negotiations are often strained by unequal power relationships because the courts interpret property rights of communities as weaker than use rights conferred to companies by government. Where negotiations go poorly, communities can have substantial collective power to delay or halt development, and are increasingly skilled at using this power.

1.1.2 Spatial planning
A new national law on spatial planning was enacted in 2007, stipulating a multi-tiered approach via 20-year national, provincial and district spatial plans. These plans were to be developed using a participative process and in accordance with more long-term development plans. This required all provinces to submit revised spatial plans before the end of 2010. Implementing regulations of this law require these spatial plans to be in agreement with the National Forest Zone, mandating a role and procedure for the MoF to review and approve the spatial plans.

Spatial plans, at the national, provincial and district level, designate land that is available for development and land that is contained within the Forest Zone, i.e. used for forestry or maintained for biodiversity or environmental services. It is also the legal basis for the allocation of licenses that must be in accordance with the spatial plan. Governance of land in Indonesia is divided between multiple agencies, namely the MoF, the National Land Agency, and local government. Despite existing requirements to reconcile MoF designation of forest zone (Kawasan Hutan) and the spatial plans developed by provincial offices (RTRWP) prior to the 2007 law on spatial planning, the plans evolved separately, which lead to substantial differences in terms of the proportion of the area designated as a forest zone within certain areas and provinces (Figure 1).

The outcome of the divergence of the MoF Forest Zone and the spatial plans has led to licenses to be issued that are potentially legal and valid under one law but illegal and invalid under another. This leads to business uncertainty, and also potential conflicts between companies. This means it is not only a state governance issue, but also a corporate governance issue. The uncertain status of land reduces the incentives for investors to improve management practices, and encourages interference in the provincial and district spatial planning revision process. Not only does this uncertainty affect existing investors, but it also encourages speculative and wide spread attempts at acquisition—particularly in areas deemed likely to fall outside the forest zone.

As a consequence, national, provincial and local governments currently face both technical and political constraints to delineate forest and non-forest areas. This is particularly true in Central Kalimantan given its large Forest Zone (82% of the land area) and a development strategy that relies on access to large areas of land. The tensions between the MoF and local governments have been playing out over three decades and are not yet resolved.

1.1.3 Tenure
Until recently, communities could only be awarded partial management rights of areas previously designated as Forest Zone, if the area had no pre-existing forestry license granted. The granting of a forestry license did not consider community rights and therefore potentially led to conflict.

In 2013, however, the Indonesian Constitutional Court ruled to invalidate the Ministry of Forestry claim to millions of hectares of forestland. In a review of 1999 Forestry Law, the court ruled that customary forestland should not be classified as state forest areas. It is estimated that this ruling will affect 30 percent of Indonesia’s forest estate, or 40 million ha. At this stage, however, it is unknown what the full implications will be, especially as the implementation could take years to move through the various levels of government. In particular, it is unclear how conflicts between communities with customary land claims and private companies that have been granted licenses will be resolved.

1.2 Regulatory environment and incentives
Reliance on natural resources has given rise to policies that encourage the development of a primary resource-based economy that includes not only mining and forestry but also investment and activities in expansive agriculture practices.

5 Paoli et al. 2013
6 Gillespie 2012
7 Wells et al. 2012
8 Personal communication
9 Constitutional Court ruling Number 35/PUU-X/2012
10 Personal Communication
ecosystem services and high carbon stocks and drive intensification over expansion are currently lacking or weak. Furthermore, these high value ecosystems are attractive, as they are often sparsely settled and so avoid the necessity to engage communities and potential future conflicts.

Examples of weak regulations include Environmental Impact Assessments (EIAs or AMDAL), which are required before issuing a business permit for oil palm or a forest concession, and could potentially identify ecologically important areas, but in practice often do not. Presidential Decision No. 32/1990 acts to protect sensitive areas such as riparian buffer zones, peat lands and steep slopes offers additional protection to sensitive areas; however it often fails in its intentions as enforcement is weak. Timber plantation estates (HTI) located in Production Forests (HP) are allocated when the forest is no longer considered commercially productive, irrespective of the future potential to recover, the ecosystem services provided or, in the case of peatlands, whether it may lead to high levels of emissions when it is drained for planting.

Oil palm regulations governing oil palm on peat (issued by Ministry of Agriculture) prohibit companies from developing plantations on land where more than 70% of the peat land is over 3 meters deep. Although this may protect those areas, drainage of adjacent shallower peat lands has an impact, and forest areas and peat lands are continually earmarked for development. According to a study carried out by World Resources Institute in Central Kalimantan, there are approximately 3.3 MHa of land that could be developed without incurring major environmental damage. However, successfully redirecting investments onto these lands involves counteracting existing incentives for forest conversion and implementing a comprehensive and effective regulatory and incentive framework.

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11 Indrarto et al. 2012
12 Lim et al. 2012
13 Personal communication
14 Gingold, 2012
that is coordinated between central, provincial and district government levels. This is a challenge while regulatory authority remains disputed among these political tiers.

Indonesian governments, at all levels, have extensive plans and mandates to pursue economic development, particularly in rural and frontier regions. “MP3EI” is a plan to accelerate Indonesia’s progression toward developed country status. The plan has set extremely ambitious targets, to achieve an average per capita income of $14,250 - $15,500 and a total GDP of $4.0-4.5 trillion by 2025.\(^\text{15}\) Initially the MP3EI was based on a BAU extractive economic model, but now Bappenas (the national development planning agency) is working on developing environmental sustainability criteria and indicators for MP3EI projects. This vision for 2025 will be achieved through three key routes. Firstly, increasing investment in value added industries by expanding the value chain and increasing the efficiency of the distribution network. This will occur in part by increasing industries access to human and natural resources and by the creation of economic activities in key regions and centers of economic growth; secondly, by encouraging efficiency in production and improving marketing techniques to increase competitiveness and strengthen the national economy; and thirdly, by encouraging and supporting innovation.

The Ministry of Finance plays an indirect but key role in climate change and natural resources management through fiscal incentives: tax exemption; tax imposition, collection and distribution; credit for bioenergy and agricultural revitalization\(^\text{16}\); and allocation of revenue share from the natural resource sector. It is also a key player in establishing the budget and capacity for MoF to play its role.\(^\text{17}\) The role of the Ministry of Finance could be further enhanced if the law governing fiscal transfers between Central Government and Regional Government were amended to provide stronger incentives to the regions that are conditional, performance based, do not require matching funds and could allow the

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15 Indonesia Investments
16 Ministry of Finance regulation No. 117/PMK. 06/2006
17 Carmody et al. 2010
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Policy option: Making existing regulations more effective through improved data, transparency, education and communication

Strategies are needed to improve stakeholder (community, government, company and financiers) understanding of key issues related to sustainability and the mechanisms being put in place to protect high value ecosystems and associated services. This will improve accountability and ownership across all stakeholders, but will require greater access to information and transparency of licensing processes.

Case study: Communication and education is the key to building on the legislative foundation for a nature-based economy

Acre state, in Brazil, passed legislation that promotes sustainable development by incorporating the value of natural services into the state-wide economy, Sistema de Incentivo a Servicos Ambientais (SISA). The initiative involved coordinating four state departments (Agriculture, Environment, Forests, and Agroforestry & Smallholder extension). The schemes also involved educating millions of citizens and thousands of business people about complex subjects such as agroecological zoning, PES, Monitoring Reporting and Verification (MRV), and carbon sequestration.

This initiative creates an intricate and integrated system of economic incentives for good land stewardship. A framework of laws and regulations enable payments to flow to people who manage the land so as to preserve and protect environmental services, including biodiversity, capture carbon and manage watersheds. It has been able to promote a forestry-based economy supported by some conventional policies and some ecosystem services compensations such as REDD+.

(Source: Ecosystem Market Place)

transfers of payments between regions to secure vital ecosystem services.\textsuperscript{18}

1.3 Valuation of ecosystem services and REDD+

Although many industrial land uses in Indonesia, such as timber and oil palm plantations, depend on the services provided by ecosystems, the environmental costs of these services are often underpriced or free and ignored by government and private sector when making key decisions regarding the location and operations of plantations. Services such as watersheds, forests, healthy agricultural soils, are key resources for local communities and long-term development goals. This failure to consider true economic value of ecosystem services often results in negative environmental impacts, such as soil erosion and water pollution. Despite continued efforts to incorporate ecosystem services within decision-making, valuation is not often used due to limited government and business capacity to carry out assessments and monitoring, the technical requirements and complexity of valuation methodologies and insufficient enabling conditions.

More formal exchanges are being developed to create incentives to protect ecosystem services such as Payment for Ecosystem Service (PES) and REDD+ in Indonesia, for example, PES projects linked to National Program for Community Empowerment (PNPM).\textsuperscript{19} However, currently the use of such mechanisms is constrained by high transaction costs, inadequate capacity and limited market demand for such services. Recognizing the potential for economic incentives to complement regulatory approaches, government introduced provisions in the Spatial Planning Law and the Environmental Law for using economic incentives and disincentives to guide local authorities in development planning and to optimize land allocation for agriculture based on ecosystem service provision. Government could take further action by taxing environmental externalities for production practices and offering financial benefits or regulatory incentives to firms that voluntarily protect ecosystem service.

\textsuperscript{18} Shah 2007

\textsuperscript{19} Jurgens et al. 2013
Major industries/sectors in Central Kalimantan

Oil Palm
- Oil palm plantation area in Indonesia has increased eight fold since 1991, reaching 8.9 million ha in 2011. Most growth occurred post 1997 financial crisis.
- Export revenues of $12-15 billion (3% GDP) meaning industry expansion is strongly supported by government policy – Central Kalimantan is aiming for 3.5 MHa by 2020
- Available spatial data suggests that licenses have been issued to establish oil palm estates on another 891,902 ha of peat land and 3.9 million ha of forest across Indonesia in the near future.
- Average yields in plantations in Indonesia are 20-40% lower than those in Malaysia and up to 70% lower than max potential yields
- Indonesian Sustainable Palm Oil board statistics 2012 estimate that roughly smallholders manage 40% of all palm oil in Indonesia that average between 2-10 ha.

Timber
- Statistics indicate that more than 1 million ha of peat land and 2.8 million ha of forest land has been allocated for industrial timber plantations
- The pulp and paper industry giants account for roughly 20% of the deforestation between 2000-2010 and 50% of peat land conversion in Indonesia
- It is estimated that roughly 15 million people have been employed to establish the 5.1 million ha of industrial timber plantations and that 1.7 million were employed in 2011 to grow and harvest these plantations.

Coal
- Currently only 2 million of the 12 million ha of coal mining concessions in Indonesia are active.
- Current coal prices are decreasing

(ISPO commission statistics 2012, Casson et al. 2013, Personal communications)

1.4 The role of business
Oil palm is the most profitable agricultural crop in Indonesia with proven ability to accelerate economic growth and alleviate poverty in under-developed areas through job creation and opportunities for smallholder farmers to develop plantations. However, it has also proved to have significant social and environmental impacts. The palm oil and pulp & paper sector are significant drivers of land use change. In particular, the drying, decomposing and burning of peat land contributes disproportionately to these emissions.

Estimates suggest that the top 9 largest oil palm firms produce 35% of all CPO, suggesting that a focused engagement could make a significant difference. However, smallholders also play a considerable role with over 40% of production. Policies must take in to account the range of actors operating within a region as the differentiation between smallholders and small and medium enterprises (SMEs) becomes increasingly blurred, and many private investors/elites are using local connections to buy up larger chunks of land. Despite calls from civil society, consumers and the international community for producers to adopt high yield/low impact practices, market incentives and economic drivers continue to encourage expansion over increases in yield. This is because land is relatively inexpensive, labor is abundant and inexpensive and market prices for key primary commodities remain strong. Although best management practices are relatively inexpensive, they require investments in training, education, technology and continued monitoring and adaptive management. This, combined with small price differentials for palm oil originating from well-managed, high-yield plantations, including those certified under the Roundtable for Sustainable Palm Oil (RSPO), are proving insufficient to motivate change in large segments of the industry and discourages companies from changing business as usual practices.

20 Paoli et al. 2013
21 Personal communication
Policy option: Industry upgrading
As well as tackling the perverse incentives that encourage expansion and BAU development, as opposed to yield improvements and industry upgrading, extensive training among stakeholder groups is needed to build capacity.

Case study: The Brazilian Central Bank Resolution 3,545
Introduced in mid-2008, Resolution 3,545 placed a condition on rural credit in the Brazilian Amazon Biome. In order to access subsidized rural credit, borrowers had to present proof of compliance with environmental regulation, in the form of a range of documents, including the legitimacy of land claims and environmental compliance. The Resolution applied to landowners, their associates, sharecroppers and tenants. Rural credit is used to finance short-term working capital investment and the commercialization of rural production. According to the Brazilian Ministry of Agriculture 30% of the resources needed in a typical harvest year are funded through rural credit and the remaining 70% come from the producer's own resources as well as from other agents of agribusiness and other market mechanisms.

The Resolution was implemented voluntarily as of May 1st 2008 and became mandatory in July 1st 2008. Small-scale farmers were subject to less stringent standards. The Resolution was particularly significant in municipalities where cattle ranching is the main economic activity and interestingly the policy affected the composition of credit contracts. The number of medium to large contracts for cattle farming decreased whereas there was an increase in small contracts.

In the case of crops there was a reduction in the issuance of medium contracts. The Resolution only applied to subsidized credit (with lower interest rates), while other sources of financing was not restricted. Credit has a positive and strong correlation with deforestation, as municipalities that showed the sharpest decrease in credit also showed sharper drops in deforestation. The study also found that the impact of the Resolution was affected by the main regional economic activity (e.g. cattle ranching or crop production). The significant impact on cattle ranchers suggests that they are credit constrained and rely on subsidized credit. Crop farmers were less affected by the Resolution because they have they have greater organizational structures and are therefore better equipped to meet the requirements, they can compensate for decreased access to subsidized credit through alternative finance sources and may also be focusing a larger share of rural credit on intensification rather than expansion.

Case study 2: The green municipality scheme
Paragominas had previously been the centre of illegal deforestation in the Brazilian Amazon. As one of the fastest developing regions of the world, its forests were disappearing to make room for ranches, farms and plantations. Development within the region had improved the quality of life for citizens through the construction of highways and industrial energy, mining and agricultural projects, but had resulted in extensive environmental impacts.

In 2011 Paragominas state government launched The Green municipalities scheme. It involved the development of pacts and partnerships between local government, civil society, private sector and the public prosecution service. In order to reduce deforestation the state structured four main action areas including: 1) control and monitoring of deforestation; 2) territorial, environmental and land title organization; 3) sustainable production; and 4) shared environmental management. The challenge was to lead the state of Para toward a low carbon economy that will also help alleviate poverty in the region and promote social equity. One benefit is that the state already had one of the most diversified economies in Brazil, including mining, cacao and fruit production, tourism, forestry and ranching.

A key element of the schemes is the intensification of agriculture and ranching and the shifting of agricultural production to abandoned and underutilized pastures. Regulation and initiatives such as the New Forest Code have brought definition and legal security for rural enterprises. Infrastructure developments should also encourage a geographical shift in production. The paving of the BR 163 highway, construction of hydroelectric projects, and reopening of the Panamá Canal for ships of 170 thousand tons will push the outlet for production from the Amazon and Center-West to Belém.

(Assuncao, et al. 2013, municiposverdes.com.br)
Many of the major pulp and paper industry companies are under the same group ownership as the palm oil industry majors. Although a handful of companies dominate the sector, little is known about sub-contractors employed in land clearing and harvesting. The pulp and paper industry has expanded rapidly since the banning of log exports in 1985 and continues expanding to cater to the increase in global demand in paper products; which has in part been financed by the government’s reforestation fund. Accurate data on consumption/demand is difficult to find but what is available indicates that Indonesia consumes almost all of its sawn timber domestically but only 33% of its pulp and paper and 46% of plywood production. The remainder is exported to countries including Japan, Malaysia, Vietnam and the USA, contributing to foreign exchange earnings.

Indonesia has very significant reserves of fossil fuels as well as other minerals. It is the world’s fourth-largest coal producer, and although its impacts on forests are currently limited, potential impact is great, especially in Central Kalimantan. Despite decreasing coal prices, industry trends still point to an increase in output.
2. Review of relevant policies and regulations in Indonesia and Central Kalimantan

Section summary

This section explores current initiatives, mechanisms and policies in place seeking to resolve land-use issues and analyses their progress. We discuss the role of the one map initiative in streamlining spatial planning, the importance of the forest moratorium in buying-time to finalize spatial plans, the challenge and opportunities of decentralization, and the role of mandatory and voluntary third party certification in mobilizing the private sector. We also focus on provincial initiatives such as Central Kalimantan’s Long Term Development Plan, the Provincial Regulation on sustainable palm oil, and its prospects as a REDD+ Pilot project.

2.1 National

In October 2009, President Susilo Bambang Yudhoyono committed to reducing Indonesia’s CO2 emissions by 26% against a business-as-usual trajectory in 2020. 87% of this reduction is earmarked to come from forests and peat land. The Rencana Aksi Nasional Penurunan Emisi Gas Rumah Kaca (RAN GRK), or National Action Plan for Reducing Greenhouse Gas Emissions, was established in September 2011 by Presidential Decree. It describes sectoral allocations for achieving this target and lays the framework for all 33 provinces to develop their provincial action plans and contribute to the national target. BAPPENAS is coordinating the process and has developed and introduced guidelines for implementation at the sub national level between 2010 and 2020. The plans are required to take into account national development principles and priorities, mitigation potential, feasibility within each sector and required financing for implementation.

In May 2011 a Presidential Moratorium was issued on the conversion of primary and natural forests and peat lands. In May 2013 this was extended for another 2 years. This extension will allow more time for national and local governments to improve processes for land use planning and issuing permits as well as strengthening data collection and information systems, and continue building the institutions and mechanisms that will help achieve Indonesia’s low emission development goals. This links to the the REDD+ One Map initiative that hopes to resolve licensing issues by generating common mapping standards, which mean that different ministries’ maps are compatible and that base maps can be layered and compared to see how they relate. This reduces the risk to businesses by providing greater certainty and, through a common map used by all agencies, provides a starting point to resolve conflicting land use rights.

To assist in the finalization of the spatial plans, President Yudhoyono in September 2013 issued an instruction intended to accelerate and finalize the spatial planning process for all provinces in Indonesia. This regulation (Inpres 8.2013) addresses the issues of disputed Forest Zones. The decree states that areas that remain contested between the provincial government and MoF should be classified as a ‘Holding Zone’. This will enable the spatial plan for the rest of the area to be finalized and legalized.

Indonesia has also adopted and nationalized a number of international mechanisms including a third-party-audited certification standard for palm oil ISPO (the Indonesian Sustainable Palm Oil standard) which aims to ensure greater compliance to existing Indonesian regulations across all growers, including tracking and reporting on greenhouse gas emissions. The SVLK standard is a timber legality verification system that came into force in January 2013, and was issued by the Indonesian Ministry of Forestry and Ministry of Trade. It forms part of the FLEGT Voluntary Partnership Agreement (FLEGT VPA) with the EU, which aims to improve forest
sector governance and ensure that the timber and timber products imported to the EU are produced in compliance with the laws and regulations of the partner country.\textsuperscript{25}

2.2 Central Kalimantan

Decentralization laws have given districts greater sub-provincial administrative jurisdiction and authority than provinces to manage natural resources and regulate land-based development. This assignment of authority places provincial governments in a challenging position to coordinate land development policy across the province. Two key instruments for the province are the requirement that district spatial plans and their development plans must conform with provincial plans and that regulations enacted by the provincial legislature are binding on all districts.\textsuperscript{26}

2.2.1 Long term Development Plan (RPJP) and Medium Term Development Plan (RPJM)

The Province’s Long-term Development Plan 2005-2025 envisions a more advanced, independent and equitable Central Kalimantan. Development priorities within the plan include to \textit{Increase food security} through agro-industrial development and \textit{to increase the quantity and quality of investment}. These priorities sound similar to BAU and it will be important to see how investments are directed. The plan also advocates the \textit{development of cooperatives and small and medium scale businesses} as well as \textit{building a “learning culture”} in a fair and equitable way. These are important but challenging priorities that will require investment in time, money and education. The plan recognizes the importance of \textit{creating a professional and responsive government and building a partnership between local government and society, strengthening public participation}. In addition the plan acknowledges the importance of \textit{creating harmonious relations between natural resource functions and economic, social, and cultural functions to support each other sustainably and optimize the application of spatial plans}. The skeleton structure is in place for sustainable development in Kalimantan, and can be further advanced in the next Medium Term Development Plan that will be produced during the remainder of the current governor’s term.

2.2.2 REDD Pilot Province

On December 23rd 2010, President Yudhoyono \textbf{established Central Kalimantan as the pilot province for REDD+ implementation}, following a Letter of Intent (LOI) between Norway and Indonesia to decrease GHG emissions caused by deforestation and forest degradation. On September 16th 2011, the Chairman of the National REDD+ Task Force and the Governor of Central Kalimantan signed a Memorandum of Understanding (MOU) regarding implementation of the REDD+ demonstration project. Central Kalimantan produced

\textsuperscript{25} Timber Trade Federation
\textsuperscript{26} Law on Spatial Planning 2007
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a low carbon development plan in 2011, mandated development of a Regional REDD+ Strategy in 2012, and has since formed a Regional REDD+ Commission.

2.2.3 Provincial Regulation on Sustainable Palm Oil

The expansion of oil palm in Central Kalimantan (doubling in the last 10 years) has driven regional economic growth, but has come at significant social and environmental cost. However, the Provincial Parliament of Central Kalimantan passed a groundbreaking provincial regulation in 2011 on Sustainable Management of Plantation Businesses. The regulation is noteworthy for its breadth and depth, progressive social and environmental provisions, and generally strong support from local stakeholders when it was passed. It outlines requirements for obtaining required licenses that include monitoring and reporting social and environmental impact mitigation measures; conflict resolution; investment in smallholder farmers; community rights (see below) and protection of ecologically sensitive areas. Potentially far-reaching provisions include:

1. Provincial government must develop a Master Plan, Strategic Plan and Work Plan for Palm Oil Plantation Development taking into consideration results of a provincial Strategic Environmental Assessment
2. Prior to commencing development, companies must carry out HCV assessments to identify and maintain HCVs in their plantations
3. Licenses for new plantations must prioritize degraded, low carbon land
4. Agricultural practices must be designed to achieve high yields
5. Provincial government must facilitate establishment of an independent institution to promote sustainability.

2.2.4 Community rights

The Governor issued a regulation in 2009 on Indigenous Lands and Peoples Rights to Land, and a Provincial Regulation on Sustainable Palm Oil that reaffirms:

a. The rights of local communities, especially those with customary or traditional land claims
b. The responsibilities of companies to recognize customary land claims and invest in local job creation, smallholder support, and building diversified local economies.

These provisions were developed ahead of the Constitutional Court Decision that recognizes customary land rights and enables these areas to be excised from the National Forest Zone, allowing communities to manage the forest. Growing NGO support and organized leadership by local customary institutions is expected to accelerate recognition of customary forest claims in Central Kalimantan.

2.2.5 The spatial planning process

To date, Central Kalimantan has not completed its spatial plan, due to the continued dispute between the MoF and the Government of Central Kalimantan on land function. However, in accordance with the Presidential Instruction discussed in section 2.1, in 2014 Central Kalimantan will pass a regulation enacting a spatial plan that will include a holding zone roughly 3.5-4.5 million ha. The proposed regulation will prevent new licenses from being issued at the request of the Governor. Also, as part of a legal review and law enforcement work in conjunction with the REDD+ Agency, there is a plan to develop a more comprehensive data set, which will try to determine which licenses are clean and clear. Importantly, this will provide legal certainty to communities and companies in the undisputed areas outside of the ‘Holding Zone’.

There is a significant scope to optimize land use in Central Kalimantan. Only around 58% of the Forest Zone is forested and much of the remaining forest is highly degraded. Approximately 9% of the area outside the Forest Zone that is currently allocated for development is forested. Optimization of the spatial plan could bring all forested areas into the forest estate and release some of the non-forested areas within the estate for agricultural production, depending on their ecological function. In addition an optimized plan would also identify locations that would be suitable for restoration and reforestation, providing important environmental services that are wholly consistent with both National policies on forestry and goals of mitigating carbon emissions. A finalized spatial plan, including agreement on the ‘Holding Zone’, will increase legal certainty for communities, industry, regional, and central government and, importantly, will greatly support efforts to safeguard forest assets.

27 Personal communication
28 Personal communication
29 Daemeter 2014
30 Daemeter 2014
Figure 3: Indicative holding zone, Central Kalimantan
Source: Daemeter

Figure 4: Indicative holding zone overlaid with forest and peat coverage, Central Kalimantan
Source: Daemeter
Realizing a vision to ensure sustainable production of Food, Fuel, Fibre and Forests in Indonesia requires overcoming significant challenges related to regulation, governance, business, and local community participation and empowerment. These challenges include not only technical barriers related to data and capacity but also norms of governance and decision making that require greater transparency as well as broad based participation. The production of food, fuel, fiber and forests are dependent on land allocation, a finite resource that must be utilized more efficiently in an increasingly land constrained world. This requires optimal land use planning, disciplined decision making, and effective regulation, as well as market based incentives that reinforce desired outcomes. Spatial planning cannot be

### Challenges

- Competition for land between different stakeholders
- Many maps and spatial plans produced by different levels of government and ministries creating uncertainty on zoning and tenure
- Conflicting legislation and profusion of mechanisms, initiatives and policies
- Lack of capacity and engagement from key stakeholders in business, government and local communities
- Rapid development
- Lack of certainty surrounding legal rights of local community and indigenous people
- Lack of incentives to implement best practices and increase yields

### Resulting in

- Poor spatial planning leading to inefficient land use
- Contested land allocation and user rights
- Inefficient land use and poor planning
- Unequal benefits and limited poverty alleviation and development
- Perverse incentives for expansion over intensification
- Limited understanding and capacity to implement existing regulations
- Lack of accurate data and transparency

### Leading to

- Conflict between government businesses and communities
- High transaction costs and productivity losses
- Business uncertainty
- Limited investments in Best Practices across industry
- Rapid land clearing and inefficient land use
dictated solely by suitability, but must also consider legal frameworks, pre-existing rights and the needs of local constituents. Decisions must also ensure realistic profitability of enterprises, and maintenance of the environment on which long-term development will depend. The inherent difficulty of reaching consensus on land use optimization is compounded by the different perspectives and goals held by National, Regional, Local Community and Business actors, as well as members of the global community – but this challenge cannot be ignored.

The pulp and paper and the oil palm industry are both fundamental to the production of the 4 Fs and have also been a focus of marked criticism. These producers are supplying national and global demand for their products, and have been granted access to land by government. Civil society has made great progress in holding companies to account for their impacts on the ground, a trend that should be supported and encouraged. Growing coalitions of diverse actors have also created enabling conditions for changing entire supply chains to internalize the social and environmental costs of production, notwithstanding the significant, potential undermining risks of leakage into alternative supply chains. Altering the policy of government can overcome such leakage but this is only likely if this ultimately benefits the nation, as in the case of Indonesia, it is the regions whose decentralized government is empowered to issue such licenses. But there is also a need to balance national and regional interests: how can this effectively be managed? At a finer scale, real societal costs exist, as illustrated by community conflicts with companies even when the company is well intentioned. This indicates that protection must be offered to both sides to provide legal certainty and equity, which are pillars of sustainability. To find solutions requires us to view these issues with different lenses across different scales to gain a clearer understanding of the different actors’ needs and the complex relationships between them. This paper has identified key problem areas that are summarised in the chart on page 14.
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Acronyms

APL Areal Penggunaan Lain, Other land uses (non-forested land)
Bappenas National Development Planning Agency
FPIC Free Prior Informed Consent
GHG Greenhouse Gas
Ha Hectares
HCV High Conservation Value
HD Hutan Desa, Village Forest
HGU Hak Guna Usaha, Land-Use Rights
HKM Commmmunity Forest
HL Hutan Lindung, Protected Forest
HPH Hak Pengusahaan Hutan, Forest-Use Rights
HP Hutan Produksi, Production Forest
HPK Hutan Produksi Konversi, Conversion Forest
HPT Hutan Produksi Terbatas, Limited Production Forest
HT Hutan Tetap, Forest Land
HTI Hutan Tanaman Industri, Industrial Timber Plantations
HTR Hutan Tanaman Rakyat, Community Timber Plantations
ILUC Indirect Land Use Change
INCAS Indonesia's National Carbon Accounting Scheme
IP Izin Prinsip, Permit in Principle
IPCC Intergovernmental Panel on Climate Change
IPK Izin Pemanfaatan Kayu, Timber Use Permit
ISPO Indonesian Sustainable Palm Oil
IUP Izin Usaha Perkebunan, Plantation Use Permit
IUPHHK Izin Usaha Pemanfaatan Hasil Hutan Kayu, Wood Forest Product Utilization License
KalTeng Kalimantan Tengah, Central Kalimantan
KDTI Area with Special Purpose
KSA-KPA Kawasan Suaka Alam - Kawasan Pelestarian Alam, Conservation Forest
LUC Land Use Change
MK45 The "MK45" case centered around the central government’s control over Indonesia’s Forest Zone (Kawasan Hutan).
MP3EI Master Plan for the Acceleration and Expansion of Indonesia’s Economic Development
PES Payment for Ecosystem Services
PAPL Penyediaan Area Penggunaan Lain, Forest Land Designated for Other Uses
PIR/NES Perkebunan Inti Rakyat, Nucleus Estate and Smallholder Scheme
PIR-Trans Perkebunan Inti Rakyat Transmigrasi, Nucleus Estate and Smallholder Scheme for Transmigrants
PNPM National Programme for Community Empowerment
RADGRK Rencana Aksi Daerah Penurunan Emisi Gas RumahKaca, Regional Mitigation Action Plan on Greenhouse Gas Emission Reductions

5. Appendix
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>REDD</td>
<td>Reduced Emissions from Avoided Deforestation and Degradation</td>
</tr>
<tr>
<td>RTRWP</td>
<td>Rencana Tata Ruang Wilayah, Provincial Spatial Plan</td>
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<tr>
<td>TGHK</td>
<td>Tata Guna Hutan Kesepakatan, Forest Land Use Consensus</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change World Resources Institute</td>
</tr>
<tr>
<td>UU</td>
<td>Undang-undang National Law</td>
</tr>
</tbody>
</table>
List of key actors and legislation/policy

| Constitutional Court ruling Number 35/PUU-X/2012 | Indonesian Constitutional Court’s decision regarding the 1999 Forestry Law. The court decision decided that customary forests of Indonesia are owned by Indigenous People, and not by the State. |
| District governments | Responsible for district based spatial planning and the allocation of concessions and licenses for land that does not fall within the forest estate, even if this land is forested. Issue district regulations (PERDA) to regulate forest management in their districts, however, these regulations can not contradict higher laws or regulations issued by the Ministry of Forestry or other parties. |
| Forest Zone | Land under the purview of Ministry of Forestry |
| Law No. 41/1999 | Forestry, dated 30 September 1999 (Undang-undang No. 41/1999 tentangKehutanan). |
| Ministry of Forestry | Issue Laws, regulations and decrees to regulate the forest estate (kawasan hutan), 70% of Indonesia’s total land area. Issue licenses for large-scale logging and industrial timber plantations and are responsible for conservation areas and other protected areas. Undertake forest cover monitoring, determine forest functions. Also regulate community-managed forests. Release conversion forestland for agriculture, estate crops or other large-scale developments. |
| Ministry of Agriculture | Responsible for food security and large-scale food estate developments such as the Merauke Food and Energy Estate, which is to be established in Merauke, Papua. Agricultural crops promoted by the Ministry include oil palm, rubber and sugar. |
| Ministry of Environment | Also undertake mapping of forest cover, responsible for physical, social and environmental assessments (AMDAL) of forest operations or processing facilities. Responsible for other environmental laws, such as the Environmental Management Act (UU23/1997), which establishes principles for environmental management and natural resource conservation. The Act applies to logging operations and processing mills. |
| Ministry of Industry and Trade | Regulate exports of processed timber and sawn timber. |
| Presidential Decree (Kepres) No.32/1990 | Management of Protection Areas. The decree defines Protection Area as an area that protects environmental functions, including natural resources, man-made resources, historical, and cultural values to support sustainable development. |
| UKP4 | (Unit Kerja Presiden bidang Pengawasan dan Pengendalian Pembangunan) Monitor the implementation of Reducing Emissions from Deforestation and Degradation (REDD) and the moratorium on logging of peat and primary forests. Responsible for reporting the results to the President. |
| National Land Authority (BPN) | Responsible for land administration and reform. Plays a role in the approval of concessions and other land permits, particularly in the non-forest estate. |
| BIG (Mapping Agency) | Responsible for reviewing spatial plans, providing standardized spatial data and responsible for the ‘One Map’ initiative. |
| Ministry of Energy and Trade | Responsible for ensuring domestic energy supply through fossil fuels and biofuels. |
| MK45 | The “MK45” case centered around the central government’s control over Indonesia’s Forest Zone (Kawasan Hutan), a classification that applies to more than two-thirds Indonesia's landmass or roughly 130.7 million hectares. Five district heads in Central Kalimantan challenged the designation of their administrative districts as Kawasan Hutan, which required their constituents — hundreds of thousands of people who live in the designated Kawasan Hutan areas — to seek permission from Ministry of Forestry whenever they wanted to make land use decisions. The Constitutional Court ruled that some of language underpinning Ministry of Forestry’s control over Kawasan Hutan is “unconstitutional” and “unenforceable”. |