

National Law and Regional Riches:

Contesting Natural Resources in East Kalimantan

Mohamad Nasir Gintu

Radboud Social
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National Law and Regional Riches: Contesting Natural Resources in East Kalimantan, Indonesia

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Abbreviations and Acronyms

ABN	Adimitra Baratama Nusantara
ADD	<i>Alokasi Dana Desa/ Village Funds Allocation</i>
AMDAL	<i>Analisis Mengenai Dampak Lingkungan/Environmental Impact Analysis</i>
APL	<i>Areal Penggunaan Lain/ Other Areas Of Use</i>
BAL	Basic Agrarian Law (1960)
BEK	Bumi Energy Kaltim
BI	Borneo Investama
BRWA	<i>Badan Registrasi Wilayah Adat/ Customary Territory Registration Agency</i>
DPMPTSP	<i>Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu/One-Stop Investment and Integrated Services Office</i>
DAK	<i>Dana Alokasi Khusus/Special Allocation Funds</i>
DAU	<i>Dana Alokasi Umum/ General Allocation Funds</i>
DID	<i>Dana Insentif Daerah/Regional Incentive Funds</i>
DR	<i>Dana Reboisasi/Reforestation Funds</i>
EI	<i>Pejabat Pengawas Lingkungan Hidup(PPLH)/ Environmental Inspector</i>
EFT	Trnsfer Fiskal Berbasis Ekologi/ Ecological Fiscal Transfers
EPM	Energi Penajam Mandiri
FAR	forest area release
GR	Government Regulation
GDP	Gross Domestic Product
GRDP	gross regional domestic product
HCV	<i>Areal dengan Nilai Konservasi Tinggi/ High Conservation Value</i>
HGU	<i>Hak Guna Usaha/Cultivation Right</i>
ISPO	Indonesian Sustainable Palm Oil
IPK	<i>Izin Pemanfaatan Kayu Timber Utilization Permits</i>
IPPKH	<i>Izin Pinjam Pakai Kawasan Hutan/ Borrow to Use Forest Area Permit</i>
IUP-B	<i>Izin Usaha Perkebunan untuk Budidaya/Plantation Business Permit for Cultivation</i>
IUP-P	<i>Izin Usaha Perkebunan untuk Pengolahan Plantation Business Permit for Processing</i>
IUP	<i>Izin Usaha Perkebunan/ Plantation Business Permit</i>
IUP- JATAM	<i>Jaringan Advokasi Tambang/Mining Advocacy Network</i>
KE	Kutai Energi

KKKPR	<i>Konfirmasi Kesesuaian Kegiatan Pemanfaatan Ruang/ Suitability Confirmation of Spatial Utilization Activities</i>
KJA	Kideco Jaya Agung
KPA	<i>Konsorsium Pembaruan Agraria/ The Consortium for Agrarian Reform</i>
MBS	Marimun Bara Sejahtera
MI	Mining Inspector
MSJ	Mahakam Sumber Jaya
MoA	<i>Kementerian Pertanian/Ministry of Agriculture</i>
MoAASP/NLA	<i>Kementerian Agraria dan Tata Ruang/Badan Pertanahan Nasional /Ministry of Agrarian Affairs and Spatial Planning/National Land Agency</i>
MoEMR	<i>Kementerian Energi Dan Sumber Daya Mineral/Ministry of Energy and Mineral Resources</i>
MoE	<i>Kementerian Lingkungan Hidup/Ministry of Environment</i>
MoEF	<i>Kementerian Lingkungan Hidup Dan Kehutanan/Ministry of Environment and Forestry</i>
NGO	Non-governmental organisations
PKKPR	<i>Persetujuan Kesesuaian Kegiatan Pemanfaatan Ruan/ Suitability Approval of Spatial Utilization Activities</i>
PKKNK	<i>Pemanfaatan Kayu untuk Kegiatan Non-Kehutanan/ the Use of Timber for Non-forestry Activities</i>
PKU	Perkebunan Kaltim Utama
PNT	<i>Penggantian Nilai Tegakan/ Standing Value Replacement</i>
PPC	Penajam Prima Coal
PPKH	<i>Persetujuan Penggunaan Kawasan Hutan/ Forest Area Use Approval</i>
PSDH	<i>Provisi Sumber Daya Hutan/ Forest Resource Provisions</i>
PT	<i>Perseroan Terbatas/Limited Compnay</i>
ROCCIPI	Rules, Opportunity, Capacity, Communication, Interest, Process, and Ideology
RSPO	Roundtable on Sustainable Palm Oil
SKN	Sinar Kumala Naga
STD-B	<i>Surat Tanda daftar Usaha Perkebunan Budidaya/Registry Certificate of Plantation Business</i>
STD-P	<i>Surat Tanda Daftar Usaha Pengolahan/ Registry Certificate of Plantation Product Manufacture</i>
TAF	The Asia Foundation

TAKE	<i>Transfer Anggaran Kabupaten Berbasis Ekologi</i> /Ecology-based District Budget Transfer
TAPE	<i>Transfer Anggaran Provinsi Berbasis Ekologi</i> /Ecology-based Provincial Budget Transfer
TANE	<i>Transfer Anggaran Nasional Berbasis Ekologi</i> /Ecology-based National Budget Transfer
UKL	<i>Upaya Pengelolaan Lingkungan</i> /Environmental Management Efforts
UPL	<i>Upaya Pementauan Lingkungan</i> Environmental Monitoring Efforts
TMU	Trisensa Mineral Utama

Introduction

Natural resources management and legal uncertainty in Indonesia

Indonesia has an abundant diversity of natural resources, not least in the energy sector. All types of energy sources range from non-renewable, such as petroleum, natural gas, coal, and uranium, to renewables, like biomass, wind, and solar. It also has extensive reserves of gold, nickel, and tin. Exploiting natural resources affects the state's income and contributes to its economic development (Hajad et al., 2023; Ngarayana et al., 2021). For instance, coal mining and palm oil industries have significantly contributed to the Indonesian Gross Domestic Product (GDP). During 2018-2022, the mining sector contributed approximately 12.9 percent, while the agriculture, forestry, and fishing industries shared 3,58 percent of Indonesia's GDP (BPS Kaltim, 2023).

The diverse interests to which natural resources can be put have given rise to tensions and contestation in local resource-rich settings worldwide (Bernauer et al., 2012; Homer-Dixon, 2001; Homer-Dixon, 1994; Rosengard & Stiglitz, 2015). Different usages of resources, such as individual livelihoods, large-scale industrial exploitation, and nature conservation, have created overlapping claims and disputed usage rights. Furthermore, economies that largely depend on exploiting a single or a limited number of raw resources have become highly vulnerable to fluctuations in global market prices (Auty, 1993; Badeeb et al., 2017; Deacon, 2012; Stevens et al., 2015). Both situations--local contestation and economic dependency on the exploitation of a highly limited number of natural resources – hold for East Kalimantan, one of the natural resource-richest provinces of Indonesia. How the benefits and the disadvantages generated by resource exploitation impact the local society in East Kalimantan forms the backdrop for this thesis. The research focuses on how the governance and regulation of resource usage are laid out in practice, particularly in implementing governance and the law.

This thesis concerns two stages of natural resource management. The first stage is the extensive administrative decentralization that followed the end of the New Order in 1998, as the central government delegated authority over natural resource management to lower levels of government. Decentralization occurs when a central government formally transfers powers to actors and institutions at lower levels in a political-administrative and territorial hierarchy (Ribot, 2002, p. 3). The second stage occurred when the central government again took over the jurisdiction to manage natural resources from local governments, especially after Law Nr. 23 of 2014 concerning Regional Government, which was then strengthened by Law Nr. 11 of 2020 concerning Job Creation.

I identify that decentralization and centralization have three significant effects. First is the intensified disharmony among various levels of government. There have been increased conflicts between the central and local governments, particularly in cases or sectors where the center wishes to assert its dominance, especially where the relevant laws and regulations are ambiguous, inconsistent, and incomplete.

Second, both resulting types of natural resource management have increased disputes involving local communities over the right to exploit natural resources. These disputes can be distinguished into two types. Initially, it occurs between local communities, the state, or a large natural resource company. It typically concerns the land ownership that the local people, based on *adat* law, claim or reclaim as their property. The second type of dispute occurs among local communities as they compete to gain a higher share of the benefits of local natural resources. Given the increase in natural resource extraction by coal mining companies and oil palm plantations and the uncertainty of laws and policies, it is not surprising that the number of disputes between the companies and local communities or among communities has increased.

Furthermore, decentralization and centralization of the authority over natural resources give rise to conflicts that see companies as the main actors, be it a dispute among companies themselves or between companies and the government. I aim to show the importance of assessing the role of companies to understand such conflicts and, secondly, to establish whether this role has increased. It could indicate an intensified part of companies, businesses, and perhaps, the international market in East Kalimantan's natural resource industries.

Regarding such dynamics, I underline that how to govern natural resources is critical to address, as shifting authority from the central government to the regions and vice versa creates ambiguity, inconsistency, and incompleteness of laws, leading to legal uncertainty and opportunism.

This thesis has two main focuses: the coal mining sector and the oil palm plantation sector. The discussion on coal mining aims to describe how authority in this sector is being re-centralized and its relations with multi-level and sectoral-based legislation. On the other hand, the oil palm plantation sector serves as an example of the decentralization of authority and its relations with multi-level and sectoral-based legislation.

This choice is based on four purposive criteria. *First*, coal mining and oil palm plantations are central to the provincial economy. For the period 2016-2020, the

contribution of the coal mining sector to the gross domestic product (GDP) of East Kalimantan was, on average, 33,69 percent, while the oil palm plantation sector contributed 4,5 percent (BPS Kaltim, 2021). Indeed, the importance of palm oil is still relatively small for the provincial GDP. However, the provincial government has designated the sector as a leading sector for renewable resources, and substantial new plantations are being laid out. The provincial long-term development plan (2013-2030) identifies oil palm plantations as the basis for East Kalimantan's future economic structure.

Environmental impacts form the *second* criterion. Coal mining activities generate land conflicts that are prominent between mining companies and local communities (Fünfgeld, 2016; Muhdar et al., 2020; WaterKeeper' Alliance & JATAM, 2017), as are disputes over pollution caused by mining that affects harvests, degrades forests, and poses a risk to the health of the local population (Amir et al., 2019; Anggraeni et al., 2019; Izza & Afkarina, 2019; Kristanti et al., 2019). East Kalimantan's enormous coal reserves are regularly described as a resource curse for the province (Fauzi et al., 2019; Harefa, 2019; Rahma, 2019), both because of the province's economic dependency on coal and because of the mismanagement, corruption, collusion, and nepotism that regularly come to the fore in the province's mining industry (Bersihkan Indonesia, 2020; Hamzah, 2020; JATAM et al., 2019).

Likewise, the expansion of oil palm plantations has given rise to devastating effects on environmental conditions, such as threats to biodiversity and increased greenhouse gas emissions (Meijaard et al., 2018; Meijaard et al., 2020; Purnomo et al., 2020). Oil palm plantation expansions also limit the land available to local communities, triggering land conflicts between communities and companies (Coalition of Civil Societies for Indonesian Palm Oil Moratorium, 2018; Human Rights Watch, 2021). In East Kalimantan, large areas of tropical forest and other ecosystems with high conservation value have been cleared to make room for vast monocultural oil palm plantations (Bakhtiar et al., 2019; Nanggara, Bari et al., 2017; Wakker, 2014). While considerable legislation protecting these forests and conservation areas exists, it seems unable to effectively halt or limit such large-scale resource extraction development.

Third, overlapping land use and conflict over land use claims have emerged about coal mining and oil palm plantations. As of April 2022, the areas of right to cultivate of oil palm plantations (HGU) in East Kalimantan reach around 1,274,516 Ha. Based on the results of spatial analysis, there are around 41.5 percent or approximately 529,179 hectares of plantation concessions that overlap with coal mining areas

(Pemprov Kaltim, 2022). Between 2009 and 2019, the data from the administrative court in Samarinda show that overlapping licenses caused eighteen conflicts brought before the court between coal mining and oil palm plantation companies. Likewise, between 2014 and 2019, according to the Mining Advocacy Network (JATAM), there were fifteen conflicts involving communities that refused mining business licenses to companies and the government (Hukum Online, 2020). Dealing with oil palm plantations in this province, as of February 2023, 31 land-used conflicts involved oil palm plantation companies and communities (Prabawati, 2023).

The political change in natural resource management is the *fourth* reason. Since November 2014, the 2004 Regional Government Law has been substituted by the 2014 Regional Government Law. The new law transfers the authority over coal mining from the district government to the provincial government. In contrast, the authority to govern and control the activities of oil palm plantations remains in the district. Comparing the policies and decisions at these two levels of authority following the 2014 Regional Government Law provides new insights into the interests and operations of these different levels of government authority.

A significant development in the coal mining sector that needs to be stated is that in June 2020, the central government amended the 2009 Mining Law with Law No. 3 of 2020. An essential point of this law was the centralization of the authority of coal mining from provincial to central government jurisdiction. It made the central government the sole authority in the coal mining sector.

As mentioned above, the operations of coal mining and oil palm plantations impact the environment and frequently entail conflicts. In this thesis, I argue that the legal uncertainty of regulations concerning coal mining and oil palm plantations contributes to these problems and even reinforces them. The causes of such uncertainty are ambiguity, inconsistency, and incompleteness of provisions in the regulation of both sectors.

Current studies concerning coal mining and oil palm plantations in Indonesia focus predominantly on four main issues, namely the impact of both sectors on the environment (*Coal mining see*: Fünfgeld, 2016; WaterKeeper' Alliance & Mining Advocacy Network (JATAM), 2017; Atteridge et al., 2018; Izza & Afkarina, 2019; *Oil palm plantation see*: Gaveau et al., 2016; Petrenko et al., 2016; Bakhtiar et al., 2019; Purnomo et al., 2020), human rights violations (*Coal mining see*: Komnas HAM, 2016; Jalaluddin, 2018; White et al., 2018; *Oil palm plantation see*: Joseph & Montefrio, 2015; Andrianto et al., 2019; Human Rights Watch, 2019), land use conflicts (*Coal mining*

see: Subarudin *et al.*, 2016; Abram *et al.*, 2017; Muhdar *et al.*, 2020. *Oil palm plantation* see: Semedi & Bakker, 2014, Sunarminto *et al.*, 2019; Tondo & Siburian, 2019; Pasaribu *et al.*, 2020), and the lack of plantation legislation (*Coal mining* see: Budiono & Rini, 2017; Hartati *et al.*, 2017; Dwiki, 2018; PwC, 2019; *Oil palm plantation* see: Daemeter Consulting, 2015b; Khatarina, 2018; Schouten & Hospes, 2018; Maskun *et al.*, 2020). No studies are available that examine how legal uncertainty in coal mining and oil palm plantations relates to these four issues. I believe that the ambiguity, inconsistency, and incompleteness of regulations is a significant factor.

This dissertation moves into this gap and contributes to the existing literature in various ways. First, by elaborating on how ambiguity, inconsistency, and incompleteness of regulations on coal mining and oil palm plantations create legal uncertainty, as well as by considering how such related sectors as environmental, forestry, spatial planning/land, and investment can lead to legal uncertainty. Second, by exploring how the legal uncertainty of regulations in coal mining, oil palm plantations, and related sectors generated legal uncertainty in the licensing governance of these sectors. Third, by investigating how the legal uncertainty of regulations and licensing governance of coal mining and oil palm plantation sectors can trigger environmental degradation and land use conflicts.

This thesis thus examines the uncertainty of laws concerning natural resource issues in East Kalimantan. Legal uncertainty occurs when the laws or regulations for specific facts or issues are ambiguous, inconsistent, and incomplete to provide a reliable basis for actions or decisions. Particularly in coal mining and oil palm plantations, there are considerable overlaps in law. It causes confusion and unclear policies that resound in local politics, the economy, and wider society.

This study goes beyond merely describing forms of legal uncertainty without providing adequate explanations, which is the typical approach of many more juridically oriented law-in-context scholars (Bedner, 2016a, pp. 31-32). Instead, it seeks to identify the factors contributing to the emergence of legal uncertainty.

Contesting natural resource management in East Kalimantan: a new frontier

The abundant potential of its natural resources has made East Kalimantan attract significant domestic and national investments (Chao *et al.*, 2013, p. 125). Under the 1945 Indonesian Constitution, the government must ensure that the utilization of

natural resources is sustainable and can improve people's welfare. However, natural resource utilization has sometimes gone in the opposite direction. The exploitation of natural resources has intensified: vast tracts of forest and land have been assigned to national and international logging, mining, and oil palm companies. Furthermore, such diverse interests in natural resources give rise to dynamics in the policies and laws, both at the central and regional levels. Also, the different interests in natural resource use can trigger contestation among stakeholders (investors, government, and society), which may lead to conflict (Jalaluddin, 2018; White et al., 2018; Andrianto et al., 2019; Human Rights Watch, 2019; Tondo & Siburian, 2019; Muhdar et al., 2020; Sunarminto et al., 2019; Pasaribu et al., 2020).

Natural resource exploitation in East Kalimantan may be divided into four main sectors. First is forestry, which is mainly timber. From 1969 to 1974, around 11 million hectares of forest concessions were granted in the East Kalimantan region. This period was called the timber boom, known in Indonesia as *banjir kap* (logging-flood). The idea was to accumulate the timber upriver and wait until the monsoon floods came so the swollen rivers would carry the timber, free of charge, to the river mouths where it could be collected (Magenda, 1989, pp. 221-222; Obidzinski, 2003, pp. 114-115).

At the time, East Kalimantan's economic growth rate reached 7.42 percent per year (Wongso, 2017). In the late 1970s, the Indonesian government made a policy aimed to promote processed tropical timber. As part of the policy, in the early 1980s, a log export ban was imposed. Since then, the plywood industry has developed rapidly in Indonesia, including in East Kalimantan (Hidayat, 2008). Unfortunately, supervision and planning at that time did not go well. The installed capacity of plywood factories is far above the ability to supply raw materials, causing illegal logging to flourish in the province. In the end, due to the inability to meet raw materials, in the mid-1990s, the forestry industry in East Kalimantan began to collapse (Hidayat, 2008; Wongso, 2017).

Second is the oil and gas sector. From the beginning of 1970 to 1991, several oil companies discovered oil and gas resources on a giant scale in East Kalimantan. On the mainland in Samarinda, Huffington Company (HUFFCO) Indonesia discovered vast gas fields such as at Badak (1972), Nilam (1974), and Mutiara (1981). In the offshore area, Union Oil and Japex discovered the giant oil field Attaka (1970), then Kerindingan and Melahin (1972), Sepinggian (1975), and Yakin (1976). Total E & P Indonesia, in the offshore area of East Kalimantan as well, discovered the large Bekapai field (1972), the largest oil field in East Kalimantan, Handil (1974), then Tambora (1974), the supergiant gas field Tunu (1982), Sisi field and giant gas field Peciko (1991). Oil and gas became the primary source of East Kalimantan's

economy (Wongso, 2017). In the period 1990-2009, the oil and gas mining sector, the petroleum refining industry, and the liquefied natural gas industry became the main pillars of East Kalimantan's economy (Katadata & Indonesian Petroleum Association, 2017; Wongso, 2017; Profor, 2009).

The third natural resource sector is coal mining. East Kalimantan holds 38 percent of Indonesia's national coal reserves (BG ESDM, 2020a). The provincial government has allocated 5,227,136 hectares, 40.1 percent of the province's territory, for coal mining in its 2016-2036 spatial planning document (Fadli, 2018). In 2019, 48.2 percent of the total national production of 616 million tons of coal came from East Kalimantan (Bank Indonesia, 2020a), making the province Indonesia's largest coal producer. In April 2016, 1,404 mining permits were in force in East Kalimantan (Antara Kaltim, 2017; Rusmadi, 2017). Most of these permits had been issued by provincial and lower governments. Following a permit evaluation in July 2021, the Ministry of Energy and Mineral Resources (MoEMR) announced that of these 1,404 permits, only 386 remained valid. The rest were declared invalid because they had expired, the permit holder had failed to comply with administrative, technical, environmental, or financial requirements, or because a permit's area overlapped with other permits (such as other coal mines, plantations, or protected areas) (ESDM, 2021).

Fourth are the oil palm plantations. This sector is central to the post-oil, gas, and coal economic transformation strategy (*Kaltim Maju Vision in 2030*) (Wongso, 2017). East Kalimantan is one of six provinces with more than one million hectares of oil palm plantations¹ (Katadata, 2019). Although the area of oil palm plantations is currently around 1.2 million hectares, the province, in its spatial planning document, has allocated 3,269 million hectares or around 25 percent of the land area of East Kalimantan for oil palm plantations (Herdiyanto, 2018).

In East Kalimantan, the forestry, coal mining, and oil palm plantation sectors occupied vast land, reaching some 13.83 million hectares. The concessions exceed the province's total area, which is only 12.7 million hectares. Of these, overlapping permits for forestry, coal mining, and oil palm plantations cover 4,50 million hectares (Fel GM, 2019; Maulana, 2019). The overlapping permits answer the question of why the permits can exceed the province's total area. After reducing the overlapping permits, an area of concessions of 9.33 million hectares remained, or 73 percent of the province's area (Maulana, 2019).

^{1.} The six provinces are Riau (3,4 million hectares), North Sumatera (2,1 million hectares), West Kalimantan (1,8 million hectares), Central Kalimantan (1,8 million hectares), and South Sumatera (1,5 million hectares), and East Kalimantan (1,3 million hectares).

It is important to mention that the East Kalimantan Provincial Spatial Plan (2015-2035) also contains overlapping allocations. The regulation provides space for a cultivation area of 10,451 million hectares. Of this area, 6,055 million hectares are allocated to the production forest, 5,227 million hectares for coal mining, and 3,681 million hectares for agriculture and plantation. When the land allocation of each sector is added up (almost 15 million hectares), the total area again exceeds the provided portion of the cultivation area itself, even the entire province.

The dynamics of natural resource management, particularly coal mining and oil palm plantations, demonstrate that East Kalimantan has characteristics of a new frontiers zone. The term "new frontiers" refers to regions with abundant natural resources already under state control but experiencing a weakening of that control. Such a state of affairs leads to the breakdown of existing state institutions, rules, networks, and arrangements that uphold sovereignty, authority, legitimacy, and equity and regulate power, violence, and property relations. These circumstances often result in new forms of exploitation, resource grabbing, and conflicts over ownership. However, it also leads to the emergence of new actors and changing coalitions between these actors, who use new legal and practical instruments to challenge existing forms of resource control (NIF Project, 2013). I adopt a new frontier optic to understand East Kalimantan's transformations and gain insight into the socio-political, cultural, and economic contextual dynamics underlying those transformations.

Referring to the four characteristics De Jong et al. (2017, pp. 343-344) introduced, East Kalimantan can be categorized as a new frontier region with the following explanation. First, the role of space has changed. The decentralization of authorities made space and control have become far more hybrid. The decentralization often caused significant confusion over whether national or local authorities were supposed to manage natural resources (De Jong et al., 2017; PwC, 2019; Paoli et al., 2013; Spiegel, 2012). This situation led to overlapping claims over natural resources among the central, regional, and local governments. Second, the role of time evolves. With the advancement of information technology, facts related to, for instance, criticism of coal mining and palm oil plantation operations in East Kalimantan, considered environmentally unfriendly, spread quickly worldwide, affecting global demand and influencing the economic growth in East Kalimantan. Such a decrease in foreign market demand for coal and palm oil hit East Kalimantan's economy (Bank Indonesia, 2020b; Fel GM, 2020; Prokal.co, 2020).

Third, the actors are more diverse. Interaction and contestation in natural resource utilization are no longer dominated by the government or investors but also

involve multinational corporations, non-governmental activists (NGOs), community organizations (*organisasi kemasyarakatan/ormas*), local communities, traditional leaders (De Jong et al., 2017), political parties, and the "inner circle" of regional leaders or central officials (JATAM et al., 2019). Fourth, social and socio-ecological relations develop. Expanding coal mining and oil palm plantations requires large amounts of land. It gives rise to two significant negative consequences: land use conflicts (Gaveau et al., 2016; Li, 2018) and environmental degradation (Atteridge et al., 2018; Izza & Afkarina, 2019). In this sense, land occupation is not only seen as an economic activity but also leads to far-reaching social, cultural, political, ecological, and economic implications and complications.

This thesis affirms that the dynamic of natural resource management authority has led to the creation of sector-based and multi-level legislation, where each sector (such as mining, plantation, environment, forestry, and land) and level of government (central, provincial, and district/city) has the jurisdiction to regulate it. This situation can result in ambiguity, inconsistency, and a legal vacuum, ultimately leading to conflicts over natural resources and environmental damage.

Furthermore, this circumstance puts authority in managing natural resources into the grey zone, borrowing the idea of Tsing (2005): shifting authority generates, stimulates, and prolongs all kinds of new paradoxes. The notions, for instance, regarding legal and illegal, formal and informal, legitimate and illegitimate, public and private, economic and ecologic, become more fluid and unclear. Understanding what these new frontiers and paradoxes are, their causes and effects are part of the issues addressed in the following chapters of this manuscript.

Research Objectives

In order to obtain insight into, and an understanding of the research issues described above and to contribute to the formulation of recommendations on the law relating to coal mining and oil palm plantations in East Kalimantan, I formulated three research objectives. *First*, to identify ambiguous, inconsistent, and incomplete aspects of laws related to coal mining and oil palm plantations, which causes conflict between companies vs. government, among palm oil plantations or coal mining companies, between palm oil plantations and coal mining companies, and, or between palm oil plantations or coal mining companies and local communities. *Second*, to better understand the impact and consequences of ambiguous, inconsistent, and incomplete regulations regarding coal mining and oil palm

plantations in East Kalimantan. *Third*, to develop possible interventions by endorsing an integrated natural resources legislation and policy in East Kalimantan province.

Research Questions

In order to reach these objectives, I have developed the following central question: How does the government regulate coal mining and oil palm plantation operations in East Kalimantan? Why might this cause legal uncertainty, and what are the ensuing societal and environmental effects?

In order to answer this central question, five sub-questions have been formulated, namely:

- a. What laws and regulations are available that regulate coal mining and oil palm plantation activities, and how do these laws and regulations divide authority in these matters among the different levels of government?
- b. Do existing laws and regulations cause legal uncertainty regarding authority in coal mining and oil palm plantation activities, and if so, what are its causes?
- c. To what extent does the existing legal framework hamper the government's authority in supervising coal mining and oil palm plantation activities?
- d. What societal and environmental problems emerge in areas used for coal mining operations and oil palm plantations, and how do these relate to law and its implementation?
- e. Which interventions can be suggested to develop more balanced and integrated natural resource policies and regulations in East Kalimantan?

Research Methods

Approach

In this thesis, I applied an interdisciplinary approach known as socio-legal studies. By adopting this approach, I no longer examine law only as it is written in the books but also investigate the context within which law exists and functions (Banakar & Travers, 2005). In other words, I observe the law as an empirical social phenomenon (Wignjosoebroto, 2002). By employing this approach, this study observes how the norms are implemented on the ground. In this regard, it is essential to comprehend the context within which laws exist, such as the political, economic, social, and cultural landscape where enforcement will occur. This concern is crucial as law enforcement is inevitably impacted by and interacts with these varied interests, which can significantly affect their effectiveness.

This research followed a two-step approach. The first step involved a desk study to analyse the legal framework of government authority concerning coal mining and oil palm plantations. I based the content of this analysis on information collected through a systematic review of the available laws and regulations, as well as documents relevant to the governance of coal mining and oil palm plantation permits. I applied a doctrinal analysis to identify the ambiguity, inconsistency, and incompleteness of norms that regulate the government's authority regarding coal mining and oil palm plantations.

Collecting data

This research was carried out in stages between September 2017 and August 2021 in the province of East Kalimantan (Figure 1). In order to gather comprehensive information regarding laws and regulations pertaining to coal mining and palm oil plantations, as well as other sectors such as the environment, forestry, land, and spatial planning, I conducted an extensive review of the literature. Additionally, I obtained data on permits for coal mining, plantations, the environment, and land from various agencies located in Kutai Kartanegara, Paser, East Kutai, and Samarinda.

In this context, at the national level, I reviewed laws and government regulations related to coal mining, oil palm plantations, regional government, environment, land, spatial planning, and forestry. Besides, I also examined ministerial regulations of related sectors, such as the MoEMR, Minister of Agriculture (MoA), Minister of Environment and Forestry (MoEF), and Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (MoAASP/NLA). At the regional level, I studied provincial and gubernatorial regulations concerning coal mining, plantation, and environmental sectors. To gain insight from the district level, I analysed district and regent regulations on plantation and environment in the four regions. Also, I reviewed several licensing documents related to the supervision of coal mining, oil palm plantations, and the environmental impact analysis.

Furthermore, I also studied court decisions to explore the ambiguity, inconsistency, and incompleteness of laws and regulations. I investigated the constitutional court's decisions on natural resources management to find the authoritative interpretation of the concept of the state's right to control. At the practical level, I studied the decisions of the district courts, the high court, and the supreme court regarding conflict among parties. In order to see the permit dispute settlement, I also looked into administrative court decisions, appeal (high court), and cassation (Supreme Court) levels.

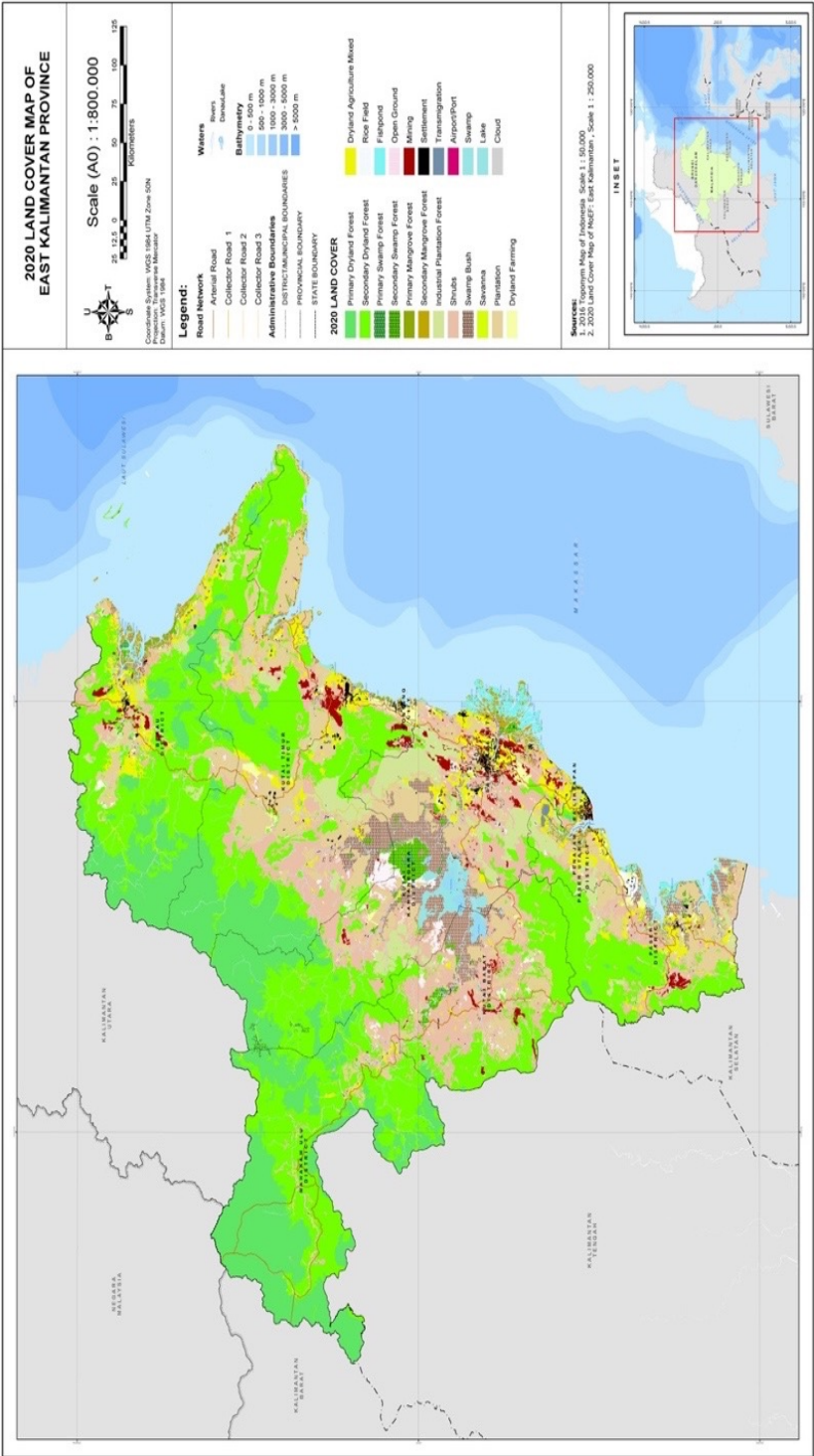


Figure 1. The 2020 Land Cover Map of East Kalimantan Province

The second part of this research concerns a field study of how the problems identified in the analysis of legislation manifest themselves in the actual practices of coal mining and oil palm plantations in the East Kalimantan province. Therefore, in order to collect primary data, I conducted in-depth interviews with public servants to obtain more detailed information about the district government's various perspectives and behaviors and to explore new and complex issues in more detail. Besides, the interviews provided the context of information to the secondary data, thus completing the picture of what happened at different levels, especially at the local level (Boyce & Neale, 2016; Legard et al., 2003).

I conducted a series of interviews with various stakeholders between February 2018 and July 2019. At the provincial level, the interviews were held with officials from plantation agencies, energy and mineral resources agencies, environmental agencies, and forestry agencies. At the district level, I likewise organized several meetings in Kutai Kartanegara and Paser districts. I interviewed officials from the plantation, environmental, and village community empowerment agencies. Most of the discussions were conducted as part of a seminar or informal meeting forums so that the discussion could be more relaxed. In Kutai Kartanegara, I also interviewed the Regent to gain insight into palm oil plantation policies. In order to explore the performance of supervision in the oil palm plantation sector at the village government level in the district, I talked to the heads of Loa Duri Ulu and Loa Tebu villages. Regarding coal mining supervision, I interviewed the head of Mulawarman Village, Kutai Kartanegara district.

Furthermore, in the Kutai Timur district, in July-August 2020, I organized five focus group discussions via Zoom to investigate the current situation of the forested area outside the forest zone, known as *Areal Penggunaan Lain* (APL). The participants of this online discussion consisted of representatives of Government and Village Community Empowerment Services, the Regional Planning and Research Board, Environment Service, Plantation Service, Agriculture Service, Land and Spatial Planning Service, Regional Secretariat (Legal, economic, and natural resources sections), as well as representatives of NGOs and universities in Kutai Timur district.

I adopted the method because, during COVID-19, all travel and face-to-face interactions to collect data were not allowed. The meetings identified items that can be used as ecological fiscal transfer (EFT)², criteria, and indicators and examined

² EFT is an incentive scheme through fiscal transfers to subordinate governments (states or provinces) as a reward for performance in environmental management, including forestry. The scheme intends to overcome the scale mismatch between the environmental benefits and the economic costs of ecosystem conservation (Giri, 2016). See also Chapter 5.

opportunities and challenges in implementing the EFT scheme in the Kutai Timur district, East Kalimantan. The online meetings involved representatives of the regional development planning agency, environmental agency, community empowerment and village government agency, plantation agency, agriculture agency, land and spatial planning agency, district secretariat (legal division, economic division, and natural resources division); representatives of village government; NGOs; and universities. Since the COVID-19 pandemic, I have had to rely on online meetings because all travel and face-to-face interactions to collect data were not allowed. To respond to the dynamics at the research site, I conducted several updates by phone calls.

As for civil society, at the provincial level, I had discussions with several activists from the Indigenous Peoples Alliance (AMAN), the East Kalimantan Mining Advocacy Network (JATAM), the Indonesian Forum for the Environment (WALHI), the Bumi Foundation, and Dayak Youth Movement (*Gerakan Pemuda Dayak/Gerdayak*). At the Paser district, I met activists from the Indigenous Peoples Alliance (AMAN Paser) and organizations affiliated with it, such as the Women of AMAN (*Perempuan AMAN*) and indigenous youth of AMAN (BPAN). I also interviewed Noorhayati, an indigenous Paserese, and her family to explore her struggle in fighting for the land against the claims of the coal mining company. In Kutai Kartanegara, I visited Mulawarman village to see the environmental damage as a consequence of coal mining activities, and I talked to several villagers to investigate the settlement of the environmental damage and land conflict. In order to gain better insight into land conflict resolution, I also interviewed several villagers from the Sungai Nangka hamlet of Teluk Dalam village.

Finally, I adopt participant observation to cross-check secondary data by concentrating on nonverbal cues, social interactions, and real-life behaviors (Schmuck, 2006). This method helps assess the extent to which authoritative legal texts are implemented locally. To employ participant observation, I engaged extensively with communities impacted by coal mining and oil palm plantation operations. I identified a need for these communities to enhance their rights and acquire the knowledge to safeguard them.

My colleagues and I organized three coaching clinics to address the needs. The first clinic focused on regulatory impact analysis (RIA), designed to educate participants on identifying individual and community rights within regulations. Attendees gained insight into decision-making processes that shape regulations and learned how to contribute to and improve the decision-making process. We held this training in the Paser district, specifically at the Muara Komam sub-district, from March 27th

to 30th, 2018. A total of 40 individuals participated, including community leaders from Munggu, Muara Pias, Long Kali, Kepala Telake, Miu, Muara Komam, and Baras Jiring. Additionally, we held training in the Kutai Kartanegara district on April 3rd and 4th, 2018, at Lamin Pulut village. Twenty-nine participants from Lamin Telihan, Lamin Pulut, and Teluk Bingkai villages attended this training.

The second training focused on legal drafting, designed to protect villagers' rights by providing village regulations. Participants learned how to engage in the law-making process and develop rules. We conducted the training in Tanah Grogot on August 29th-30th, 2018, and it involved 20 people, including community leaders from various villages such as Munggu, Muara Pias, Long Kali, Kepala Telake, and Muara Komam. In Tenggarong, we organized the training on September 17th-18th, 2018, with 25 attendees from Lamin Telihan, Lamin Pulut, and Teluk Bingkai villages.

The third training was a para-legal training. This coaching had two aims. The first was to assist communities who suffered injustices or human rights violations and connect them to relevant institutions and authorities. The second was to perform mediation, advocacy, and community assistance. By joining the training, participants gained knowledge of the possibilities for advocacy actions and the steps they should take if their rights were violated. In Kutai Kartanegara, we held the training on 18-19 February 2019 in Tenggarong. The event was attended by eighteen participants from several villages, such as Lamin Telihan, Lamin Pulut, Teluk Bingkai, and the representatives of community organizations. As for Paser, we arranged it for 26-27 February 2019 in Tanah Grogot. Thirty-eight people were involved in the forum. They came from several villages, such as Swan Slutung, Long Sayo, Muara Payang, Muara Pias, Long Kali, Kepala Telake, and Muara Komam.

I interacted with relevant participants during these three coaching clinics, also to gather more primary data. Given the participants were accommodated at the training venue, I could interview them during training breaks or evenings. Occasionally, I conducted individual interviews, but other times, I conducted them in groups. The reason for group interviews was that some participants lacked confidence in expressing their thoughts or opinions without being accompanied by participants from their village.

Additionally, in order to capture the nonverbal expressions or feelings, I was involved in preparing the legal documents required in the trial process. In the Noorhayati case, I assisted in preparing the appeal and cassation document. As for the Sungai Nangka case, we helped the villagers draft documents for the district court.

Furthermore, based on the results of my studies, I formulated several regional regulations and proposed drafts to the provincial and district governments. At the provincial level, I offered two drafts: The Local Regulation concerning The Governance of Adat Village and the Governor Regulation concerning the Protection and Management of High Conservation Value in the Oil Palm Plantation Area. As for the Kutai Kartanegara district, I conveyed two regent regulations: first, concerning the guidelines of identification, verification, and enactment of indigenous people's rights, and second, regarding the protection of partnership land of oil palm plantation. Likewise, in the Paser district, I compiled an academic draft of Local Regulations concerning the Protection of Sustainable Food Land. Furthermore, in the Kutai Timur district, I provided a draft of regent regulation on implementing the ecological financial transfer scheme.

Analysis

The analysis of the legislation in this study follows the hierarchy of statutory regulations, as specified in Law Nr. 12 of 2011 concerning Lawmaking, as last amended by Law Nr. 13 of 2022. In this thesis, the analysis was carried out in two stages: vertically and horizontally. I adopted a vertical analysis to examine the relationship between the 2009 Mining Law and the 2014 Plantation Law and its implementation of regulations, such as government regulations, ministerial regulations, and regional (provincial, district, and municipal) regulations, including the governor or regent regulations.

As for the horizontal analysis, I applied it to assess the relationship between regulations at the same level and regulating a similar object, such as between laws, government regulations, ministerial regulations, or regional regulations. In the coal mining sector, I analysed the 2009 Coal Mining Law, the 2009 Environmental Law, the 2007 Spatial Planning Law, the 1960 Basic Agrarian Law (BAL), the 2014 Regional Government Law, and the 1999 Forestry Law. At the government and ministerial regulations level, I reviewed the regulations issued by MoEMR, MoEF, and MoAASP/NLA. At the provincial level, I analysed the regional and gubernatorial regulations related to coal mining and the environment.

Concerning the plantation sector, I studied the 2014 Plantation Law, the 2009 Environmental Law, the 2007 Spatial Planning Law, the 1960 BAL, and the 1999 Forestry Law. Subsequently, I analysed MoA, MoEF, and MoAASP/NLA regulations at the government and ministerial regulations level. At the provincial and district level, I explored the regional regulations governor and regent regulations related to plantations, environment, and land.

The analyses intend to investigate the inconsistencies and incompleteness of the regulations, both vertically and horizontally. In the vertical stage, I analysed the conflict of norms using the *lex superior* principle (*lex superior derogat legi inferior*), meaning that a higher-level regulation overrules a lower one. In a case of conflict of norms in the horizontal analysis, I based my examination on the *lex specialis* principle (*lex specialis derogate legi generali*), which rules that a more special regulation overrules a more general one. Finally, the *lex posterior* principle (*lex posterior derogate legi priori*) states that a later regulation overrules an earlier one.

Furthermore, I applied several interpretive methods to the law to grasp ambiguous or vague norms. Firstly, I used a literal or textual interpretation to understand what it means linguistically. This interpretation uses the ordinary meaning of written acts to determine the law (Ammann, 2020, p. 197). However, the interpretation did not help much because the legislators used language following the conditions or political interests at that time. The Basic Agrarian Law, for example, was made in 1960, and of course, the words or terms used are not in sync with the current situation.

The second was an authentic interpretation based on an explanation of the law. For example, to find out the meaning of a word in a provision, the first step is to examine the article's explanation or general provisions that contain essential terms in a regulation (Asshiddiqie, 2006, p. 282). However, it is only possible to interpret a word in a statute by knowing the aim of the statute (Lon Fuller as cited by Lindroos-Hovineimo, 2006, p. 63). Therefore, we also employed the purposive interpretation. It uses the "purpose" of the text as the standard for determining which semantic meanings yield the legal sense. The relationship between the subjective and objective purposes, or between the text's author's original intent, the sense of a reasonable author, and the legal system at the time of interpretation, determine the ultimate goal and, consequently, the legal meaning (Barak 2005, p. 205; Marinković, 2016, p. 98).

Finally, I adopted the systemic interpretation to examine the relationship and meaning of a term or article in a regulation with other regulations. It is the way of establishing the meaning of a word or a rule by considering the word or rule in its statutory or another legal context, that is, in one or several legal acts of the same legal system (Padjen, 2020, p. 192). This method tries to interpret an article with another article of one law or between one law and another. Through this method, I can identify, among others, ambiguity in East Kalimantan spatial planning, as I explained in the previous section. This provincial regulation provides the same area to different sectors; consequently, if added up, the land allocated to each sector exceeds the province's total area. The ambiguous formulation of land use allocation

provides opportunities for multiple interpretations that create problems in its implementation and lead to legal uncertainty.

Once the legislation has been reviewed in detail, it is essential to investigate the implementation of the rules that contain ambiguous, inconsistent, or incomplete norms. This research explores the intricate relationship between power or authority and the social, cultural, and economic context in which the law operates and how this impacts law enforcement. Additionally, the study investigates the extent to which legal uncertainty can cause societal conflicts and degrade the environment. By adopting a socio-legal approach, this research aims to provide insights into the social and political factors that shape the law and its implementation.

I performed data analysis in two phases. The initial stage adopted a general analysis strategy that relied on theoretical propositions. In this phase, I analysed data by following the propositions guiding the entire case study series. Propositions were made to focus on particular data and ignore other data, to help organize the study, and determine alternative explanations to be examined (Yin, 2018). In the subsequent stage, I employed an analysis technique called explanation building. I employed this technique to explain a series of causal relationships regarding a particular phenomenon or case, which is complex and challenging to measure with certainty (Yin, 2018).

Based on the two stages of analysis above, the existing data were analysed using the following procedure: (1) establishing general boundaries regarding the legal uncertainty of the framework of coal mining and oil palm plantations and its implementation, as well as its impact, as the subject of study, (2) formulating propositions to explain this phenomenon based on relevant literature, previous research, and the researcher's views, (3) conducting discussions with experienced and knowledgeable individuals to ensure that all interpretations and conclusions are objective and unbiased.

Positionality Statement

In this study, I position myself as a part of impacted communities of coal mining and oil palm plantation policies. With more than two decades of expertise in promoting natural resources policies, I firmly believe that the key challenge in natural resources policy, specifically in East Kalimantan, lies in the legal uncertainty arising from ambiguous, inconsistent, and incomplete norms. The situation is then exacerbated by unscrupulous officials or companies who may exploit the circumstance for their own gain through corruption, collusion, nepotism, and other unethical practices.

When conducting research, this position often requires me not only to act as a researcher but also to be involved in cases as a community facilitator when they have to deal with companies. For instance, with other colleagues, I designed and conducted serial training regarding regulatory impact analysis (RIA), legal drafting, and para-legals in Paser, Kutai Kartanegara, and Samarinda. On a more practical level, I helped Mrs. Noorhayati in preparing a cassation file and assisted villagers of Sungai Nangka hamlet in responding to a lawsuit filed against them by a company.

Subsequently, I also consider the local government perspective since it is crucial to suggest policies that promote sustainable environmental management and community welfare. Therefore, through several Focus Group Discussions (FGD), I proposed and provided drafts of several policies related to plantations and indigenous communities. For instance, as Chapter Five describes, I suggested promoting Ecological Fiscal Transfers (EFT) as a policy instrument to safeguard forested areas in non-forest zones (APL).

Maintaining objectivity during research can be challenging in such a position, as personal views and beliefs may inadvertently influence the outcome. As a researcher, I must remain impartial and avoid any bias towards the subject under examination. Therefore, I address this concern by presenting the findings based on the data collected during the study and analysing them by referring to the methods I described in the data analysis procedure. I believe the research results can be deemed reliable and trustworthy by adopting this approach.

Limitations of The Study

It should be highlighted that this study has its limitations, chiefly related to collecting primary data. With the onset of the COVID-19 pandemic, the primary data collection method had to be modified from field visits to virtual meetings via Zoom. This shift in methods was especially true for studies on opportunities to implement EFT in the East Kutai Regency. This change resulted in suboptimal information gathering since the meeting duration was limited, and Zoom meeting participants often changed. Consequently, I could not explore the issue as thoroughly as I would have liked. Furthermore, I could not observe the situation in East Kutai Regency, which means I could not gain a complete picture of the condition of villages in the district if EFT were implemented. Therefore, I conducted an extensive search for secondary data to complete information regarding this matter.

Similarly, updating information related to mining and plantation cases posed challenges as some community resource persons living in remote areas with limited internet connectivity could not be contacted by phone. I reached out to the relevant regional officials to obtain information on the cases to overcome this limitation. However, it must be admitted that the information provided did not entirely reflect the community's perspective.

Subsequently, this study focuses on legal uncertainty, assuming that laws and regulations sometimes include ambiguous, inconsistent, and incomplete norms. These three factors are the main topic of the study because, in practice, legal uncertainty caused by any of these factors can lead to weak supervision and conflicts arising from overlapping land claims and environmental damage. The consequence of the approach that centered on legislation is the lack of examination of the judiciary's roles in filling legal gaps or resolving differences in interpreting statutory provisions, which in this thesis is only applied in a single case between a mining company and the East Kalimantan provincial government and several Constitutional Court decisions. It should be acknowledged that investigating the courts' decisions regarding such issues is significant, considering that in Indonesia's legal development context, the judiciary plays a crucial role by clarifying legal meaning, promoting consistency of interpretation, and filling in legal gaps.

Conceptual Framework

To address the research questions above, I begin the analysis with the concept of the state's right to control (*hak menguasai negara*). Article 33, paragraph (3) of the 1945 Indonesian constitution forms the basis of Indonesia's legal framework for natural resources management (Suparto, 2020; Zon et al., 2016). The article states that "the land, waters, and natural resources within shall be under the powers of the State and shall be used to the greatest benefit of the people." The phrase "shall be under the powers of the state" is known as the notion of the state's right to control land, waters, and natural resources--henceforth, the state's right to control --in the Indonesian legal system (Butt & Lindsey, 2008).

Nevertheless, the Constitution does not explain what the state's right to control implies. The first (legal) interpretation of the concept can be found in the 1960 BAL. According to Article 2, paragraph (2), the state's right to control provides the state with authority to:

1. regulate and implement the allocation, use, and preservation of land, water, and air space;
2. decide and make regulations on legal relations between humans and land, water, and air space;
3. decide and regulate legal relations among humans and legal actions concerning land, water, and air space.

Furthermore, to ascertain Article 33 of the Constitution's implementation, the People's Consultative Assembly (Majelis Permusyawaratan Rakyat/MPR) issued decree No. IX/MPR/2001 concerning Agrarian Reform and Natural Resource Management. Through the decree, the MPR orders the government to comply with twelve principles, among others, to maintain sustainability that can provide optimal benefits suitable for current and future generations while still paying attention to the environment's carrying capacity. Also, to carry out social, sustainability, and ecological functions following local social culture conditions.

In recent years, the Indonesian Constitutional Court has broadened the interpretation of this right. The interpretation can be traced to the Constitutional Court's decisions concerning the judicial reviews of Law Nr. 20 of 2002 on Electrical Power, Law Nr. 22 of 2001 on Oil and Natural Gas, and Law Nr. 7 of 2004 on Water Resources.³ The court ruled that the phrase 'controlled by the state' in Article 33 paragraph (3) of the constitution means that on land and natural resources, the state holds the public authority of making policies, administering, regulating, managing, and supervising (Magnar et al., 2010). These five activities needed to be performed for one purpose: the greatest prosperity of the people.

One of the instruments to actualize the state's right to control is the license to exploit or use natural resources. Licensing is associated with granting concessions, a legal action that assigns formal land possession to investors, often even though it is already under customary (informal) ownership or use (McCarthy, 2004, p. 1208). The licensing regime, besides legislation, is a significant factor in the governance of natural resources in Indonesia, particularly in coal mining and oil palm plantations. It implies two things. First, a license is an instrument used to distribute land for coal mining and oil palm plantations. Second, a license is the main instrument to supervise and control coal mining and oil palm plantations.

³. Constitutional Court Decisions Case Number: 002/PUU-I/2003; 05S-059-060-063/PUU-II/2004 and 00S/PUU-III/2005.

Awarding a permit to exploit the natural resources means the government conducts five actions. First, issuing a permit means making a policy on allocating the area for coal mining and oil palm plantations following the designated areas in the spatial planning. Second, to administer mining and plantation activities through issuing or revoking permits. Third, to govern, where the government establishes procedures and procedures for issuing and revoking permits. Fourth, to manage where the government determines the number of obligations the permit holder must fulfill. Fifth, to supervise, namely, to ascertain whether the process of issuing and revoking permits follows existing procedures and whether the permit holders have fulfilled their obligations.

Deacon and Mueller (2004, pp. 2-3) indicate four ways a nation's political system is linked to how its natural resources are used. First, when property rights to resources are weak, the competition to acquire them can be wasteful, characterized by rent-seeking and violent conflict. Second, when a country's political system is unstable or non-representative, the individual's claim to a resource stock's future return can be rendered insecure. Third, when a country's natural resources are capable of generating significant rents, but institutions of democratic governance and the rule of law are not well-established, corruption by government officials responsible for resource management can encourage rent-seeking, dissipating the benefits those resources would otherwise confer. Fourth, the political system may affect the mix of private versus public good outputs produced by a nation's natural resources.

This thesis investigates the relationship between Indonesia's political system, as reflected in its laws and regulations, and the management of natural resources. Firstly, I examine the provisions of existing local regulations that concern the management of natural resources. Specifically, I focus on issues such as access, property rights, usage, and permits, as well as measures for protection and prohibition. I examine what is included in existing legislation and what is not. I identify relevant issues that are not included and where overlaps exist. I also investigate whether the legislation takes other relevant legislation into account.

The second step is to establish whether the existing legislation on natural resources is adequately implemented and, if not, what the obstacles are. I investigate whether the applicable regulations have been properly implemented, and if not, whether it is due to the substance of the regulation - for example, if it is ambiguous, inconsistent, or incomplete - or because of human resources factors in implementing it or both.

Based on the first two steps, the third is an analysis of the competition by the central and regional governments, uncoordinated law-making by ministries in charge of natural resources sectors, lack of public participation, and other factors that disrupt the establishment of local regulations. These factors include the interest of certain central and regional officials, investors, and mass organizations. The fourth step investigates whether local legislation - at the province and district level - provides fair access, participation, control, and benefit. Special attention needs to be given to the connection between decision-makers and the local population.

In terms of relations between the national political system and the management of natural resources, this research finds that law is not only used as an instrument to achieve social welfare but, on the contrary, it is often mobilized or contested and consolidated or modified by parties (actors) to exploit natural resource (Lund, 2021, p. x). Therefore, rather than promoting order and welfare, the law can sometimes lead to social conflict and environmental degradation.

This research considers that the state's right to control natural resources is regulated by multiple laws and regulations in each natural resource sector, such as environment, forestry, energy and minerals, agriculture, land, and spatial planning. In addition, the state's right to control is also set at the different levels of government: central, provincial, district, and municipal.

This thesis finds that these sectoral-based and multi-level arrangements make the norms regarding natural resources management ambiguous. The word ambiguous or ambiguity means uncertainty of meaning or intention (Garner & Black, 2009, p. 105) or uncertainty or doubtfulness of the meaning of language (Batten, 2010, p. 257). Duhl (2009, p. 84) points out that inconsistent terms (or provisions) are ambiguous because one term or provision excludes the other and vice versa. Sennet (2016) portrays how ambiguity relates to legal uncertainty. He concludes that ambiguity in laws can undermine their application and the ability to comply with these laws.

In addition to the ambiguity of provisions, this thesis will demonstrate that apart from responding to the development of social, economic, and political situations, the dynamics of the legislation have also caused inconsistency in regulations. Lehman and Phelps (2005, p. 369) state that things are said to be inconsistent when they are contrary to each other to the extent that one implies the negation of the other. Further, Engel (2004, p. 43) conveys that intersecting subfields of the law are fraught with inconsistency, given that the same organizing principles govern not all subfields. The authority in making legislation also generates inconsistent

regulations on natural resources management because it resides at multiple levels of government: central, provincial, district, or municipal governments.

Furthermore, the sectoral-based and multi-level government legislation creates incomplete provisions. Pistor and Xu (2003, p. 932) articulate that a law may be incomplete if it fails to include all actions it shall cover. Alternatively, the law may be incomplete because it uses open-ended, vague wording, as a result of which the boundaries of the law are not clearly delineated. When the law is incomplete, it cannot be applied to cases without clarifying its meaning. The term 'incomplete' also refers to a situation where implementation regulations or guidelines that are mandated by higher regulations do not exist. Waddell (2004, p. 186) indicates that a high level of uncertainty will result from such a situation. The incompleteness of regulations means a delay in their implementation. Detailed or technical regulations are required to ensure how to implement general provisions adequately. The implementing regulations are also needed to avoid unilateral interpretation from the government on how to apply the rules.

In this research, I contend that legislation concerning coal mining and oil palm plantations is developing rapidly, which can result in ambiguous provisions and different interpretations of its implementation. In addition, regulations or norms can be inconsistent and vary vertically (between hierarchically different legislation) and horizontally (between rules with equal positions) due to not having the same organizing principles governing coal mining and oil palm plantations sectors. Finally, the incompleteness of regulations can create legal vacuums at the implementation level when implementing rules or technical provisions required by higher regulations have not been made yet or are not available.

These three factors generate legal uncertainty both in the content of the law and its implementation. It also makes the boundaries of natural resource management authority unclear, especially in supervision. Furthermore, such uncertainty can trigger land-use conflicts and environmental degradation. In this sense, the law could be a legal and practical instrument for possessing, appropriating, or challenging previous resource control mechanisms and instruments in new Indonesian frontiers.

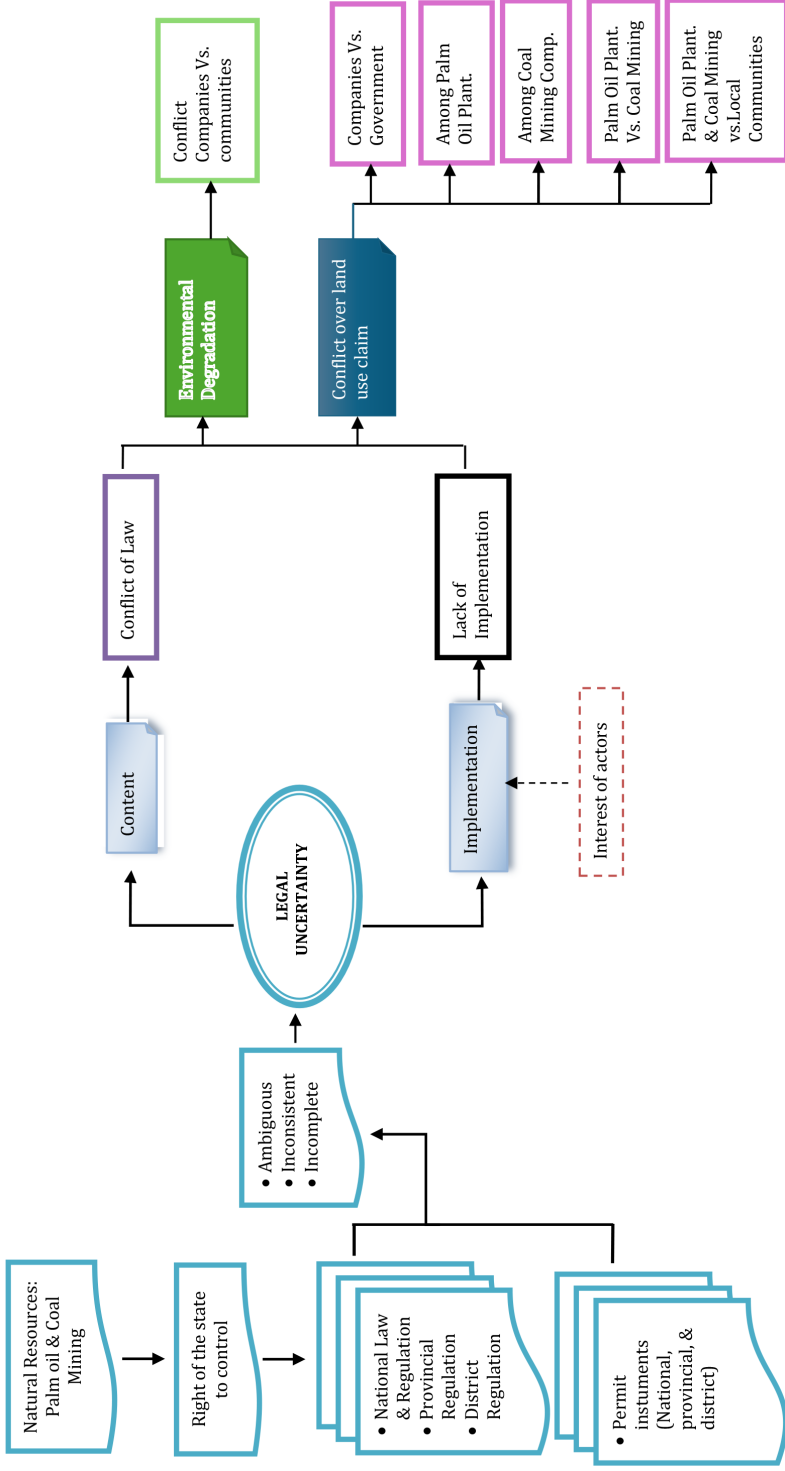


Chart 1. Analytical Framework

The Structure of The Thesis

In this thesis, I investigate how the government regulates coal mining and oil palm plantation operations in East Kalimantan and what the effects are of the legal uncertainty that ensues from these regulations. This central research question was articulated in five sub-questions that are described and analysed in the following chapters as will be explained below.

In **chapter one**, We focus on the following research sub-questions: *1) What laws and regulations are available that regulate coal mining activities, and how do these laws and regulations divide authority in these matters among the different levels of government? 2) Do existing laws and regulations cause legal uncertainty regarding authority in coal mining activities, and if so, what are its causes?*

In addressing those questions, the first chapter describes the decentralization of the authority to manage coal mining. Taking the East Kalimantan province as the research site, this thesis demonstrates that mining governance rests with different levels and institutions of government, which have divided and delegated government authority and efficiency, while revisions of relevant laws fail to consider this complexity. Therefore, coal mining governance is hampered by the law's ambiguity, inconsistency, and incompleteness, causing legal uncertainty for the stakeholders. Furthermore, this part describes the consequences of this legal uncertainty: conflicts among companies or between companies and local communities are frequently plaguing mining operations. We consider the role that legal ambiguity, inconsistency, and incompleteness play in these conflicts and argue that these are important in causing conflict.

Chapter two aims to answer the following two research sub-questions: *1) What laws and regulations are available that regulate oil palm plantation activities, and how do these laws and regulations divide authority in these matters among the different levels of government? 2) Do existing laws and regulations cause legal uncertainty regarding authority in oil palm plantation activities, and if so, what are its causes?*

This chapter focuses on the authority governing oil palm plantation licensing and finds that it also relates to other sectors of legislation, such as land, spatial planning, environment, and forestry. Besides, the arrangement is also multi-level because the central, provincial, and district governments can regulate it under their respective authorities. We describe how the complexity of the governance of oil palm plantation licensing leads to ambiguity, inconsistency, and incompleteness of provisions. We

identify that an ambiguous norm causes different interpretations by the government and plantation company that implements them. Meanwhile, inconsistent provisions confuse the execution stage: Which rules should be applied by the government or plantation company, considering that two or more different regulations govern an object inconsistently? Norms' incompleteness often occurs because more technical rules are not available, thus creating a legal vacuum. These three factors can create legal uncertainty in oil palm plantation licensing governance.

The main discussion in **chapter three** focuses on the complexity of supervising the environmental management of coal mining areas in East Kalimantan. This chapter addresses two research sub-questions: 1) *To what extent does the existing legal framework hamper the government's authority in supervising coal mining activities?* 2) *What societal and environmental problems emerge in areas used for coal mining operations, and how do these relate to law and its implementation?*

This chapter finds that the current cross-sectoral and multi-level arrangement of mining supervision leads to uncertain regulations on supervising the environmental management of coal mining operations. This thesis also shows that incomplete provisions lead to a legal vacuum at the implementation level. Inconsistent, ambiguous, and vague norms cause uncertainty and different understandings of performing supervision of environmental management in coal mining areas. Moreover, supervisors are limited by a lack of capacity, funding, and personnel. Mining and environmental inspectors tend not to follow up on environmental damage if permit holders assure them of their intentions to address such issues. At the end of this chapter, we conclude that mining permit holders benefit most from this situation. Furthermore, the legal uncertainty and lack of supervisory capacity have destroyed settlements and agricultural areas, generating considerable environmental damage and pollution in the villages surrounding the mining operations. This ecological degradation may also trigger conflicts between coal mining companies and communities.

Chapter four presents the answer to the following two research sub-questions: 1) *To what extent does the existing legal framework hamper the government's authority in supervising oil palm plantation activities?* 2) *What societal and environmental problems emerge in areas used for oil palm plantations, and how do these relate to law and its implementation?*

This chapter highlights a series of problems in the legal framework that is in place to govern and facilitate governmental supervision of the activities of oil palm

plantation corporations. The regulation on supervision of oil palm plantations spans multiple levels of government (central, provincial, and district) that all hold relevant authority. The control is also cross-sectorally based since plantation permit holders are subject to environmental, land, and forestry sectors. The consequence of sector-based and tiered legislation is the incompleteness of provisions and overlaps between respective authorities, making the supervision overly complicated.

This thesis finds that the legal framework of oil palm plantation supervision suffers from legal incompleteness, which causes legal uncertainty and hampers adequate control. We discover three leading causes of this incompleteness of law in supervising oil palm plantations: the delay in establishing the implementing regulations, the absence of sanctions in case of non-compliance, the use of imprecise words, and complex terms and language. Furthermore, the incomplete regulations on supervision in this sector allow the local government to refrain from revoking the plantation permit even when permit holders have violated their obligations and the procedural requirements for revocation have been met. As illustrated by a case in the Kutai Kartanegara district, where an oil palm plantation company contaminated the water sources, the local government did not impose sanctions on the alleged company. The circumstances can degrade the environment and trigger conflicts between communities and oil palm plantation companies.

Chapter five discusses how to protect the remaining forested areas in the non-forest zone (APL) from the threat of land-based activities on a large scale, such as coal mining and oil palm plantations. This This topic is also intended to respond to this research sub-question: *Which interventions can be suggested to develop more balanced and integrated natural resource policies and regulations in East Kalimantan?*

I propose the Ecological Fiscal Transfer (EFT) as a policy instrument to protect the forested areas in APL in the Kutai Timur district--which has the largest area in APL in East Kalimantan. This chapter demonstrates that the district government can adopt the EFT scheme, given that they have the authority to manage the APL and village funds. In this chapter, I argue that to adopt the scheme, the district government should develop criteria and indicators by considering the goals and priorities of district development, the data availability, and the opportunity for every village to implement it. Further, the district government requires integrating the EFT scheme into the district village fund allocation (*Alokasi Dana Desa/ADD*) policy. By implementing this scheme, the district government can encourage the village governments and villagers to protect and manage forested areas in their village areas.

In the **conclusion**, I present the main findings of this research and offer a discussion around the research questions. Legislation regarding coal mining and oil palm plantations clearly overlaps with other sectors, such as environment, spatial planning, land, and forestry. Furthermore, the governance of the sectors is organized at multiple levels (central, provincial, district, or municipal). Consequently, its development is very dynamic, with fast-growing legislation resulting in uncertainty of the law, which manifests primarily in ambiguous provisions and inconsistent and incomplete regulations.

The ambiguous and inconsistent provisions may cause uncertainty because they create different understandings when supervising coal mining and oil palm plantation operations. Meanwhile, incomplete regulations lead to a legal vacuum at the implementation level. It occurs because implementing regulations or technical provisions ordered by higher regulations are unavailable or are yet to be stipulated.

This thesis also concludes that the legal uncertainty generates considerable environmental damage and pollution in the villages surrounding the coal mining and oil palm plantation operations. This ecological degradation may also trigger conflicts between coal mining and oil palm plantation companies and communities. I argue that legal uncertainty has generated regulations and permits as instruments that facilitate coal mining and oil palm plantation activities, with due consequences for the environment and often leading to conflicts with communities. The permit instrument and related regulations have not and are not successful in protecting all parties, as the nature of the permits and regulations in many situations leads to environmental damage and conflicts around the coal mining and oil palm plantations areas. Furthermore, the regulations and permits have not led to the sustainable use of natural resources and fail to fulfill the constitutional mandate to reach the greatest prosperity of the people.

I propose the EFT as a policy instrument for developing more balanced and integrated natural resource legislation and policies in East Kalimantan. Through this scheme, the district government can integrate the EFT scheme into policies regarding district village fund allocation to conserve the forested areas in the district jurisdiction. By implementing this instrument, the district government can encourage village governments and villagers to protect and manage forested areas in their village areas. In addition to legislation on natural resources, the district government should establish a policy on community empowerment, particularly related to the indigenous people around the coal mining and oil palm concessions or locations designated to both sectors in spatial planning.

Chapter 1

Coal Mining Governance in Indonesia: Legal Uncertainty and Contestation^{*}

*"The legal order is like a Gothic cathedral:
it is permanently under construction.*

- Christoph Engel (2004)

This chapter is adopted and modified from:

Nasir, Mohamad and Bakker, Laurens and Van Meijl, Toon, Coal Mining Governance in Indonesia: Legal Uncertainty and Contestation (March 2, 2022). *Australian Journal of Asian Law*, Vol. 22, No. 1, Article 4: 53-67, 2022, Available at SSRN: <https://ssrn.com/abstract=4047425>

Coal production and export are essential elements of the Indonesian economy, but mining operations are frequently plagued by conflicts among companies or between companies and local communities. We consider the role law plays in these conflicts and argue that it is, in fact, a factor that causes conflict.

This chapter describes that such a circumstance is caused by mining governance rests with different levels and institutions of government, which has divided and delegated government authority and efficiency, and because revisions of relevant laws fail to consider this complexity. Coal mining governance is, therefore, hampered by the inconsistency, ambiguity, and incompleteness of the law, causing legal uncertainty for the stakeholders.

Taking cases encountered during research in the province of East Kalimantan, a major coal-producing area, we discuss the causes and consequences of the current state of coal mining legislation.

1.1 Introduction

Over the past 15 years, Indonesia's coal production has increased enormously. During the last three years (2017 to 2019), Indonesia was the largest exporter of coal worldwide (Prime, 2020). By 2040, Indonesia may provide 28 percent of the total global coal exports (IEA, 2017). Coal export improves trade balance, increases government revenue, and is an important sector in terms of providing employment. Between 2015 and 2019, the coal mining industry contributed about 2.26 percent to Indonesia's GDP per annum (BPS, 2020).

While positive in terms of economic impact, coal mining activities are also associated with negative environmental impact (Atteridge et al., 2018; Fünfgeld, 2016, 2017; Izza & Afkarina, 2019), human rights violations (Jalaluddin, 2018; Komnas HAM, 2016; White et al., 2018), land conflicts (Subarudin, et al, 2016; Muhdar, et al., 2020; Tondo & Siburian, 2019), and a lack of regulation and legal integration (Budiono & Rini, 2017; Dwiki, 2018; PwC, 2019). These problems are manifested in disputes over land access between companies and local populations, the pollution of crops and farmlands with mining dust and mud, and involuntary displacement of local people due to mining operations (for example, Ives & Bekessy, 2015; Van Paddenburg et al., 2012).

Further, post-mining restoration¹ and reclamation² of finished concessions are frequently omitted by coal mining companies although they are required by Law No 4 of 2009 on Mineral and Coal Mining (the 2009 Mining Law) to undertake these activities. This leaves land and ecosystems severely damaged and means that conflicts continue after mining has ended (Atteridge et al., 2018; Naim et al., 2010; WaterKeeper' Alliance & JATAM, 2017).

In this article, we consider the role of law in conflicts over coal mining activities. We argue that coal mining governance suffers from legal uncertainty and, as such, may contribute to conflicts--or even cause them--rather than providing a solution. We found that several frequently occurring forms of such conflict, which we will introduce and discuss below, follow from three general causes. These are: a) ambiguity of the law, by which we mean lack of clarity regarding intention and meaning; b) inconsistency of the law, such as when relevant regulations are contradictory;

^{1.} Post-mining restoration is a planned, systematic and continuous activity following mining activities that aims to restore the natural environment's function and social functions (art 1(27) of the 2020 Mining Law).

^{2.} Reclamation is an effort to restore, maintain and improve land functions so that the carrying capacity, productivity and role in maintaining the life support system of the area remains sustained (art 1(26) of the 2020 Mining Law).

and c) incompleteness of the law, which occurs when required regulations, instructions or explanations are not provided. These are not mutually exclusive or exhaustive categories, but they allow us to highlight what we believe to be the main issues of legal uncertainty in mining legislation and governance.

Such issues are not unique to the sector: various problems we encountered in mining governance are reported for Indonesian law more generally. They include a lack of public trust in the legal process and administrative institutions, corruption in the courts, and statutory law being out of date, marginal or poorly enforced (see, for example, Lev, 2000). They also include unclear formulations of laws and lack of elucidation causing problems with the implementation of new legislation (Butt & Lindsey, 2018, pp. 35-36), and problems of authority arising from the application of legal instruments that are not part of the official hierarchy of laws (Sadiawati, et al, 2015, pp. 38-40; Syahlan, 2019, p. 95). Meanwhile, conflicts between laws are caused by lower-level lawmakers failing to consider higher-level laws and by sectoralist law-makers failing to consider relevant legislation from outside their own field (Sumardjono, et al, 2009, p. 3). Long delays in the finalisation of supporting legislation required for implementing new legislation also often make it impossible to apply new legislation (Waddel, 2002, p. 17).

Mining governance is a relatively fragmented legal field that is regulated through sector-based laws and policies on mining, the environment, land, forestry, regional government, and spatial planning. New legislation on mining is presented frequently but irregularly and reflects the sectoral and governmental divisions of mining authorities. Until the recent (2020) amendment to the 2009 Mining Law (see below), the authority to issue mining licenses and monitor mining operations was divided between provincial and central levels of government (while district governments also had such authority from 2001 to 2014). This makes mining governance a dynamic sector but also one that is difficult to predict and hard to keep track of. This is not without significance given the strong national discourse emphasising that mining activities should benefit the population at large and improve the lives of the general population, as well as alleviate negative impacts for those living near mining operations (see, for example, Gandataruna & Haymon, 2011; Robinson, 2016).

Nationalism has shaped mining and other extractive sectors over the past decade in the form of a range of policies aimed at limiting foreign influence, to benefit Indonesia's domestic extractive industry. The ensuing policy regime has produced regulations and laws that are vaguely formulated, Warburton (2017, p. 300) suggests, so as to keep options open and satisfy different patronage networks among the

political and business elites. The result is a situation in which the different interests of central and regional governments cause these levels to apply conflicting policies (see, for example, Bakker, 2016) and the 'nationalism' at stake primarily benefits a small group of already massively wealthy business tycoons (Warburton, 2018). While our focus is not so much on the political aspects of mining governance, the question of who benefits from the current practice is one that should be raised.

We proceed as follows. First, we present an analysis of legislation governing coal mining, to come to an understanding of its strengths and problems. Next, we offer a brief overview of examples of ambiguity, inconsistency and incompleteness of the law to illustrate how these come to the fore in legislation. Subsequently, we illustrate the consequences of this legal uncertainty by discussing two frequently occurring constellations of conflict caused by overlap in coal mining concessions and other land rights. These are conflicts between companies and local communities, and conflicts between companies and local governments. We use examples we encountered during our research in the province of East Kalimantan.

This province is representative of Indonesia's coal mining problems and unique in the intensity of its involvement. Nearly 52.5 percent of Kalimantan's coal reserves are concentrated here, making it the most significant coal-producing area in Indonesia (Lidwina, 2020). As of April 2016, some 1,404 mining permits had been issued for this province alone (Antara Kaltim, 2017; Rusmadi, 2017). These permits total 5,134 million hectares, or 40.3 percent of the province's territory (Apriando, 2017a). Also, unlike other Indonesian provinces, East Kalimantan's provincial government has enacted important provincial legislation on coal mining, thus adding province-level policy and governance to the legislative framework.

1.2 Coal Mining Governance in Indonesia

Indonesia's coal mining governance cannot be considered separately from the extensive decentralisation of administrative authorities that followed the end of the New Order regime in 1998. While this policy revolution gave the regional level of government considerable control over land and resources within their boundaries, much of this authority was recentralised to provincial government, national government, and various ministries during revisions of the regional autonomy law in 2004 and 2014.

In this decentralisation era, the Indonesian government enacted the 2009 Mining Law to replace the 1967 Mining Law. This law stipulated that the central, provincial, and district or municipal governments can manage coal mining, each of which may develop legislation on the sector. In 2014, however, the central government also enacted Law Nr. 23 of 2014 on Regional Government (the 2014 Regional Government Law). The significant point related to mining in this law is the revocation of district/municipal government authority in the mining sector. The law also orders district/municipal governments to hand over all coal mining permits to the province.

In April 2015, the Ministry of Energy and Mineral Resources (*Kementerian Energi dan Sumber Daya Mineral*/MoEMR) issued a circular letter declaring that regents (*bupati*) and mayors (*walikota*) no longer have authority to issue mining permits. Still, contracts and agreements that regional governments had entered into have mostly remained in force, which was of great consequence as the 2003-2013 global commodities boom saw an unprecedented rise in foreign demand for Indonesia's natural resources. As a result, regional governments benefited considerably, despite the national government seeking to develop the mining and the mineral processing industries to strengthen the national economy (see, for example, Bakker, 2016a; Warburton, 2017). For this purpose, the 2009 Mining Law instructed mining companies to add value to the raw ore through smelting, refining and other value-adding processes before exporting it overseas.

In 2020, due to a revision of the 2009 Mining Law, mining again became the near exclusive remit of the national (central) government. However, under art 173C of the amended Mining Law, provincial governments continue to hold the authority to extend existing mining licenses, although they can no longer issue new ones. This authority remains with provincial governments for a maximum period of six months following the enactment of the law or until its implementing regulations have been issued. In coal mining governance, the 2020 Mining Law is the main piece of legislation governing coal mining, but other sectoral laws, such as those relating to the environment, spatial planning and forestry, also govern elements of coal mining, as do various other regulations. An overview is provided in Table 1.

Table 1. Regulations related to coal mining governance

Subject	Government Regulation (GR)	Minister of Energy and Mineral Resources Regulation (MoEMR)	Related Regulations
Mining Areas	GR No 22 of 2010	Mining Area, Licensing and Reporting in Mineral and Coal Mining MoEMR No 7 of 2020 revoked MoEMR No 11 of 2018, as amended by MoEMR No 22 of 2018 and MoEMR No 51 of 2018 Determination of Mining Areas MoEMR No 37 of 2013	Spatial Planning: Law No 26 of 2007 on Spatial Planning, Local Regulations on Spatial Planning (province, district/municipality). Forestry: GR No 6 of 2007 on Forest Management and Formulation of Forest Management Plans, and Forest Utilisation, Regulation of MoEF on Borrow-to-Use Forestry Permit MoEF No 27 of 2018 as amended by MoEF No 7 of 2019
Mining Business Activities	GR No 23 of 2010 as amended by GR No 24 of 2012, GR No 1 of 2014, GR No 77 of 2014, GR No 1 of 2017, and GR No 8 of 2018	Mineral and coal mining operations MoEMR No 25 of 2018 as amended by MoEMR No 50 of 2018 and MoEMR No 11 of 2019 Licensing and Reporting in Mineral and Coal Mining MoEMR No 7 of 2020 Delegation of Authority for Granting Licensing as Implementing of One-Stop Services MoEMR No 25 of 2015	Environment: Law No 32 of 2014 on Protection and Management of Environment, Law No 11 of 2020 on Job Creation, GR No 27 of 2012 on Environmental Permit, MoEF No 4 of 2012 on Indicators of a Friendly Environment for Business and/or Activity Open Coal Mining, Local Regulations on Protection and Management of Environment (province, district/municipality). CSR: Law No 47 of 2007 on Limited Company Online Single Submission (OSS): GR No 24 of 2018, President Regulation No 97 of 2017, local regulation on OSS Taxation: GR No 37 of 2018
Reclamation and Mine Closure	GR No 78 of 2010	Reclamation, post-mining, implementation of good mining principles and supervision of mineral and coal mining MoEMR No 26 of 2018 replaced MoEMR No 7 of 2014 (on the implementation of reclamation and post-mining)	Environment: Law No 32 of 2014 on Protection and Management of Environment, Law No 11 of 2020 on Job Creation, GR No 27 of 2012 on Environmental Permit, MoEF No 4 of 2012 on Indicators of a Friendly Environment for Business and/or Activity Open Coal Mining, Local Regulations on Protection and Management of Environment (province, district/municipality).

Table 1. Continued

Subject	Government Regulation (GR)	Minister of Energy and Mineral Resources Regulation (MoEMR)	Related Regulations
Mineral and Coal Mining Direction and Supervision	GR No 55 of 2010	Implementation of good mining principles and supervision of mineral and coal mining MoEMR No 26 of 2018 replaced MoEMR No 2 of 2013 (on supervision of the implementation of mining activities by provincial and district/ municipal governments) Evaluation procedures for the issuance of mineral and coal mining business permits MoEMR No 43 of 2015	Environment: Law No 32 of 2014 on Protection and Management of Environment, Law No 11 of 2020 on Job Creation, GR No 27 of 2012 on Environmental Permit

This scattered division of regulatory authority over various levels of government, ministries and other governmental bodies is complicated and creates confusion. The Fraser Institute, an independent research and educational organisation based in Canada, conducts an annual survey of mining companies. Over the past three years it has consistently indicated a high degree of uncertainty in the Indonesian administration’s interpretation and enforcement of existing regulations, particularly with respect to its environmental regulations. The researchers pointed to the existence of regulatory duplications and inconsistencies. The survey gives Indonesia ominously low ratings on these aspects (Jackson & Green, 2017; Stedman & Green, 2018, 2019). Other studies present similar findings. Fünfgeld (2016) and O’Callaghan and Vivoda (2017) report inconsistencies in regulations issued by the central, provincial and regional levels of government, as well as among different agencies at these levels of government. Devi and Prayogo (2013, p. 25) argue that uncertainty of law emerges due to an absence of implementing regulations or because technical directives are lacking, while ambiguity is caused by competing regulations and differing interpretations given to these by various parties (O’Callaghan, 2010, p. 224).

1.3 Legal Uncertainty in Governing Coal Mining in East Kalimantan

Although the 2020 Mining Law made the central government the coal mining sector's exclusive licensing authority, previously existing regulations on licensing are valid until the promulgation of the implementing regulations of the new law, which at the time of writing (April 2021) were not yet announced or introduced. This implies that, at the time of writing, the authority to manage coal mining in East Kalimantan, which mainly consists of permit monitoring, reclamation and post-mining activities, was still managed predominantly at the provincial level of government. During our research, we found this management to be problematic in various ways, as we discuss below.

1.3.1 Ambiguity in Permit Guarantees

Under art 46(1) of the 2009 Mining Law, any holder of a Mining Business Permit (*Izin Usaha Pertambangan*) for exploration is 'guaranteed' to obtain a Mining Business Permit for production to ensure the continuation of the mining business. Similar provisions exist in art 34(2) of Government Regulation (GR) Nr. 23 of 2010 on the Implementation of Mineral and Coal Mining Business Activities and art 43(2) of the MoEMR Regulation Nr. 11 of 2018 on Procedures for Giving Area, Licensing, and Reporting on Business Activities of Mineral and Coal Mining. Yet the meaning of 'guaranteed' (*dijamin*) is unclear. Does it mean that the licensor cannot refuse the applicant a production permit once an exploration permit has been granted, or does it mean that continuation is subject to meeting the conditions set out in the law?³

'Guaranteed' was interpreted differently by parties in the case of PT Marimun Bara Sejahtera (PT MBS) v the East Kalimantan Provincial One-Stop Investment and Integrated Services Office (*Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu Provinsi/DPMPTSP*). In July 2018, the company submitted a request to DPMPTSP to upgrade the status of its permit from exploration to production operations. However, DPMPTSP found that the company did not meet the requirements for such an upgrade as set out in art 4 of MoEMR Regulation Nr. 43 of 2015 on Evaluation Procedures for Issuing Permits of Mineral and Coal Mining. Also, the requested area

³ These conditions concern administrative requirements such as production of valid permits, a correct map of the concession and confirmation from the provincial government that the permit contains no overlaps. Also, Mining Business Permit holders need to show that they have complied with all financial liabilities (both tax and non-tax) and that they have met all technical requirements. These include submission of a final exploration report, a feasibility study, an environmental impact analysis (see below), and a reclamation and post-mining plan, as well as approvals of all these by the authorities responsible.

included overlaps with plots that were designated as residential and horticultural areas in the provincial spatial plan, which made them out of bounds for mining. DPMPTSP interpreted the ‘guarantee’ as being conditional on the fulfilment of these requirements and therefore rejected the request.

PT MBS disputed the decision and brought the case to the administrative court in August 2018. At the trial process, the judges found that the 2009 Mining Law and MoEMR Regulation Nr. 34 of 2017 on Mineral and Coal Mining Permits (as amended by MoEMR Regulation Nr. 11 of 2018) provide an unconditional guarantee that the exploration permit holder can upgrade the permit status as a continuity of his investment. Based on these considerations, the judges ordered DPMPTSP to issue the production operation permit to PT MBS. However, at the time of writing DPMPTSP had not done so and, while we have been unable to obtain a clear answer as to why this is so, the issue illustrates that, even with a court decision, it may take considerable time to obtain a permit upgrade.

The debate regarding the word “guaranteed” is interesting to observe, considering that the Constitutional Court in Decision Nr. 64/PUU-XVIII/2020 has declared that the phrase “guaranteed” in 169A paragraph (1) of the 2020 Mining Law is contrary to Article 27 paragraph (1) and Article 33 paragraphs (2) and (3) of the 1945 Constitution of the Republic of Indonesia. According to the decision, the term “guaranteed” must be replaced with “can.” The Concession Contract (*Kontrak Karya*, KK) and Coal Mining Concession Contract (*Perjanjian Karya Pengusahaan Pertambangan Batubara*, PKP2B)⁴ can be extended if permit holders meet specified requirements for administration, technical expertise, environmental impact, and financial compliance.

The above discussion demonstrates that variances in construing statutory provisions can give rise to disputes between concerned parties. The case also evinces the significant role of legal interpretation in negotiations between parties to a conflict, including court judgments. At the same time, the various interpretations, as shown by the case, indicate that in order to bring about legal change, it is crucial to encourage novel judicial interpretation (Bedner, 2016b, p. 63)

⁴ KK/PPK2B is a contract between the Indonesian Government and mining companies approved by the People’s Representative Council (DPR) and signed by the President. In 1990, the Indonesian Government discontinued new entries for KK and PKP2B companies. However, the Government still acknowledges and regards all the existing contracts until the terms are ceased.

1.3.2 Inconsistencies in Post-mining Restoration Governance

While the previous example already included elements of legal inconsistency, the effects of such deficiencies are central to many problems of regulating reclamation and post-mining restoration.⁵ These are regulated by the 2009 Mining Law, with details of its implementation provided in GR Nr. 78 of 2010 on Reclamation and Post-mining and in MoEMR Regulation Nr. 7 of 2014. Although the 2009 Mining Law and GR Nr. 78 of 2010 explicitly order the mining companies to fill in open mining pits upon conclusion of their activities, MoEMR Regulation Nr. 7 of 2014 allows companies to leave the pits open if these are designated to be used as residential areas, for tourism, as water sources, or as cultivation areas. The regulation also allows companies to leave mining pits open if a pit is too large to fill in or for other technical reasons, which are not specified or explained in the law.

The opportunity to use mining sites for other purposes rather than carry out the reclamation and post-mining obligations set out in the 2009 Mining Law has obscured and neglected the intentions of reclamation and post-mining to restore the quality of the environment and ecosystem to its previous condition. Companies frequently claim ‘technical reasons’ to leave pits open (Azis, 2019), which brings into question their responsibility for post-mining restoration of the ecosystem and the social environment. In addressing this issue, MoEMR Regulation Nr. 7 of 2014 was recently replaced by MoEMR Regulation Nr. 26 of 2018 on the Implementation of Good Mining Rules and Supervision of Mineral and Coal Mining. This regulation ordered companies to restore land use according to the environmental impact analysis (*Analisis Mengenai Dampak Lingkungan*),⁶ which the company is obliged to carry out before commencing mining activities. By doing so, this new regulation ended the possibility of companies to changing the designation of mining locations upon conclusion of activities, unless such a change is already stated in the environmental impact analysis. MoEMR Regulation Nr. 26 of 2018 thus places final responsibility much more clearly with the company.

At the same time, a more technical provision as a follow-up to the regulation is MoEMR Decree Nr. 1827 of 2018 on The Guidance of The Implementation of Good Mining Practice. The Annex to this decree states that at the production operations stage reclamation can take the form of re-vegetation or other designations, including

⁵ The 2020 Mining Law removes provincial and district authority in the mining sector (arts 7 and 8 of the 2009 Mining Law). Under art 6 of the 2020 Mining Law, only the central government can carry out guidance and supervision of reclamation and post-mining.

⁶ An environmental impact analysis is conducted, to establish the scale and significance of the environmental impact of planned development. It is required as input for the process of decision-making for issuing permits.

turning them into housing areas, tourism sites, water sources, or cultivation areas. While MoEMR Regulation Nr. 26 of 2018 states that reclamation is intended to organise, restore and improve the quality of the environment and ecosystem following its previous use, this Ministerial Decree again opens the opportunity to use former mine pits for other purposes that differ from their original designation.

East Kalimantan's Provincial Regulation Nr. 8 of 2013 on the Implementation of Reclamation and Post-mining addresses the issue as well. This regulation also allows companies to not restore former mining areas to their original function. They can, instead, develop such land for livestock farming and smallholder plantations, or leave mining pits open in up to 10 percent of the disturbed land area.⁷ However, areas for such redevelopment, as well as pits to be left open, must be clearly indicated in the environmental impact analysis.

Complicating matters further is the Minister of the Environment Regulation (MoE) Nr. 4 of 2012 on Indicators of a Friendly Environment for Business and/or Open Coal Mining Activities, which is based on the 2009 Environmental Law. The Annex to this MoE Regulation Law Nr. 32 of 2009 on Environmental Protection and Management stipulates that every business and/or activity that has critical impact on the environment must conduct an Environmental Impact Analysis.

The Annex to this MoE Regulation stipulates that open excavation pits may remain for up to 20 percent of the coal mining permit's area. In 2014, the Ministry of Forestry and the Ministry of Environment were merged into the Ministry of Environment and Forestry. Earlier Ministerial Regulations of both ministries have remained in force, yet simultaneous implementation of MoEMR Regulation Nr. 26 of 2018 and MoE Regulation Nr. 4 of 2012 is highly complex due to their different provisions on post-mining pit closure.

Regardless of which regulation is to take precedence, each refers to environmental criteria that mining companies should meet. Once a company fails to do so, the regulations refer to the different provisions of the 2009 Mining Law and the 2009 Environmental Law. Which of these laws is to be enforced, and by which authority is, however, not clear.

1.3.3 Ongoing Incompleteness of Mining Governance Authority

The enactment of the 2014 Regional Government Law that was discussed above annulled the earlier distribution of government authority as set out in the 2009

⁷ 'Disturbed land' connotes an area used for mining business activities, drilling holes, test wells, test trenches, and mining supporting facilities.

Mining Law, specifically ending district government authority in permit-issuing and in the monitoring and evaluation of reclamation and post-mining activities. To address these changes the MoEMR issued three regulations in 2018 that jointly revoked fourteen earlier MoEMR regulations that authorised district governments to carry out these tasks.⁸ The three new regulations ordered the MoEMR and the Directorate General of Coal Mining to draft a comprehensive set of implementing guidelines for the environmental management of mining, for mining reclamation, post-mining management, the supervision of mining business governance, and for the monitoring and evaluation of reclamation and post-mining activities.

However, in 2020 one of these, MoEMR Regulation Nr. 11 of 2018 (which had been amended twice since its promulgation), was revoked by the new MoEMR Regulation Nr. 7 of 2020 on Procedures for Granting Areas, Licensing, and Reporting on Mineral and Coal Mining Business Activities. The guidelines ordered in MoEMR Regulation Nr. 11 of 2018 were not ready, while MoEMR Regulation Nr. 7 of 2020 instructed that yet further new guidelines should be drafted.⁹ While not dissimilar in terms of required guidelines, MoEMR Regulation Nr. 7 of 2020 shifts the authority for enacting the guidelines from the director-general to the minister. While creating a higher binding force, the involvement of the minister also causes new delays.

In short, the changes brought about by Law Nr. 23 of 2014 have still not been implemented in 2020. This situation is further complicated by the 2020 Mining Law revoking provincial governments' authority to issue permits and supervise reclamation and post-mining activities, and placing these with national government, while the implementing regulations are, as yet, not available. As a result, the 2020 Mining Law does not resolve the legal vacuum on supervision guidelines but rather adds to the ensuing legal gap.

⁸ These three regulations are: 1) MoEMR Regulation Nr. 11 of 2018 on Procedures for Granting Area, Licensing and Reporting on Mineral and Coal Mining Business Activities, which replaced six regulations related to the permit, mining area, and the authority of local government; 2) MoEMR Regulation Nr. 25 of 2018 on Exploitation of Mineral and Coal Mining, which annulled two regulations related to licensing; and 3) MoEMR Regulation Nr. 26 of 2018 on the Implementation of Good Mining Rules and Supervision of Mineral and Coal Mining, which repealed six regulations on reclamation and post-mining activity, monitoring and evaluation, and environment.

⁹ These guidelines should take the form of MoEMR decisions on: 1) enactment and implementation of granting mining business license areas; 2) application, evaluation, and issuance of the exploration permit; 3) application, evaluation, issuance, and extension of production operation permit; 4) application, evaluation, and approval of partnership program; and 5) preparation, submission, evaluation, and approval of the Annual Work Plan and Budget.

1.4 Contestation of Coal Resources in East Kalimantan: Rights to Land versus the Right to Exploit

The various competing interests in natural resources in East Kalimantan have given rise to numerous conflicts over their usage. In 2019, there was an overlap of approximately 4.5 million hectares in licenses granted to plantation and mining companies and to various types of forestry sector enterprises (Fel GM, 2019).

Conflict settlement between such diverse parties should follow the law. For natural resources, various sectoral laws — forestry, land, plantations, and mining — provide specific instructions on conflict resolution. As we have shown above, however, such diverse legislation may not only give rise to confusion, it may also cause conflict. For instance, if a coal mine is located in a forest area and causes environmental degradation in that area, which legislation takes precedence and must be applied to resolve the conflict? The Mining Law, the Forestry Law, or the Environmental Law?

In this section, we discuss several conflicts that we encountered during our research, to examine how such contests were worked out.

1.4.1 Coal Mining Companies versus Communities

In 2014-15, there were 18 cases of this type of conflict (JATAM, 2016, unpublished data). Two of these were brought before the administrative court, but the others remain unresolved. We identified two main causes for these conflicts. The first is when a local government grants a coal mining permit in a settlement area or for land that is otherwise occupied by a community, such as gardens or rice fields. Articles 135 and 136 of the 2009 Mining Law allow for this on the condition that the mining company provides compensation to which the holder(s) of land rights agree(s). In practice, such an agreement is often not reached. This is not just because the amount of compensation offered is deemed too low, but because communities often do not want to release their land for coal mining in the first place. The absence of an agreement gives rise to conflict as both parties contest the other's rights: the company maintains that it has a permit, while the community counters that no legally required agreement was reached. This is an inconsistency in the law.

The second cause of such conflicts is ambiguity in the 2009 Mining Law, which does not provide explicit provisions to solve overlaps between coal mining concessions and other parties' land rights. Article 136(1) of the 2009 Mining Law only states that these 'should be settled under statutory provisions,' but such provisions are still lacking at the time of writing, and they have not been included in the 2020 Mining

Law either. The lack of clear rules encourages parties to apply other methods to further their interests. Communities often resort to blockades and protests, while mining companies react by bringing criminal charges against stubborn opponents who persist in asserting their right to land. The companies accuse protesting communities of obstructing or interfering with mining operations, as stated in art. 162 of the 2009 Mining Law (CNN Indonesia, 2019; Hukum Online, 2020) and the court frequently endorses such accusations. While this may end the blockades, it does not resolve the conflict. Nor does it improve relations between the parties involved.

Contests between companies and communities are generally resolved through direct negotiations between the parties, often through mediation by a third party (which is nearly always the local government). If this fails, the case is often brought before the court. It is not uncommon for parties to apply a number of these methods before the issue is eventually decided upon, as the following example illustrates. In 2011, a coal mining company, PT Mahakam Sumber Jaya (MSJ), came into a conflict with the villagers of Sebuntal village in Kutai Kartanegara District. PT MSJ had a concession area of 23,000 hectares, of which 4,000 hectares overlapped with a community plantation cultivated by a Land Ownership Association (*Kelompok Persatuan Pemilik Lahan*) of some 300 local families. The association's claim to the land was based on a Land Tenure Statement (*Surat Pernyataan Pemilikan Lahan*) that had been issued by the local village head and was recognised by the sub- district government (Detak Kaltim, 2017).

In 2011, PT MSJ appealed to the district government to facilitate a solution to the land conflict. The district government sent a team to investigate and identify land claims by the villagers farming in the disputed area (Dimas, et al., 2014; Harjanto, et al, 2019). The team failed to settle the conflict, as PT MSJ did not agree with the amount of compensation requested by the villagers. In 2013, the East Kalimantan Provincial Legislative Council mediated between the parties involved in the dispute but also failed to reach a settlement (Antara Kaltim, 2013). Meanwhile, the Sebuntal villagers living around the mining concession did not wait for events. Arguing that PT MSJ had not paid compensation for their land, they frequently put up physical blockades to obstruct the company's activities. PT MSJ countered that while no agreement had been reached about compensation, they had conducted the process as per the legislation in force (Dimas et al., 2014; Harjanto, et al, 2019).

As a non-litigation approach had failed to reach an agreement, the villagers said that they would start a lawsuit if PT MSJ commenced mining activities in their community plantation (Detak Kaltim, 2017). However, they only threatened and never executed the lawsuit plan. PT MSJ ignored this threat of being sued by the

community and continued to carry out its operations. The conflict continued and on August 31, 2023, the Regional People's Representative Council (DPRD) facilitated the resolution of a dispute. Both parties agreed to discuss determining a mutually agreeable compensation amount (DPRD Kaltim, 2023). On November 23, 2023, the villagers returned to the DPRD to file a complaint against PT MSJ. They claimed that the company had not kept its promise. On the other hand, a representative from PT MSJ stated that they had already made two compensation payments relating to the land. However, the villagers were still demanding more from the company (Kaltim Kita, 2023). At the time of writing (February 2024), there is no update on the resolution of the dispute.

That such conflicts may be resolved through a lawsuit is shown by the case of the village of Muara Kaeli disputing a mining concession held by PT Sinar Kumala Naga (PT SKN) in the district of Kutai Kartanegara. Here a Forest Education and Research Area in the village overlapped with PT SKN's concession.¹⁰ The mining activities of PT SKN had damaged the Forest Education and Research Area and had disrupted the livelihoods of people living in its vicinity. In November 2015, the Barisan Anak Dayak (BADAK), an NGO based in Samarinda, filed a lawsuit in the administrative court in Samarinda against PT SKN and the Regent of Kutai Kartanegara (the issuer of the permit). The NGO asked the court to order the regent to exclude the overlapping area of about 29.61 hectares from the concession. The judge accepted the plaintiff's claim and ordered the Regent of Kutai Kartanegara to release these hectares from the permit.¹¹

A third example of this type of conflict illustrates the criminalisation of opponents by companies. In the district of Paser, a conflict began in 2009, when PT Kideco Jaya Agung (PT KJA), a coal mining company, conducted land clearing in Songka Village, a settlement of indigenous Paserese. A total of 598 hectares of the disputed land was claimed by Mrs. Noorhayati, a local villager who based her claim on a *segel*¹² issued in 1957. PT KJA did not pay compensation, since the amount offered by the company was deemed insufficient by Noorhayati and her family.

As no solution was forthcoming, they staged a six-day Belian ritual on the disputed land in June 2014. A Belian is a ritual to cleanse the community and the environment from harmful aspects or misdeeds (Bakker, 2009a). Staging such a ritual in this context may be considered a creative way to perform an obstructive protest yet circumvent

^{10.} Forest Education and Research Area is a forest area designated for forestry research and development, forestry education and training as well as religion and culture.

^{11.} See Administrative Court Decision Nr. 30/G/2015/PTUN-SMD.

^{12.} A *segel* is a letter containing a statement regarding land control by a person, issued by the village head and approved by the head of the sub-district.

the prohibition on hampering mining operations. The Belian was intended to spiritually repair the consequences of PT KJA's operation on the land, yet PT KJA felt that the Belian hampered its *activities*, particularly the transportation of coal, claiming it caused a loss of around 95 billion rupiahs (US \$9,858,128).¹³ The company called in the police and asked them to arrest Noorhayati as the instigator of the ritual. Noorhayati was indicted on the grounds that the Belian ritual had blocked mining activities. After a series of trial examination sessions, Noorhayati was found guilty of obstructing coal mining operations and sentenced to two months' probation in June 2015. The High Court confirmed the verdict in October 2015, followed by the Supreme Court in January 2017.

These three cases illustrate some of the more common conflicts that arise regularly between companies and communities as a result of overlap between mining permits and other land rights. The situation is caused mainly by ambiguity in land allocation in spatial planning that allows mining to be carried out in locations where there are already other land-based activities such as settlements or agriculture, and the poor formulation of dispute resolution in the laws. As a consequence, clear and more precise legislation about fair and adequate compensation could remedy this condition. The criminalisation of protest is a cause for concern in itself, since legal procedures to stop ritual events can trigger widespread conflict with indigenous peoples, as happened in Noorhayati's case. Importantly, the three cases show that coal mining companies are well-placed to use their permits and the law to privatise disputed land and dominate communities' social spaces and natural resources.

1.4.2 Coal Mining Companies versus Local Government

Based on our research in the administrative court in Samarinda, we identified eighteen conflicts between coal mining companies caused by overlapping licenses, and which took place between 2009 and 2019. These overlapping permits resulted from a local government granting a permit to a company for an area in respect of which another company already holds a permit. This can be a consequence of poor or incomplete permit administration, poor coordination between responsible authorities, or corruption (Arwanto, 2018; JATAM, et al, 2019). Such overlaps frequently become conflicts because of inconsistencies in the law and because of the significant business interests that are at stake. Often these overlaps involve multiple companies, which are generally mining companies, but can also be other types of companies, such as plantation owners.

¹³ See Tanah Grogot Court Decision No 04/Pid.B/2015/PN.TGT.

Our first example here, the case of PT Bumi Energy Kaltim (PT BEK) v PT Penajam Prima Coal (PT PPC) and PT Energi Penajam Mandiri (PT EPM), provides an illustration of how such disputes occur. This conflict commenced in August 2011, when the government of Penajam Paser Utara district upgraded the mining permit status of PT PPC and PT EPM from exploration to production operations. During the process, however, the district government found that the two companies' concessions overlapped with the concession of PT BEK. The district government subsequently asked PT BEK to stop its mining activities in the overlapping area, and resolve the issue. The local government facilitated a series of mediation meetings to explore the possibility of an amicable solution.

Since all companies maintained their claims, the regent then applied a formal approach. After verifying all of the licensing documents, the district government identified that the area of overlap between PT BEK and PT PPC totalled 730 hectares (22.25 percent of PT BEK's concession), while the overlap between PT BEK and PT EPM amounted to 2,254 hectares (68.70 percent of PT BEK's concession). According to the district government's findings, PT BEK had obtained its permit in 2008, whereas PT PPC and PT EPM obtained theirs in 2004. Since mining permit services must be applied according to a first-come, first-served principle, as stated in the Decree of Ministry of Energy and Mineral Resources No 1603K/40/MEM/2003, the regent decided to reduce the concession of PT BEK in December 2014. In response, PT BEK brought the decision before the administrative court in March 2015. The company argued that the decision of the district government was against the law and had caused legal uncertainty for PT BEK's business, calling for the court to cancel the regent's decision. However, the court rejected their request as the judges considered the regent's decision to have followed applicable laws and regulations.¹⁴

Between 2009 and 2019, the administrative court in Samarinda also heard ten cases of conflicts between coal mining and palm oil companies that were caused by overlapping licenses. The case of PT Perkebunan Kaltim Utama I (PT PKU) v PT Kutai Energi (PT KE), PT Trisensa Mineral Utama (PT TMU), PT Adimitra Baratama Nusantara (PT ABN), and PT Indomining serves as our second example. On June 9, 2009, the regent of Kutai Kartanegara district issued a coal mining license to PT KE for 6,932 hectares. PT PKU protested the issuance of the permit as they held a license, also issued by the regent, that overlapped with the new concession of PT PKU. When looking into the case, PT PKU found further overlaps with new permits that the regent had issued to other coal mining companies, namely PT TMU, PT ABN, and PT Indomining. The total overlapping area amounted to 3,968.3 hectares.

¹⁴. See Administrative Court Decision No 05/G/2015/PTUN-SMD.

On 6 December 2010, a coordination meeting was held between the district government and the various companies and an agreement was reached that involved shared land use with priority for coal mining activities. This meant that the coal would first be mined, after which plantations would be set up once the area had been restored. Although PT PKU signed the agreement, the company remained dissatisfied with the outcome and sued the regent in the administrative court in July 2011. The judges rejected PT PKU's demands to revoke the permit issued to PT KE because the lawsuit was filed late (more than 90 days after the issuance of the license).¹⁵ In turn, PT KE opted to settle the matter on commercial basis. PT Toba Bara Sejahtera, the parent company of PT KE, PT TMU, PT ABN and PT Indomining decided to buy 11,250 shares (equivalent to 90 percent) of PT PKU in June 2013 (Pradipta, 2013). The acquisition of PT PKU minimised the risk of future legal disputes (PT Toba Bara Sejahtera Tbk., 2013).

These examples illustrate how local governments fail to provide legal certainty for permits issued to companies. When granting a coal mining permit, the local government often does not ascertain the concession area to be awarded to a company on the basis of existing permits. Such poor administration results in inconsistent decisions by local governments as they generate significant overlap between concessions.

1.5 Conclusion

In this chapter, we have discussed the role of law in conflicts over mining activities. We find that coal mining governance is plagued by legal uncertainty that poses a significant obstacle to a functional and effective coal mining regime. We see three causes of this. The first is the distribution of authority over three different levels of governance (regional, provincial and national), which overlap, contradict and lack mutual coordination. As mining governance is also dispersed over multiple sectoral laws in addition to the Mining Law itself, concentrating and coordinating its authority requires extensive collaboration between different levels and bodies of government. This proves to be problematic in practice, as well.

The second cause is the speed and coordination of the revision of coal mining governance. Decentralisation, recentralisation and new divisions of coal mining authority followed one another at a fast pace--the 2020 Mining Law being the latest instalment--but this caused problems in legislation due to overlaps, contradictions

¹⁵ See Administrative Court Decision No 24 /G/2011/PTUN-SMD.

and a lack of implementing regulations. Thus, the legal structure suffers from the speed with which it is constructed, altered and new aspects added to it.

The third cause of legal uncertainty is the existence of multiple permits to the same plots of land and overlaps between permits and other land titles. A clear and transparent permit system is fundamental for companies, communities and land users in general. In sum, we perceive a lack of regulatory clarity in coal mining governance that results from a lack of coordination and alignment in the development of legislation and the allocation of authority and responsibility in governance.

Based on the cases we reviewed above, we discern two major consequences. The first is that mining companies are the actors that appear most capable of benefiting from the present situation. Local governments are relatively powerless to act. In particular, the regulatory opacity allows mining companies that are unwilling to meet their obligations in reclamation and post-mining restoration ample opportunity to avoid the implementation of such activities and the expenses associated with them. Although we see government bodies undertaking serious attempts to compel companies to fulfil their obligations, these are hampered by a lack of legal and governmental cohesion and coordination. The second is that the law fails to assist and protect people living in the vicinity of mining areas. In particular, rural villagers and small-scale farmers suffer adverse effects by loss of farmland, pollution of the natural environment, and exposure to illegal and hazardous conditions. The lack of implementation of restoration and rehabilitation may impact many others in the future as well.

To resolve these issues, it is not only indispensable to critically take stock of the present structure of coal mining governance, as we have done in this paper, but also to overhaul its organisation so that overlaps may be removed, gaps repaired and clarifications provided where necessary. In terms of research, a study analysing the policies underpinning such changes--or, rather, the lack thereof--would be a very welcome contribution to the debate.

Postscript

Following completion of this paper, in November 2020, the Indonesian government promulgated Omnibus Law No 11 of 2020 on Job Creation, which inserted a new article, 128A, into the 2020 Mining Law. This article offers a no royalty fee fiscal incentive to coal mining license holders (IUP and IUPK) who carry out value-added activities (that is, coal upgrading, coal liquefaction, and coal gasification). This incentive follows governmental plans to step up the domestic derivative industry to reduce the export of unprocessed coal. Furthermore, overlaps in permits and land rights are now addressed in an implementing regulation under the Job Creation Law, Government Regulation No 43 of 2021 on the Incompatibility Settlement of Spatial Planning, Forest Areas, Permits, and Land Rights. Article 12 (2) of this regulation instructs that when a new permit is issued that overlaps with existing permits, the overlapping areas will remain with the existing permit. The article also allows for settlement of such overlaps through a joint land-use agreement between the permit holders.

Chapter 2

Legal Uncertainty in Governing Oil Palm Plantations in Indonesia: Causes and Impacts

This chapter explores two crucial concerns surrounding the licensing of oil palm plantations in Indonesia. Firstly, it analyzes the interplay between the regulatory body overseeing the licensing process and other areas of legislation, including land, spatial planning, environment, and forestry. Secondly, it discusses the diverse types of legal ambiguity that emerge due to the intricacies of the legislation and the permitting system.

Upon examination, it was revealed that the complicated governance of oil palm plantation licensing leads to fuzzy, inconsistent, and incomplete legal provisions. Vague clauses result in varying interpretations by government officials and plantation companies, while conflicting provisions confuse which regulations to follow. Furthermore, incomplete regulations often arise because the technical rules necessary for implementation are absent, giving rise to a legal void. These three factors combine to create legal uncertainty when implementing regulations.

2.1 Introduction

Diverse and conflicting natural resource interests have sparked tensions and contestation in resource-rich locales worldwide (Bernauer et al., 2012; Homer-Dixon, 2001; Homer-Dixon, 1994; Rosengard & Stiglitz, 2015). Different usages of resources, such as individual livelihoods, large-scale industrial exploitation, and nature conservation, have created overlapping claims and disputed usage rights that may involve more than one type of resource. In many cases, one or more of the following drivers are at play: resource ownership, resource access, the decision-making associated with resource management, and the distribution of resource revenues (UNEP, 2015). Furthermore, economies that largely depend on exploiting a single or a limited number of raw resources have become highly vulnerable to fluctuations in global market prices (Auty, 1993; Badeeb et al., 2017; Deacon, 2012).

Both situations—local contestation and economic dependency on exploitation of a natural resource – hold for oil palm plantations, one of the main pillars of Indonesia's economic development. The industry contributed an average 3.5 percent to the country's GDP between 2017 and 2021 (BPS, 2022) and employs over 16 million workers.¹ The sector is seen as crucial to development and poverty alleviation in Indonesia (Mardiharini et al., 2021; Pramudya et al., 2017). Yet it also causes major environmental degradation through the application of pesticides and fertilizers and gives rise to social problems as plantations expand onto lands used or claimed by local people. An extensive and international literature associates the sector with such problems as deforestation, carbon emissions, and land rights conflicts (Obidzinski et al., 2012; Pacheco et al., 2017). An estimated 80 percent of the nation's greenhouse gas emissions are generated by land use and land cover change, much of it driven by oil palm expansion (Daemeter Consulting, 2015a, p. 6). Such land use conversion threatens biodiversity and contributes to climate change (Meijaard et al., 2018; Petrenko et al., 2016; Vijay et al., 2016). A major concern is the increase in conflicts around oil palm plantations. Oil palm plantation expansions have limited the land available to local communities and triggered land conflicts between communities and companies (Coalition of Civil Societies for Indonesian Palm Oil Moratorium, 2018; Human Rights Watch, 2021). The Consortium for Agrarian Reform (KPA), an organization that aims to struggle for fairer agrarian policies and laws in Indonesia, noted 212 agrarian conflicts in Indonesia throughout 2022. Of that number, 99 cases were land conflicts in the plantation sector, and 80 cases concerned the oil palm plantation sector, with an area of conflict reaching 347,998 hectares and resulting in as many as 103,379 households affected (KPA, 2022, p. 18).

¹. See Press Release of Coordinating Ministry for Economic Affairs Nr. HM.4.6/221/SET.M.EKON.3/08/2021

Several studies have investigated the extent to which policies and regulations in the field of oil palm plantations have an impact on the benefits and losses incurred by the sector's operations. Handayani (2010, p. 7-8) explored the national laws and regulations concerning the cultivation of oil palm in Indonesia, and the mitigation of its environmental impacts. The report also seeks to highlight legal obstacles and inconsistencies, and to identify 'problem' areas of the law. Daemeter Consulting (2015a, p. 19-20), examining a similar topic, found that palm oil governance in Indonesia is legally and institutionally complex, involving multiple bodies of law and government agencies related to land, forests, plantations, spatial planning, environmental management, and regional government. Soedomo et al. (2018, p. 69-128) showed that the weakness of regulations, long bureaucratic chains, and non-transparent and unaccountable licensing processes had generated overlapping plantation licenses with forestry and community land. Furthermore, these lead to land conflicts. Yet while these studies focused on the uncertainty of the law of oil palm regulations and licensing practices, they did not examine why the uncertainty of the law occurs.

This thesis explores the causes of such legal uncertainty in oil palm regulations and licensing practices by examining, first, how the layers of the authority of the plantation sector and their relation to other legislation in the land, spatial planning, environment, and forestry create legal uncertainty. Second, we identify the forms of legal uncertainty that arise due to the issues identified and the implications for the permitting process for oil palm plantations.

2.2 Plantation Regulations in Indonesia: Tiered and sector-based legislation

Under Article 33 (3) of the 1945 Constitution, the land, waters, and natural resources in it shall be under the state's control and used for the greatest prosperity of the people. The phrase "under the state's control" (*hak menguasai negara*) means that the state holds the public authority to make policies, administration, regulation, management, and supervision on land and natural resources.²

In order to implement this right of the state to control, the peoples' representative council, along with the government at the central and regional level (i.e. provincial, district or municipal), have the authority to carry out the policy-making and

² Constitutional Court Decisions Case Numbers 002/PUU-I/2003; 055-059-060-063/PUU-II/2004 and 005/PUU-III/2005.

regulatory functions of the state. Subsequently, the government can issue and revoke permits and concessions. The management of natural resources is carried out through a share-holding mechanism or direct involvement in managing State-Owned Enterprises or State-Owned Legal Entities as institutional instruments. To perform supervision, the government has the jurisdiction to control and manage natural resources (Magnar et al., 2010).

The state's obligation to ensure the use of natural resources for the prosperity of the people implies protecting citizens, the environment, and natural resources from excessive or unfair exploitation of private sectors (Mermin, 1982). The state must also provide and guarantee legal certainty for businesses and investments. Accordingly, it should develop and implement regulations that provide the authority of government, particularly in granting permits and controlling them, the scope of rights and obligations of permit holders, and mechanisms to supervise and enforce them when violations occur (Barón Soto & Velásquez, 2015, p. 5).

Therefore, granting a license to an oil palm plantation implies that the government takes actions to regulate, manage, and supervise. In the case of an oil palm plantation, the permit has two leading roles. First, it is the main instrument for directing and controlling oil palm plantation activities. Second, it is a means of distributing land (Hadjon, 1993, p. 3) to oil palm plantations. Consequently, improperly granting a permit will impact the implementation of monitoring and supervision, as well as the distribution of land among communities and oil palm plantation companies.

Further, the regulation of the authority to grant oil palm plantation permits is divided across multiple levels of government (central, provincial, district, and municipal). Besides, it is also sectorally based, given that oil palm plantation operations are also related to other sectors such as the environment, forestry, spatial planning, and investments. Accordingly, before conducting its operations, a plantation company is also required to obtain relevant permits from those such sectors.

This thesis found that this tiered and sector-based regulation of plantations leads to ambiguity of rules. The word ambiguity, or ambiguous, means uncertainty of meaning or intention, as in a contractual term or statutory provision (Garner & Black, 2009, p. 105), or uncertainty or doubtfulness of the meaning of language (Batten, 2010, p. 257). According to Duhl (2009, p. 84), inconsistent terms (or provisions) are ambiguous when one term or provision excludes the other and vice versa. Ambiguity also exists when a term has multiple meanings (Poscher, 2012, p. 129) and ambiguity

in the statement of the law can undermine their applicability and the ability to comply with them (Sennet, 2016).

Tiered and sector-based plantation regulations also give rise to inconsistency of norms. These are inconsistent when they are contradictory to each other to the extent that one implies the negation of the other (Lehman & Phelps, 2005, 369). Intersecting subfields of the law pertaining to plantations contain multiple inconsistencies because subfields are governed by different organizing principles (Engel, 2004, p. 43). Furthermore, we found that the sectoral-based and multi-level government legislation creates incomplete provisions. Pistor and Xu (2003, p. 932) articulate that a law is incomplete if it fails to include all actions it shall cover. When the law is incomplete, it cannot be applied to cases without clarifying the law's meaning. The term 'incomplete' also refers to a situation where implementation regulations or guidelines which are mandated by higher regulations do not exist. Waddell (2004, p. 186) indicates convincingly that a high level of uncertainty will result from such a situation. The incompleteness of regulations also means a delay in their implementation. Detailed or technical regulations are required to ensure an adequate implementation of general provisions.

2.3 Methods

We adopted a doctrinal approach to discover and describe the problem of governance of oil palm plantation permits through an analysis of legislations (Egan, 2017). By applying this approach, we clarify ambiguities, inconsistencies, and incompleteness within rules, place them in a logical and coherent structure and describe their relationship to other rules (Chynoweth, 2008). This thesis starts by exploring the legal framework of government authority concerning oil palm plantations. Hutchinson and Duncan (2012, p. 110-113) convey that the doctrinal method is a two-part process. First, locate the sources of the law. In this step, we attempt to determine an 'objective reality,' that is, a statement of the law encapsulated in legislation on plantations and other related sectors. Having located the content of such legal documents, the second step is interpreting and analyzing the text to identify legal uncertainties within laws and regulations. We based the content of this analysis on information collected through a systematic review of the available laws and regulations regarding the governance of oil palm plantations permits.

We analyse the legislation in two stages, namely vertically and horizontally. We adopted a vertical analysis to examine the relationship between Law Nr. 39 of

2014 concerning Plantations (the 2014 Plantation Law) and its implementation of regulations, such as national government regulations, ministerial regulations, and regional (provincial, district, and municipal) government regulations, including those promulgated by provincial governors or district regents. We applied a horizontal analysis to assess the relationship of regulations at the same level and regulating a similar object, such as between laws, between government regulations, between ministerial regulations, or between regional regulations.

In order to examine the effects of legal uncertainty surrounding oil palm plantations legislation, we selected the East Kalimantan province. This province is one of the big four that have more than 1,3 million hectares of oil palm plantations (BPS, 2023). At present, East Kalimantan has 1,312 million hectares of oil palm plantations in its territory, but East Kalimantan has allocated a total of 3,269 million hectares, or around 25 percent of its land area, to oil palm plantations in its spatial planning document (2015-2035) (Herdiyanto, 2018). This is considerably more than the province of Riau, which has 2,858 million hectares of oil palm plantations (Dinas Perkebunan Provinsi Riau, 2020).

2.4 Legal Framework of Oil Palm Plantation Permits in Indonesia: an overview

This section briefly describes the legal framework for licensing of oil palm plantations. We focus on this issue because permit issuance is a frequent source of problems in oil palm plantation operations. Furthermore, the implementation of rules regarding oil palm plantation permits is also required to comply with related sector legislation, such as land, environment, and forestry, as will be explained in more detail below.

2.4.1 Plantation regulation

The 2014 Plantation Law categorizes plantation businesses into three types, namely cultivation,³ plantation crops processing,⁴ and integrated plantation businesses that combine cultivation and business service plantations.⁵ The types of permits are detailed in the MoA Regulation Nr. 98 of 2013 concerning Guidelines for Plantation Business Permit, that was amended in 2017⁶ (MoA Regulation Nr. 98 of 2013). Under the regulation, a plantation business permit consists of three types: plantation

^{3.} Cultivation is a series of pre-plant activities, planting, crop maintenance, harvesting, and sorting.

^{4.} Processing crops is an activity that processes the main raw material of crops to gain added value.

^{5.} Business service plantation involves the activities to support the business activities of cultivation or business processing crops.

^{6.} The last amended by the Ministry of Agriculture Regulation Nr. 21/Permentan/KB.410/6/2017.

business permit for cultivation (*Izin Usaha Perkebunan untuk Budidaya*: IUP-B), plantation business permit for processing (*Izin Usaha Perkebunan untuk Pengolahan*: IUP-P), and a comprehensive plantation permit combining cultivation and business operations (*Izin Usaha Perkebunan*: IUP).

In case a cultivation area or processing business is less than 25 hectares, an applicant only requires a Registry Certificate of Plantation Business (*Surat Tanda Daftar Usaha Perkebunan Budidaya*: STD-B) and a Registry Certificate of Plantation Processing Business (*Surat Tanda Daftar Usaha Pengolahan*: STD-P). The regent has the authority to issue the permit, STD-B, and STD-P for plantation operations located in his district territory. The governor is authorized to give the STD-B, STD-P, IUP-B, IUP-P, or IUP when a plantation territory includes land in two or more districts or municipalities. In case the plantation will include territory in two or more adjacent provinces, the MoA has the jurisdiction to enact it. The following Table 2 shows the plantation businesses' classification and the required types of permits.

Table 2. Classification and Permit Type of Plantation Business

Classification of plantation business		Type of Permits	Licensors
Cultivation business of plantation plants	Cultivation business of plantation plants with the size of land less than 25 hectares	Registry Certificate of Plantation Business (STD-B)	• The regent/mayor: when the plantation is located in a district or municipal territory. • The governor: when it is situated in two or more districts or municipalities. • MoA: when it is located in two or more provinces
	Cultivation businesses of plantation plants with the size of land 25 hectares or more	Plantation Business Permit for Cultivation (IUP-B)	
Plantation product manufacture	The plantation product manufacturing business has a capacity below five tons of fresh fruit bunch/hour	Registry Certificate of Plantation Product Manufacture (STD-P)	
	The plantation product manufacturing business has five tons or more capacity of fresh fruit bunch/hour	Plantation Business Permit for Processing (IUP-P)	
Cultivation business of plantation and integrated with plantation product manufacturing	The cultivation business of plantation having a size of 1000 hectares or over and having a plantation processing unit	Plantation Business Permit (IUP)	

Under MoA Regulation Nr. 98 of 2013, the holder of plantation permits (IUP-B, IUP-P, or IUP) is required to fulfill several obligations, such as the implementation of an Environmental Impact Assessment (AMDAL).⁷ A permit holder must also facilitate the development of community plantations,⁸ complete the process of acquiring land rights, and report the development of the plantation business to the licensee periodically every six months.

At the provincial level, the Regional Regulation of East Kalimantan Province No. 7 of 2018 concerning Sustainable Plantation Development (the 2018 Provincial Regulation) states the obligation of permit holders to mitigate and adapt to climate change and measure and compile an inventory of greenhouse gas emissions. In addition, the regulation requires permit holders to protect areas of high conservation value.

To respond to the demands of international institutions, markets, and communities requiring that the practices of the oil palm plantation industry be more sustainable,⁹ the Indonesian government issued MoA Regulation Nr. 19 of 2011 concerning System Certification for Indonesian Sustainable Palm Oil (ISPO) (Nanggara, Rosalina et al., 2017). This regulation summarises all laws and regulations regarding the palm oil industry in Indonesia. ISPO requirements consist of seven principles, 41 criteria and 130 indicators covering legal, economic, environmental, and social issues extracted from 137 provisions (Amri, 2014). To strengthen the compliance of business actors with the ISPO system, the MoA enacted Regulation Nr.11 of 2015, which contains more detailed obligations with various administrative sanctions (KPK, 2016).

The MoA regulation on ISPO then was replaced by Presidential Regulation Nr. 44 of 2020 concerning the Certification System for Sustainable Palm Oil Plantation in Indonesia (the 2020 ISPO Regulation). This regulation sets forth that the implementation of ISPO certification must be based on seven principles: compliance with laws and regulations; implementation of good plantation practices; management of the environment, natural resources, and biodiversity; labor responsibilities;

^{7.} An Environmental Impact Analysis is an overall process of assessment on any proposed development that could conceivably affect the environment in order to determine its potential for generating significant impacts.

^{8.} Community plantations are oil palm plantations for communities around oil palm plantation concessions.

^{9.} ISPO has also intended to respond to The Roundtable on Sustainable Palm Oil (RSPO). Plantation practices must adhere to RSPO principles of following applicable laws and regulations that focus on environmental sustainability, planning, and implementation for the long-term socio-economic wellbeing and continuous improvement of the sector. Unlike the RSPO, which is voluntary, the ISPO, as Indonesian government regulation, is mandatory for all palm oil plantations and mills but voluntary for smallholders (For details see: Suharto et al., 2015).

social responsibility and community economic empowerment; implementation of transparency; and sustainable business improvement. It is also stipulated in Article 5(1), that oil palm plantations must apply for ISPO certification. According to article 6, violation of this requirement is subject to administrative sanctions by the MoA. The sanctions are a series of warnings, fines, temporary suspension of the oil palm plantation business, freezing, or, ultimately, a revocation of the ISPO certificate.¹⁰

2.4.2 Land and spatial planning regulation

In the initial phase, a plantation company must have a location permit issued by the local government. This location permit is later replaced with a suitability confirmation of spatial utilization activities (*Konfirmasi Kesesuaian Kegiatan Pemanfaatan Ruang: KKKPR*) and suitability approval of spatial utilization activities (*Persetujuan Kesesuaian Kegiatan Pemanfaatan Ruang: PKKPR*), as regulated in GR Nr. 21 of 2021 concerning Spatial Planning. KKKPR is a document certifying the conformity between spatial utilization activity plans with detailed spatial planning. In the case of a district or municipality that does not yet have detailed spatial planning, PKKPR is applied.

By proposing the target area and outlining a development plan, the application for a KKKPR is submitted to the regent if the requested location is within its jurisdiction or to the governor when the area spans across two districts. According to Law No 26 of 2007 concerning Spatial Planning (as amended by the 2020 Job Creation Law), the proposed location must be located in a designated cultivation area, which is in line with local spatial plans (district or province), indicating land-use types suitable for plantation development.

In order to operate an oil palm plantation, companies are also required to obtain a cultivation right (*Hak Guna Usaha: HGU*) from the Minister of MoAASP/NLA.¹¹ The obligation of oil palm plantation companies to have a HGU is also stated in GR Nr. 18 of 2021 concerning Management Rights, Land Rights, Flat Units, and Land Registration (GR Nr. 18 of 2021) and Minister of MoAASP/NLA Regulation Nr. 18 of 2021 concerning The Procedures for Determining Management Rights and Land Rights. It is also stated in the MoA Regulation Nr. 5 of 2019 concerning Procedures for

^{10.} More details of the principles and criteria of ISPO are regulated in MoA Regulation Nr. 38 of 2020 concerning The Implementation of Oil Palm Plantation Certification.

^{11.} Previously, according to Article 42 of the 2014 Plantation Law, plantation business activities could be carried out by plantation companies if they had obtained HGU or plantation business permit. However, the Constitutional Court stated that the requirement is cumulative (HGU and plantation business permit), not alternative (HGU or a plantation business permit). See the Constitutional Court Nr. 138/PUU-XIII/2015

Business Licensing for the Agricultural Sector, which requires plantation companies to have an HGU before carrying out plantation activities.

GR Nr. 18 of 2021 obliges the HGU holder to manage and maintain the high conservation value areas in their concession in order to protect biodiversity. HGU holders who have an area of more than 250 hectares are required to facilitate the development of community plantations for a minimum of 20 percent of their total HGU areas.

2.4.3 Environmental Regulation

The primary legal reference for the environmental aspect of oil palm plantation is the 2009 Environmental Law and GR Nr. 22 of 2021 concerning The Implementation of Environmental Protection and Management. Both regulations oblige any company that has activities with significant environmental impacts to carry out an environmental impact assessment (AMDAL).

The AMDAL is a comprehensive (ecological and social) impact analysis, planning for prevention and mitigation of negative impacts, and monitoring of impacts and mitigation measures for future years to come (Wakker, 2014, p. 15). A multi-stakeholder AMDAL Commission will assess the proposed AMDAL document. The output of the review is a recommendation, which has become the main prerequisite to issuing a letter of environmental feasibility. The decision of the minister, governor, or regent on whether to issue the environmental approval must consider the commission's decision. The environmental approval is mandatory to obtain a permit for an oil palm plantation (IUP-B, IUP-P, or IUP).

Environmental approval holders should comply with the requirements and obligations contained in the approval. Fulfilment of these must be reported every six months to the licensor (minister, governor, regent or mayor following their authorities). Environmental approval holders are also required to provide guarantee funds for the restoration of environmental functions. Thus, a plantation company is also bound by environmental obligations contained in the environmental approval and AMDAL documents.

2.4.4 Forestry Regulation

Under the MoA decree Nr. 833 of 2019, Indonesia's oil palm plantations reached 16,381 million hectares spread across 26 provinces. 3.4 Million hectares, or 20.2 percent of the total plantation areas, are in forest land (Nugraha, 2019). In 2021, the Audit Board of the Republic of Indonesia (BPK) found that in 2020, of a total of 3,4

million hectares, around 2.9 million hectares of oil palm plantations existed in forest areas without forestry permits (BPK, 2022, p. 26).

The forest areas are under the jurisdiction of the MoEF. Any non-forestry purposes -such as plantations- that use forest areas must obtain permission from the ministry. The distribution of authority, as set out in the 1999 Forestry Law, was changed when the Central Government promulgated Law Nr. 23 of 2014 concerning Regional Government as last amended by the 2020 Job Creation Law. This new law revoked district and municipal authority in governing forestry and gave it to the provincial government.

In order to use a forest area for a plantation, the company must apply for a Forest Area Release (FAR)¹² to MoEF. If the location still has timber, the company needs a Timber Utilization Permit (*Izin Pemanfaatan Kayu*; IPK) for the land clearing to prepare the space for oil palm plantations. Also, in order to address the massive carbon release from forest degradation, particularly from peatlands (MoEF, 2018a),¹³ Government Regulation Nr. 71 of 2014 on the Protection and Management of the Peat Ecosystem as amended in 2016 mandates the retroactive restoration of certain deep peat areas converted by industrial timber and oil palm plantations, in first instance by requiring these plantations to draft Peat Ecosystem Restoration Plans (MoEF, 2018b, pp. 9-10).

Before an oil palm company can begin operations on forestry land, they must also obtain a FAR approval (previously FAR decree) and an IPK. Under GR Nr. 23 of 2021 concerning Forestry Implementation, the holder of the FAR approval has the obligation, among other things, to maintain and protect the forest area being released. Further, the MoEF Regulation Nr. 7 of 2021 concerning Forestry Planning, Changes in Forest Area Designation and Changes in Forest Area Functions, and Use of Forest Areas obliges the approval holder to establish work area boundaries no later than one year after the approval has been awarded.

Concerning the IPK, MoEF Regulation Nr. 58 of 2009 concerning Replacement of Stand Value from Timber Utilization Permits or Land Preparation in Plantation Forest Development states that an IPK holder is required to deposit Forest Resource

¹². Forest area release is the alteration of the allocation of convertible production forests to be a non-forest area.

¹³. In the specific case of emissions from the forestry sector and peatlands, for the period from 2000 to 2016, the average annual level of emissions stood at 709,409 Gg CO₂e. If emissions from peat fires were to be excluded, the average annual level of emissions would be 466,035 Gg CO₂e, with most of that coming from peatland decomposition, which emitted a yearly average of 304,377 Gg CO₂e. See: MoEF, *The State of the Indonesia's Forests 2018* (MoEF (Ministry of Environment and Forestry), 2018)

Provisions (*Provisi Sumber Daya Hutan/PSDH*), Reforestation Funds (*Dana Reboisasi/DR*) and Standing Value Replacement (*Penggantian Nilai Tegakan/PNT*) to the state treasury fund. The permit holder is also obliged to carry out logging activities in the area no later than thirty days after the issuance of the IPK. The MoF regulation also orders the IPK holder to protect the area from various security disturbances, such as illegal logging by third parties and forest fires. Administratively, the IPK holders must prepare and submit monthly reports on the implementation of IPK activities.

Table 3. Description of identical obligations of the license and certificate holders

Sectors	Plantation Permit Holder	ISPO Certificate Holder	HGU Certificate Holder	Environmental Permit/ Approval Holder
Environment	Implement Environmental Impact Analysis (AMDAL), Environmental Management Efforts (UKL) and Environmental Monitoring Efforts (UPL).	- Carry out obligations as stated in the environmental permit/approval; - Provide waste management and utilization; - Maintain the protected areas and areas of high conservation value; - Mitigate of greenhouse gas (GHG) emissions.	Manage, maintain, and supervise the function of high conservation value areas.	- Meet the requirements, environmental quality standards or environmental damage standard criteria as stated in environmental documents and statutory regulations; - Provide guarantee funds for the restoration of environmental functions.
Plantation	Facilitate the development of community plantations ¹⁴ at least 20 percent of the permit area.	- Carry out corporate social responsibility; - Empower indigenous or local peoples - Facilitate the development of community plantations at least 20 percent of the permit area.	Facilitate the development of community plantations at least 20 percent of the HGU.	
Land/Spatial planning	Complete the process of acquiring land rights.	Comply with the laws and regulations in the land and spatial sector.	Comply with the provisions on the use of space regulated in the spatial plan.	

¹⁴. Community plantations are oil palm plantations for communities around oil palm plantation concessions.

The oil palm plantation is closely related to other sectors, and this requires oil palm plantation permit holders to comply with a wide range of sector-specific legislation, such as regarding land, spatial planning, the environment, and forestry. While this sector-based legislation was intended to be complementary, it can also create legal uncertainty. Apart from being bound by its obligations as a plantation permit holder, a palm oil company is also required to meet the obligations of ISPO and HGU certificate holders and an environmental permit/approval holder. The problem then arises, for instance, that when an environmental violation occurs, it must be considered whether it is a breach of the plantation permit, of the environmental permit/approval, of the ISPO or of the HGU certificates. Depending on the outcome, the authority (and duty) to investigate lies either with the licensor of the plantation or environmental permit/approval, or with the issuer of the ISPO or HGU certificates. An illustration of the identical obligations of the license and certificate holders can be seen in the following Table 3:

2.5 Procedure of Plantation Business Permit

The mechanisms for the licensing of oil palm plantations is regulated along several paths. Chart 2 (below) presents the procedure for a plantation business permit and how this relates to other sectors and licenses.

2.5.1 Investment Registration

The principal permit is mainly issued for administrative purposes, such as to allow a company to conduct field surveys and begin consultations with the relevant landowners in the area envisaged for development. The applicant must apply for FAR approval to the MoEF if the proposed land is in a forest area. In January 2018, the principle permit was changed to Investment Registration through Investment Coordinating Board Regulation Number 13 of 2017 concerning Guidelines and Procedures for Investment Licensing and Facilities. To obtain the investment registration, an applicant applies for it to the One-Stop Investment and Integrated Services Office, both at the central, provincial and district or municipal levels following their respective jurisdiction.

2.5.2 KKKPR and PKKPR

As we explained above, KKKPR and PKKPR have replaced the location permit. A KKKPR or PKKPR is granted to a company to acquire the required land for investment. The applicant applies to the regent or mayor to obtain a KKKPR or a PKKPR if the proposed location is in one district or municipality. The application is to the governor when the area is in two or more districts or municipalities in one province. In case the location is cross-provincial, the applicant conveys the request to the Minister of MoAASP/NLA.

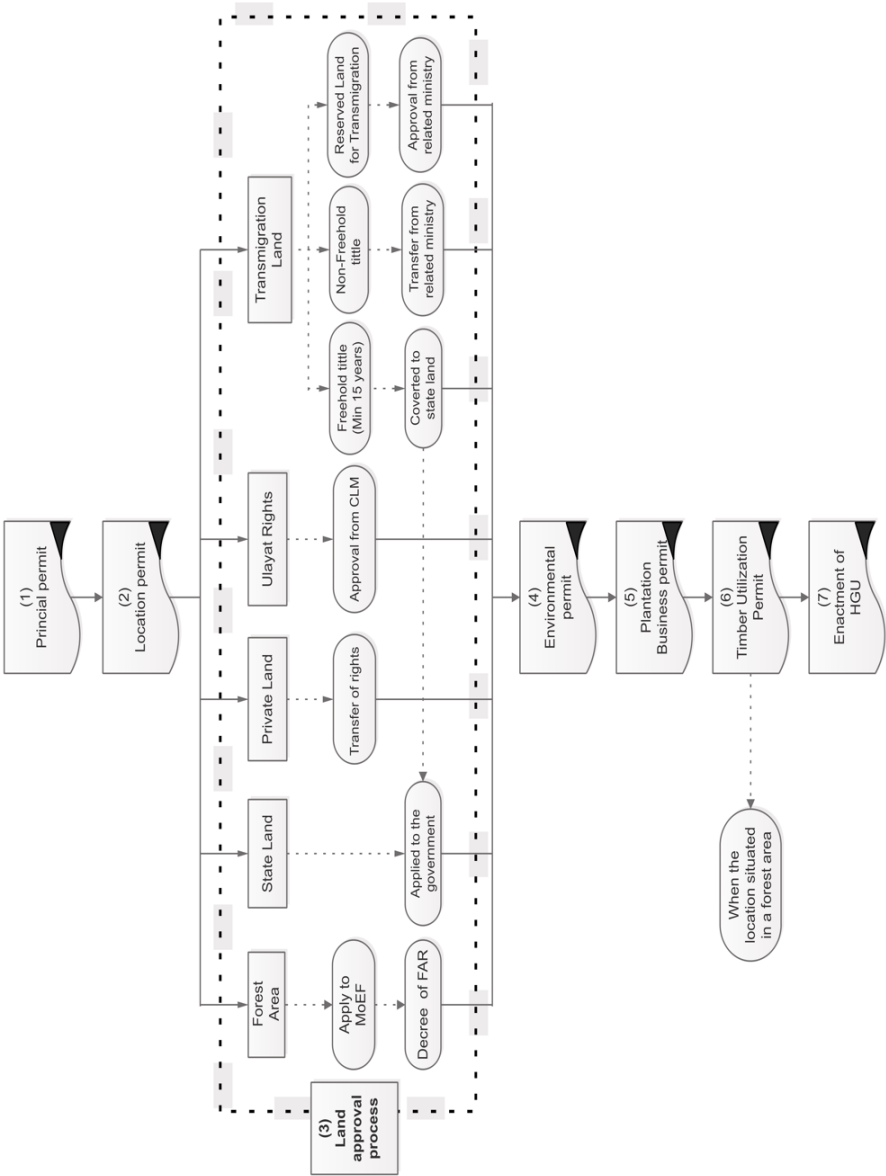


Chart 2. Procedure of Plantation Business Permit

2.5.3 Land approval process

The applicant can apply directly to the government if the requested land is unoccupied state land. When another party controls or cultivates the state land, the applicant must negotiate an agreement with that party regarding compensation if there are plants and buildings. If the land is owned by an individual, a legal entity or a joint ownership, it must first be released from that land right status and converted to state land following the prevailing regulations. In regard to the land under *ulayat* rights,¹⁵ the applicant must obtain written approval from the customary law community to convert the land status to state land.

Land located in a state forest zone must be released through an MoEF decree. Land that is under transmigration management rights can be released through three possible steps. First, if the owner(s) have a certificate of ownership, agreement between the parties must be reached about compensation so the land can be converted to state land. Second, if no ownership certificates have been provided and the land is formally still state land, the applicant must obtain a handover from the Ministry of Transmigration Affairs. Third, if the status is land reserved for transmigration and has not been used for transmigration purposes, the applicant requires the approval from the ministry of transmigration affairs to cultivate it.

2.5.4 Environmental approval

A plantation company requires environmental approval given that the plantation operation may disrupt the ecological balance and cause pollution and ecosystem damage. Such approval requires an AMDAL that has been accepted by the authorized agency. In order to obtain the approval, the plantation company applies to MoEF, governor, regent, or mayor following their jurisdiction.

2.5.5 FAR approval

If the designated plantation land is located in a forest area, the company must apply for a FAR to MoEF. The procedure of releasing forest areas is governed by MoEF Regulation Nr. 96 of 2018 concerning the Procedures for Release of Production Forest Areas that Can be Converted and was amended by MoEF Regulation Nr. 50 of 2019. This regulation decrees that when forest areas are released for plantations, 80 percent of the territory may be used by corporations while 20 percent must be developed for community plantations. Also, the company should develop a partnership with communities around the permit areas to establish community plantations.

^{15.} Under the MoAASP/NLA Regulation Nr. 18 of 2019 concerning Procedures for the Administration of the Ulayat Land of the Unity of Customary Law Communities, the *ulayat* right is the right of communal unity of a customary law community to control, manage and utilize, and preserve its customary territory following the values and applicable customary law.

2.5.6 Timber Utilization Permit

Before clearing any forest with the remaining timber stand, a plantation company or its contractor must apply for an IPK. This permit is not directly connected to the land acquisition permits and plantation permits. It needs to be obtained once the right to cultivate is secured but can still be applied for when the HGU has already been received, so long as there is undeveloped forest. A timber stand survey must be conducted to obtain an IPK to determine due taxes. The procedures to obtain the IPK are arranged in MoEF Regulation Nr. 62 of 2015 concerning Timber Utilization Permit.

2.5.7 Cultivation Rights (HGU)

Under GR Nr. 18 of 2021, an individual may request an HGU of 5 to 25 hectares of land. A legal entity may request 25 hectares or more; a maximum is currently not defined. The HGU period is set at a maximum of 35 years and can be extended with a maximum of 25 years. When the land is situated in the production forest area, it must be initially released from its status as a forest area. And if there are rights of third parties, the applicant is obliged to settle with the owner. If *ulayat* rights pertain to the land, the GR states that the *ulayat* area should be released from that status following the provisions of the applicable legislation but does not define which that is.

2.6 Legal uncertainty in oil palm plantations permits governance

Awarding a permit to a plantation company implies two things. First, a permit is the main instrument to supervise and control oil palm plantations activities. Second, a license is an instrument used to distribute land for oil palm plantations. Uncertainty in issuing a permit can generate problems in supervising and controlling oil palm plantations and land distribution. In this section, we investigate instances of legal uncertainty concerning the governance of oil palm plantation permits by identifying and discussing examples of ambiguity, inconsistency, and incomplete regulations related to oil palm plantations.

2.6.1 Ambiguity in terms used and land allocation

We address the ambiguity of law in Article 12 paragraph (1) of the 2014 Plantation Law. The provision states that in the case of land required for the plantation business is land under *ulayat* rights of indigenous peoples, which in Indonesian law is described as a customary law community (*masyarakat hukum adat*), the plantation company should consult with the customary law community holding these land rights to obtain agreement on the transfer of land (*penyerahan tanah*) and the reward (*imbalan*).

Two terms have an obscure meaning in this article. First, the term 'transfer of land'. Does it mean a release of land rights as referred to in GR Nr. 18 of 2021? If referring to the GR, this would mean that upon completion of the land transfer, the land status becomes state land. As the owner of the HGU, the company is able to transfer the rights to other parties. If the term 'transfer of land' means the release of land rights, this implies then a termination of the legal relationship between indigenous peoples and their land. This may threaten the existence of these people as a 'customary law community' because one of the requirements for recognizing them is the existence of their territories. If the rights to their land are handed over, the indigenous people lose their territories, and their identity as a community.

It is challenging to use the term "reward" in a situation where a company already has a plantation permit and will occupy customary land, but the indigenous people refuse it. An instance of an ongoing issue regarding it is demonstrated by the case of the indigenous people of Dayak Modang Long Wai (people of DMLW) and the oil palm plantation company PT Subur Abadi Wana Agung (PT. SAWA) in Long Bentuq village, in the East Kutai district. The conflict emerged when the district government granted a plantation permit to PT SAWA in February 2006, covering approximately 14,000 hectares in the Busang sub-district, including 4,000 hectares of the DMLW traditional territory in Long Bentuq village.

The people of DMLW soon found out that the land acquisition encroached upon their territories. In response, they imposed a customary fine of 13 billion rupiahs. However, the company was only willing to pay 70 million rupiahs, which caused a further escalation of the conflict (Susanto, 2019). During the conflict, the National Land Agency issued HGU to PT SAWA in 2011. The issuance of the HGU implies that the land was legally transferred to PT SAWA. Regarding HGU, the validity period is 35 years and can be extended up to 25 years. After that, the HGU holder has the choice to renew it for a maximum of 35 years, resulting in a total of 85 years. When the HGU expires, the land will become state land. It implies that when the land transfer occurred, the people of DMLW lost their customary land rights indefinitely.

The ambiguity of provisions of local regulations related to oil palm plantations is also shown by the East Kalimantan Province Spatial Plan (2015-2035). Under the regulation, the allocation area for cultivation is 10,451,331 hectares. However, when the allocation for each land-based sector is added up, it reaches 15,702,774 hectares, which exceeds the designated cultivation area, as illustrated in Table 4.

Table 4. The Land Use Allocation in Cultivation Area according to Spatial Planning of East Kalimantan Province (2015-2035)

Land Use	Allocation
Production forest	6.055.793 Ha
Agriculture and plantation	3.681.657 Ha
Fishery	187.304 Ha
Industry	57.176 Ha
Settlement	97.442 Ha
Tourism	396.266 Ha
Coal Mining	5.227.136 Ha
Total	15.702.774 Ha

Source: *Spatial Planning of East Kalimantan Province (2015-2035)*

The uncertainty of the allocation of this area has triggered the conflict over the land of oil palm plantations in East Kalimantan. In February 2018, for instance, there were 41 cases of land conflicts related to oil palm plantations in this province (Antara Kaltim, 2022).

The ambiguous formulation of the regulation, as explained above, provides opportunities for multiple interpretations that create problems in the implementation. Such ambiguity can lead to legal uncertainty that results in conflicts. During 2009-2019, therefore, the administrative court in Samarinda examined eighteen conflicts caused by overlapping claims on land use (Nasir et al., 2022).

2.6.2 Inconsistency in obligations of permit holders

Inconsistency in permit holder obligations can also induce legal uncertainty, especially regarding regulations. It is problematic when it is unclear what the law stipulates as permit holders are unsure what requirements must be met. At the same time, such inconsistencies generate a grey area for permit holders to avoid unwelcome obligations.

Under the 2014 Plantation Law, plantation companies must facilitate community plantations for at least 20 percent of a company plantation area. This provision is regulated in more detail in the 2013 Plantation Regulation Permit, which states that the obligation to facilitate community development is for permit holders who have 250 hectares of land or more (See Article 15[1]). The MAASP/NLA Regulation Nr. 18 of 2021 concerning The Procedures for Determining the Management Right and Land Right also states a similar obligation. Specifically, this regulation orders to facilitate the development of a surrounding community plantation for a minimum

of 20 percent of the total HGU area. Furthermore, under article 82 (3), this obligation must be carried out following plantation sector legislation. However, this provision is inconsistent with plantation regulations, which state that the 20 percent figure refers to the entire permit area (IUP-B or IUP), rather than to an HGU.¹⁶ This raises uncertainty (Laoli, 2019) because an HGU area is always different from the IUP (Panjaitan, 2019).

An investigation conducted by BBC News, the Gecko Project, and Mongabay demonstrates a discrepancy in how plantation companies determine the proportion of land for community plantations. Plantation companies often interpret the community as entitled to one-fifth of the land planted by the company, but sometimes palm oil companies may construe it differently, so they they can manage all plantation concession areas and ask the community to provide land for community plantations. This, however, was challenging to find because the company already occupied all the land. Or the company plots land for a community plantation in a different location than was given by the community and that is located in a remote and inaccessible place.¹⁷

To address the challenge of providing 20 percent of the land for community plantations, the government has proposed alternative methods. According to Article 16 of GR Nr. 26 of 2021 concerning the Implementation of Agriculture Affairs, community plantations can be developed through various partnerships. Articles 7 and 8 of MoA Regulation Nr. 18 of 2021 concerning the Facilitation of the Development of Community Plantations in the Surrounding Areas explain that partnerships can take different forms, such as supporting productive plantation businesses. It includes facilitating land management and legality, providing certified seeds, technical consultants, and land mapping technology, and offering education, training, and guidance to develop human resources. However, considering these alternatives have been recently introduced, they have not yet been implemented in the field, especially not in East Kalimantan.

2.6.3 Incompleteness in implementing regulations

A hurdle in implementing Indonesian legislation is the absence of implementing regulations that are mandated by higher rules. Such a condition can generate a gap in the law that arises from an absence of appropriate legal policy tools in

^{16.} Article 58(1) of the 2014 Plantation Law states that plantation companies have IUP or IUP-B shall facilitate the development of community plantations around the low of 20% of the total area of plantations managed by plantation companies.

^{17.} <https://thegeckoproject.org/id/articles/the-promise-was-a-lie-how-indonesian-villagers-lost-their-cut-of-the-palm-oil-boom/> accessed 26 June 2023.

regulations (Waddell, 2002). In the plantation sector, the 2014 Plantation Law mandated 32 implementing regulations, including 21 government regulations and eleven ministerial regulations. According to the law, all implementing regulations must be enacted within two years after its introduction. However, six years since its establishment, out of 21 government regulations, only one has been implemented, namely Government Regulation Nr. 24 of 2015 concerning the Collection of Plantation Funds. The MoA has not yet established any of the 11 ministerial regulations mandated by the 2014 Plantation Law either at the time of writing.

One of the government regulations mandated by the 2014 Plantation Law is a further arrangement of the mechanisms to facilitate community plantation development, including the imposition of sanctions and the types and numbers of fines. The present absence of such regulation is criticized by the Indonesian Palm Oil Association (GAPKI). According to this organization, this rule's absence causes obscurity around the requirement to develop a community plantation (Sawit Indonesia, 2019) and creates legal gaps regarding the obligation to facilitate community plantation development and regarding the enforcement of the obligation (Nurmayanti, 2019).

Regarding the indigenous people, Article 13 of the 2014 Plantation Law states that customary law communities (*masyarakat hukum adat*) shall be determined following the provisions of the legislation. This law does not explicitly refer to which regulations are meant. However, when referring to existing legislation, the arrangements regarding the identification, verification, and determination of customary law communities are regulated in the Minister of Home Affairs Regulation Nr. 52 of 2014 concerning the Recognition and Protection of Customary Law Community. At the same time, related traditional rights are handled in MoAASP/NLA Regulation Nr. 18 of 2019 concerning Procedures for Administrative Rights of Customary Law Community Units. Furthermore, if it is related to customary forests, the reference is the MoEF Regulation Nr. 17 of 2020 concerning Customary Forests and Private Forests.

With regard to the land under *ulayat* rights, three such regulations stipulate that it can only be recognized if the district government has legally acknowledged the customary law community, either through a district regulation or a regent regulation or decision. However, in practice this raises a range of problems. After all, in 2022 the Customary Territory Registration Agency (BRWA) identified 1,119 maps of customary areas with a total area of 20.7 million hectares. Yet local governments (provinces, districts, or cities) only recognized 189 customary areas, with a total area of 3,1 million hectares, which is only fifteen percent of the total number of customary areas identified by BRWA (Wicaksono, 2023).

This outcome, and hence the provision, has triggered conflicts between oil palm plantation companies and indigenous peoples who maintain their claims regardless of governmental recognition. Sawit Watch (2021, p. 5), for example, stated in 2021 that out of 1,065 conflicts between communities and plantations, 116 cases (or 10.8 percent) involved indigenous peoples as claimants of land rights.

In terms of the people involved in the DMLW case, the absence of district regulations or regent decrees that recognize them becomes a significant issue in their efforts to retain and protect their land. Their bargaining position has been weakened since the regent issued decree Nr. 130 of 2015 that defined the administrative boundaries between Long Bentuq Village, Rantau Sentosa Village, Long Pejeng Village, Busang District, and Long Tesak Village in Muara Ancalong District in East Kutai. As a consequence of this decision, a part of the DMLW customary area of Long Bentuq Village was included in another village's administrative area, including the disputed 4,000 hectares claimed by the people of DMLW. The claim of the people of DMLW is accordingly not perceived as legally valid since the land is administratively outside the Long Bentuq village area.

Furthermore, the company and district government have stated that they cannot acknowledge the customary rights of the people of DMLW since their existence has not been officially recognized through a regent decree, as per the Minister of Agrarian Regulation Nr. 5 of 1999 concerning Guidelines for Handling Customary Law Community's Ulayat Rights Issues.¹⁸

Against this background, we identify two aspects that generate incompleteness of law. First, when the government did not provide implementing regulations or guidelines as mandated by higher legislation. Second, when existing rules do not comprehensively regulate objects. This incompleteness of law creates legal gaps and a vacuum that leads to legal uncertainty, with tragic consequences for some communities.

2.7 Conclusion

The governance of oil palm plantation licensing is complex and problematic, which is caused by two factors: the division of authority and shortcomings in the legislation. Three layers of authority govern the process (national, provincial, and district/municipal). Each level of government sets policies and legislation regarding oil palm plantation permits, but frequently these do not take other levels' legislation

¹⁸. See: Siaran Pers PT Subur Abadi Wana Agung: PT SAWA Telah Ganti Rugi Lahan Long Bentuq. <https://www.mongabay.co.id/wp-content/uploads/2021/02/dalam-rilis-perusahaan-.pdf>

into account. At the same time, sectoral-based policies and regulations also hold authority in the process. Sectors, such as land, spatial planning, forestry, and the environment contain legislation that impacts or conflicts with palm oil sector legislation. Authority between these various sectors is not clearly defined by the law.

The second factor is a lack of clarity of the regulations. This is evident in three different ways. First, the ambiguity of terms generates multiple interpretations. Second, the inconsistency of rules, both within regulations and between two or more regulations makes it uncertain which should be applied. Third, the incompleteness of regulations means a delay in their implementation. Detailed or technical regulations are required to ensure general provisions that can be implemented adequately. The absence of these implementing regulations is largely caused by a failure of responsible government entities to meet the stated deadlines for preparing and promulgating these.

All these issues can be resolved. The courts could ascertain the meaning of ambiguous provisions, or governments could revise legal texts. To overcome inconsistencies between regulations (central, provincial, and district) is to harmonize all rules governing the same object. Incompleteness could be addressed by the appropriate governments formulating and enacting the required implementing regulations to fill the legal gaps or prevent the vacuum rules.

We wish to highlight two significant consequences of this legal uncertainty. The first is that plantation companies benefit the most from the present situation. For instance, the absence of implementing regulations allows permit holders to delay their obligations to facilitate community plantation development and enforcing this obligation. The second is the lack of laws to protect and develop the welfare of the people living near plantation areas. With regard to indigenous peoples, the absence of implementing regulations makes them struggle for formal recognition by the government to have an equal bargaining position with companies to receive adequate compensation when their land is dispossessed as a consequence of a concession permit or HGU.

Chapter 3

Environmental Management of Coal Mining Areas In Indonesia: The Complexity of Supervision

This chapter is adopted and modified from:

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This chapter examines the complexity of supervising the environmental management of coal mining operations in East Kalimantan, Indonesia. It describes two issues regarding this complexity. Firstly, it discusses how the existing legal framework hampers the government's authority in supervising coal mining activities. Secondly, it describes the societal and environmental problems that emerge in areas used for coal mining operations and how these relate to law and its implementation.

We found that the current cross-sectoral and multi-level arrangement of mining supervision leads to uncertain regulations on supervising the environmental management of coal mining operations. This chapter also shows that incomplete provisions lead to a legal vacuum at the implementation level. Inconsistent, ambiguous, and vague norms cause uncertainty and different understandings of performing supervision of environmental management in coal mining areas.

Moreover, supervisors are limited by a lack of capacity, funding, and personnel. Mining and environmental inspectors tend not to follow up on environmental damage if permit holders assure them of their intentions to address such issues. We conclude that mining permit holders benefit most from this situation, while local populations and the environment are most at risk of being negatively affected.

3.1 Introduction

As an extractive industry, coal mining requires extensive land, and hence the sector typically intersects with environmental damage. Without adequate control, coal mining creates ecological problems such as soil erosion, land and water degradation, and biodiversity loss (Setiawan et al., 2021) which, in turn, cause problems for local communities. Managing environmental impact is therefore an essential part of modern-day coal mining operations. In Indonesia, which holds 39.9 billion tons of coal or about 3.7 percent of global coal reserves (BP, 2020, p. 44) this responsibility is divided among multiple government bodies whose respective tasks and authorities are stipulated in various sector-based laws on mining, regional government, environment, and forestry.

We studied the supervision of mining operations on the ground in the province of East Kalimantan. This province holds 34 percent of Indonesia's resources and 38 percent of its national coal reserves (BG ESDM, 2020b, p. 61). The provincial government has allocated 5,227,136 hectares, 40.1 percent of the province's territory, for coal mining in its 2016-2036 spatial planning document. In 2019, 48.2 percent of the total national production of 616 million tons of coal came from East Kalimantan (Bank Indonesia, 2020a, p. 61), making the province Indonesia's largest coal producer. In April 2016, 1,404 mining permits were in force in East Kalimantan (Antara Kaltim, 2017; Rusmadi, 2017). Most of these permits have been issued by provincial and lower governments. Following a license evaluation in July 2021, however, MoEMR announced that of these 1,404 permits, only 386 remain valid. The rest has been declared invalid because they have expired, the permit holder failed to comply with administrative, technical, environmental, or financial requirements, or because a permit's area overlaps with other permits (such as other coal mines, plantations, or protected areas) (ESDM, 2021). In line with the transfer of authority in the coal mining sector that is discussed in what follows, the supervision of these remaining 386 permits is carried out solely by the MoEMR.

Coal is the central pillar of East Kalimantan's economy. Between 2015 and 2019, the coal mining sector contributed 33.8 percent to the province's gross regional domestic product (GRDP) (BPS Kaltim, 2020). The industry also contributes significant revenues to the province through the national Natural Resources Revenue Sharing Fund (DBH-SDA),¹ from which lower governments receive partial funding in alignment with the fiscal balance between the central, provincial and district (*kabupaten*) or municipal (*kota*) governments (the latter two are jointly also known as 'regional' governments

¹ DBH-SDA (Danah Bagi Hasil – Sumber Daya Alam) is a fund of non-tax state revenue generated by the forestry, mineral and coal mining, fisheries, oil and gas, and geothermal sectors. Allocation of these funds is based on the regions' needs as well as on the amount of revenue generated in their territories.

(*daerah*)). In 2020, DBH-SDA revenues made up 33.6 percent of the USD 1.26 billion that the central government allocated to East Kalimantan's regional governments as Transfer to Regions and Village Funds (*Transfer ke Daerah dan Dana Desa*/TKDD).² As much as 95 percent of this DBH-SDA contribution originated from revenues of coal, natural gas, and petroleum in the province (DJPk Kemenkeu, 2020). The massive coal industry causes various problems for the population in the province. Land conflicts between mining companies and local communities are prominent (Fünfgeld, 2016; WaterKeeper' Alliance & JATAM, 2017), as are disputes over pollution caused by mining that affects harvests, degrades forests, and poses a risk to the health of the local population (Anggraeni et al., 2019; Kristanti et al., 2019). The enormous coal reserves are regularly described as a resource curse for the province (Fauzi et al., 2019; Rahma, 2019), both because of the province's economic dependency on coal and because of the mismanagement, corruption, collusion, and nepotism that regularly come to the fore in the province's mining industry (Bersihkan Indonesia, 2020; Hamzah, 2020).

The legal framework of coal mining does include rules and regulations to address land conflicts and even pollution, but at the same time it is characterized by inconsistent regulations and a lack of enforcement (Jackson & Green, 2017; Stedman & Green, 2018, 2019). Toumbourou et al. (2020, p. 12), who examined the failure of the provincial government to implement regulations on coal mining reclamation and post-mining rehabilitation in East Kalimantan, found that contestation over legal meanings and definitions, limited administrative and judicial capacities to enforce policies, the political context of conflict settlement, and the application of extra-legal intimidation and violence by paramilitary groups on behalf of mining companies all contributed to hampering a successful implementation of legal rules and regulations (see also Bakker, 2016b).

Furthermore, Nasir et al. (2022, p. 63) highlighted three main problems that impede effective coal mining governance. The first is the distribution of authority over three different levels of governance (regional, provincial and national), which overlap, are contradictory, and lack mutual coordination. The second issue concerns a lack of coordination and the slow speed of the revision of coal mining governance. Decentralization, re-centralization, and new divisions of coal mining authority are causing problems in legislation due to overlap, contradictions, and a lack of implementing regulations. The third is the existence of multiple permits for the same plots of land and considerable overlap between licenses and other land titles.

² TKDD is part of the state expenditure to fund the implementation of fiscal decentralization. This fund is distributed to support the needs of public services in the regions.

Analysis and discussion of the legal uncertainty of coal mining supervision and its impact on environmental degradation are essential, considering that the aforementioned papers do not specifically address the implications of the legal framework of mining supervision on the environmental damage around the mining sites. We argue that the dynamics of laws and policy-making in the mining, environment, and forestry sectors lead to legal uncertainty. Moreover, this situation is exacerbated by a lack of capacity, funding, and personnel for mining and environmental supervisors.

Following this discussion, this paper addresses two main issues. First, it explores how the dynamics of coal mining laws and policy-making can create inconsistency, incompleteness, ambiguity, and vague norms of mining supervision in Indonesian law and to what extent it creates legal uncertainty in coal mining supervision. Second, it investigates the implications of the legal uncertainty in coal mining supervision and the limitations of supervisors for the environmental damage around the mining sites. We begin by outlining the theoretical framework and approach we applied to collect and analyse data in this research. Next, we analyse legislation governing the environmental supervision of coal mining operations in the mining, environment, and forestry sectors to understand the distribution of supervisory authority. This section also offers a brief overview of inconsistency, incompleteness, ambiguity, and vague norms that emerged from the dynamics of laws and policies on coal mining and related sectors. Subsequently, we illustrate the consequences of this legal uncertainty by discussing three cases to demonstrate how coal exploitation can have disastrous consequences for the environment and village settlements. The case studies also explain how the laws do not work correctly because of inconsistency, incompleteness, ambiguous, vague norms, and the lack of supervisors' capacity, funding, and personnel. This section will also reveal factors beyond the legal aspects that influence the lack of supervision.

3.2 Theoretical framework

To address the research questions above, we begin the analysis with the concept of the state's right to control (*hak menguasai negara*). Article 33 paragraph (3) of the 1945 Indonesia's constitution forms the basis of the legal framework for natural resources management in Indonesia (Suparto, 2020; Zon et al., 2016). The article states that "the land, waters and natural resources within shall be under the powers of the State and shall be used to the greatest benefit of the people." The phrase "shall be under the powers of the state," is known as the notion of the state's right

to control land, waters, and natural resources in the Indonesian legal system (Butt & Lindsey, 2008). In recent years, the Indonesian Constitutional Court has broadened the interpretation of this right. The court ruled that the phrase 'controlled by the state' in Article 33 paragraph (3) of the constitution means that on land and natural resources, the state holds the public authority of making policies, administering, regulating, managing, and supervising (Magnar et al., 2010).

These five functions are regulated by multiple laws and regulations in each natural resource sector and at different levels of government (central and regional). In terms of environmental management in mining areas, the legislation comes from multiple sectors and various levels of government, which makes it very dynamic. We found that apart from responding to the development of social, economic, and political situations, the dynamics have also caused inconsistency of regulations. It is because the regulations regarding the supervision of environmental management in mining areas are cross-sectoral, which involves mining, environment, forestry, and spatial planning sectors. Things are said to be inconsistent when they are contrary to each other to the extent that one implies the negation of the other (Lehman & Phelps, 2005, 369). Engel (2004, p. 43) states that intersecting subfields of the law are fraught with inconsistency, given that not all subfields are governed by the same organizing principles. Inconsistency of norms on the supervision of environmental management in mining areas is also caused by the authority to make regulations in the environmental and spatial planning sectors, which are multi-level governments, namely at the central, provincial, and district or city governments.

In addition to inconsistency of regulation, we found that the sectoral-based and multi-level government legislation created incomplete provisions. Pistor and Xu (2003, p. 932) articulate that a law may be incomplete if it fails to include all actions it shall cover. Alternatively, the law may be incomplete because it uses open-ended, vague wording, as a result of which the boundaries of the law are not clearly delineated. When the law is incomplete, it cannot be applied to cases without clarifying the law's meaning. The term 'incomplete' also refers to a situation where implementation regulations or guidelines which are mandated by higher regulation do not exist. Waddell (2004, p. 186) indicates that a high level of uncertainty will result from such a situation. The incompleteness of regulations means a delay in their implementation. Detailed or technical regulations are required to ensure how to implement the general provisions adequately. Implementing regulations are also needed to avoid unilateral interpretations from the government on how to apply the rules.

Furthermore, we identified that legislation of the supervision of environmental management in mining areas is ambiguous. The word ambiguous or ambiguity means uncertainty of meaning or intention, as in a contractual term or statutory provision (Garner & Black, 2009, p. 105) or uncertainty or doubtfulness of the meaning of language (Batten, 2010, p.), while Duhl (2009, p. 84) points out that inconsistent terms (or provisions) are ambiguous because one term or provision excludes the other and vice versa. Sennet (2016) portrays how ambiguity relates to legal uncertainty. He concludes that ambiguity in laws can undermine their application and the ability to comply with them. The facts about ambiguity can matter a great deal when determining policy, an extension of the law.

Finally, we found vague provisions related to the supervision of environmental management in mining areas. This term (vagueness) is often confused with ambiguity. Both are similar phenomena but indeed different (Friedrich, 2017, pp. 7-8). Ambiguity exists when a term is interpreted in more than one way. On the other hand, vagueness happens when a word's meaning parameters are not clearly defined (Poscher, 2012, p. 129). Vagueness also exists when a word or phrase reduces the level of information in a statement (Codish & Shiffman, 2005, p. 146). Alternatively, as stated by Kennedy, vagueness raises more profound questions about knowledge of meaning (Kennedy, 2019, p. 60). Vagueness in the texts of laws, Soames (2014, pp. 288-289) writes, can cause varied or wrongful enactment as the lawmakers' intentions are not clear.

3.3 Methods

We applied an interdisciplinary approach that is common in socio-legal studies (Schrama, 2011), investigating law in the books as well as the context within which law exists and functions (Banakar & Travers, 2005). In other words, we observe the law as an empirical phenomenon in society (Wignjosoebroto, 2002). This field research was carried out in stages between May 2019 to August 2021 in the province of East Kalimantan. During the COVID-19 pandemic, we have had to rely on online contact because all travel and face-to-face interactions to collect data were not allowed. To respond to the dynamics at the research site, we conducted several updates via phone calls.

Thus, this study proceeded in two steps. The first step consisted of a desk study to analyze the legal framework of government authority concerning coal mining supervision. We reviewed national laws and government regulations on coal mining,

environment, and forestry, as well as ministerial regulations of related sectors such as MoEMR and MoEF. We also studied provincial regulations related to coal mining, environment, and forestry sectors at the regional level.

The second step consisted of an empirical study of coal mining supervision in the field. We opted to focus on three prominent cases to obtain a thorough understanding of current practices and the understandings thereof by the various stakeholders. We collected data through field visits during which we observed the state of mining in each case and conducted interviews as well as shorter conversations with stakeholders involved. We selected the villages of Mulawarwan, Kerta Buana, and Sungai Nangka in the Kutai Kartanegara district, considering the vast mining concessions there and the conflicts between the communities and mining companies due to environmental degradation. The entire village of Mulawarman, for instance, overlaps with mining concessions, and villagers were even asked to be relocated as this overlap made the village unsuitable for habitation. We also used secondary literature, such as newspaper articles, other media reports, and court reports to further comprehend events in these cases.

In addition, interviews were held at the provincial and district levels with several officials from the energy and mineral resources agency, the environmental agency, and the forestry agency. Most of the interviews were conducted as part of a seminar or informal forum meetings so that the discussion could be more relaxed. At the beginning of this research, when still exploring the performance of coal mining supervision, we visited the three villages and organized several informal meetings with villagers. Along with the interviews, we also made observations to cross-check secondary data by focusing on nonverbal expressions or feelings, interactions in the sense of communication and exchange of goods and products, as well as actual practices (Schmuck, 2006).

To address the research questions outlined above, we began the analysis of the legislation by adopting a doctrinal legal approach to examine laws and regulations, comprising a critical conceptual analysis of all applicable rules to investigate the meaning of provisions of the law concerning the issues under examination (Hutchinson, 2016; Kharel, 2018). We organized the analysis in two types. First, we adopted a vertical analysis to examine the relationship between the 2009 Mining Law (as amended in 2020) and its implementing regulations, such as government, ministerial, and regional regulations. Subsequently, we applied a horizontal analysis to assess the relationship between rules at the same level and regulating a similar object, such as among laws, government regulations, ministerial regulations, or regional

regulations. Both analyses intend to investigate the inconsistency of the content between the statutes and related rules. Furthermore, to identify the incompleteness of the law, we looked at the supervision of environmental management in mining areas in the existing legislation. Based on this approach, we argue that incomplete provisions exist when the related regulations fail to address particular or relevant actions and do not provide more detailed rules (Pistor & Xu, 2003; Waddell, 2002).

3.4 Examining regulations of environmental supervision of coal mining operations

Environmental regulations of Indonesia's coal mining activities are dispersed among the mining, environment, and forestry sectors. Regulatory change in each of these three sectors thus leads to policy changes in environmental protection and mining management supervision. This section explains how the dynamics of regulation in these three sectors have led to the failure of implementing environmental control around coal mining operations.

3.4.1. Coal mining regulations

In 2009, the central government enacted a new Mining Law to replace the 1967 Mining Law. The 2009 Mining Law gave authority to supervise coal mining activities to the national, provincial and regional levels of government. Each could develop legislation for this purpose and issue mining permits. Following up on the 2009 Mining Law, the central government enacted Government Regulation Nr. 55 of 2010 concerning Mineral and Coal Mining Direction and Supervisions (GR Nr. 55 of 2010) and its implementing regulations such as MoEMR Regulation Nr. 26 of 2018 concerning Implementation of Good Mining Principles and Supervision of Coal and Mineral Mining (MoEMR Regulation Nr. 26 of 2018) and MoEMR Decree Nr. 1827 of 2018 concerning The Guidance of The Implementation of Good Mining Practice.

Under these regulations, the provincial and regional governments authorize the supervision of environmental management, including monitoring permit holders' compliance with environmental quality standards. In its implementation, this supervision is carried out by a mining inspector (MI),³ in coordination with an

³ The authority and tasks of the MI are regulated in detail in State Apparatus Empowerment and Bureaucratic Reforms Nr. 36 of 2017 concerning The Functional Position of the Mining Inspector and MoEMR Decree Nr. 2303 of 2017 concerning The Work Guidelines of The Mining Inspector. Both decrees provide guidelines for the investigation of environmental cases, examination of restoration and reclamation, and controlling of post-mining reports and activities.

environmental inspector (EI).⁴ The MI performs supervision through inspection, investigation, and testing of the maintenance of environmental standards, restoration and reclamation processes, and other post-mining reports and activities. In case the MI concludes that mining activities have caused pollution or environmental damage, s/he can temporarily terminate part or all of a permit holder's activities. The involvement of the EI in supervision depends on the location of the mining site: if the concession is cross-provincial, the EI comes from the national level of the Ministry; for a mine straddling multiple districts or cities the EI is from the Provincial Environmental Service; while for mines in a single province, district or city the EI is from its environmental service.

MoEMR Regulation Nr. 26 of 2018 also describes that the MI has a role in ensuring whether a permit holder performs its obligations to manage the environmental aspects of mining, reclamation, post-mining, and post-operations. This responsibility covers two things: first, the management and monitoring of the mining environment following environmental documents, and second, prevention and restoration of the environment in a case of environmental pollution or destruction.

To supervise coal mining operations, East Kalimantan's government promulgated Provincial Regulation No. 8 of 2013 concerning Reclamation and Post-mining. This regulation stipulates that permit holders must comply with the coal mining concession's environmental protection and management principles.⁵ Furthermore, Governor Regulation No. 53 of 2015 brought a commission into existence that assists the provincial mining and energy service in supervising all reclamation and post-mining activities. This commission can investigate alleged violations in the reclamation and post-mining phases, but does not have the authority to impose sanctions. If they conclude that a crime is perpetrated, they must hand the case over to the police. If it concerns an administrative issue, the provincial government or the MI are the relevant authorities.

In performing supervision, East Kalimantan had eight mining inspectors in 2017 (Apriando, 2017b); there were 35 by 2020 (Ditjen Minerba ESDM, 2020). Even though this is a considerable increase, the numerous mining sites and their locations in remote and difficult to access places still indicate a severe deficiency. According to the Director of Environmental Engineering of the Directorate General of Mineral and Coal of MoEMR, ideally, one MI would supervise two or three coal mining companies (Suastha & Kandi,

⁴ The environmental inspector (*Pejabat Pengawas Lingkungan Hidup/PPLH*) is a civil servant who has a task, responsibility, authority, and right to supervise and enforce environmental law.

⁵ These principles, among others, are the protection and restoration of biodiversity; utilization of ex-mining land following its designation; and considering the social, cultural, economic, and local wisdom aspects of the local community.

2016b). The MI should conduct inspections of all mining sites every three months, which can however not be done because of budgetary constraints and lack of personnel.

These fiscal issues became starkly visible when the MIs were shifted from the provincial to the central government. From 2016 to 2019, the central government requested the provincial government to contribute to the supervision budget for MIs, while the central government paid the salaries (Achyar, 2020). However, provincial governments refused as they argued they no longer have authority in the coal mining sector and consequently no longer receive a budget to conduct supervision. As a result, inspections have been largely absent since then. The lack of operational funding and regulations prescribing how the budget should be provided has caused MI's supervision to be poorly implemented.

The above conditions indicate a legal incompleteness related to the supervision's budget. The policy of transferring MI from the province to the central government is not followed by a policy regarding the budget, which causes uncertainty about who should finance the implementation of supervision of mining activities.

In 2020, the central government amended the 2009 Mining Law through Law Nr. 3 of 2020 (The 2020 Mining Law). Again, this law made the central government the coal mining sector's exclusive authority for licensing and supervision. The dynamics of legislation in this sector give rise to incomplete regulations. The 2020 Mining Law requires the promulgation of 30 new government regulations and one new ministerial regulation. Although the law stipulates that the implementing regulations must be enacted within one year of the law taking effect (June 2020), their promulgation has not occurred at the time of writing (November 2022). Waddell (2002) describes such a situation as an incompleteness of regulations, where implementation regulations or guidelines mandated by higher regulations do not exist. In this case, the law has strictly stated the deadline for preparing the implementing rules, but the government neglected to follow it up.

Furthermore, the provincial government of East Kalimantan interpreted the new law as ending all its authority to oversee mining. On these grounds, the provincial government refuses to stop illegal mining (Ardan, 2021). This point of view should be criticized, considering that the provincial government still has the authority to act against these violations by using other legal instruments, such as environmental and spatial planning laws.⁶ As Bedner (2010, p. 52) underlines, this tendency reflects that

⁶ See Constitutional Court Decision No. 64/PUU-XVIII/2020

although decentralization has increased the region's authority for environmental control, these powers are not being fully utilized.

3.4.2 Environmental regulations

The 2009 Environmental Law (as amended by Law Nr. 11 of 2020 concerning Job Creation) required coal mining companies to provide an environmental document (*dokumen lingkungan*) detailing how they will protect the environment and manage their mining activities' ecological and social impact. This environmental document is required by the central, provincial, and district or municipal governments for issuing an environmental permit (later become environmental approval), which must be obtained by a mining company before mining may commence. Under the 2009 Environmental Law, the minister, governor, or regional head is obliged to supervise environmental permit holders' compliance with the environmental documents. They can delegate this authority to officials or specialized agencies responsible for environmental protection and management.

This supervision of the environmental impact is regulated in GR Nr. 22 of 2021 concerning the Implementation of Environmental Protection and Management. This GR authorizes the EI to carry out direct and indirect supervision. Direct supervision means that the supervisor visits the location of a business or activity regularly or incidentally, while indirect supervision is conducted by reviewing data from a company's regular reports or their environmental information system. EI supervision is further regulated in the Regulation of the Minister of State Apparatus Empowerment and Bureaucratic Reforms Nr. 22 of 2019 concerning The Functional Position of the Environmental Inspector. In terms of coal mining, this ministerial regulation states that the EI has the authority to inspect mining pits (specifically for land slopes, depth ratio, openings distances) as well as any post-mining rehabilitation carried out by a company.

The Minister of the Environment (*Kementerian Lingkungan Hidup/KLH*) provides environmental indicators for EI supervision in Regulation Nr. 4 of 2012 on Indicators of a Friendly Environment for Business or Activity Open Coal Mining (MoE Nr. 4 of 2012),⁷ These indicators concern environmental protection and management for water and land components. Regarding water, for example, MoE Nr. 4 of 2012 emphasizes that coal mining activities may not decrease the pH of groundwater by more than one level from initial conditions. With regard to mining activities, the regulation stipulates, among others, that the distance of a mining pit must be at least 500 meters from any settlement.

⁷ In 2014 the Ministry of Forestry was merged with the Ministry for the Environment and became the Ministry of Environment and Forestry.

This regulation also determines that mining pit surface areas may not be unreclaimed for more than 20 percent of the permit area if the holes are concentrated or not more than 30 percent if the holes are spread out. This provision, however, gives rise to multiple interpretations. An official at the Provincial Environment Agency (*Dinas Lingkungan Hidup (DLH) Provinsi Kalimantan Timur*) illustrated that if a permit holder has around ten thousand hectares, the coal mining company can effectively only exploit about two to four thousand hectares considering, for example, that coal deposits have low calories. It means that the company may likely leave all of its mining pits unreclaimed. In his opinion, that would be against the protection and management principles of the environment as stated in the 2009 Environmental Law (Suastha & Kandi, 2016a). The Secretary of the Environmental Agency of Samarinda (*Dinas Lingkungan Hidup (DLH) Kota Samarinda*) conveyed a similar opinion. He explained that there are about 30 thousand hectares of coal mining concessions in Samarinda. If MoE Nr. 4 of 2012 is applied, companies can leave up to six thousand hectares of coal mining pits, which will harm the city's environment. These pits will change the landscape, while the capacity of the existing void is insufficient to deal with water runoff, especially during the rainy season, causes regular floodings of the city.

The Director of Environmental Engineering of the Directorate General of Mineral and Coal of the MoEMR stated that the idea that MoE Nr. 4 of 2012 allows mining companies to leave 20 percent of their coal mining pits open is a misinterpretation by the regional government. In contrast, the Director-General of Pollution and Environmental Damage Control of MoEF stated that the MoE Nr. 4 of 2012 was based on the assumption that miners could close a pit immediately after being mined. However, this is often impossible as closing a hole entails expenses for mining companies (Suastha & Kandi, 2016b). The debate on how much of an area can not be reclaimed by a permit holder points out that the provision is ambiguous because it gives rise to different interpretations of its implementation.

The absence of clear provisions that triggers discrepancies in interpretation goes against the principle of legal certainty because, under administrative law, the principle implies that the powers of the administration must be defined as precisely as possible, among other things (Stroink, 2006, p.183)

3.4.3 Forestry regulations

The use of forest areas for coal mining activities is based on a Borrow to Use Forest Area Permit (*Izin Pinjam Pakai Kawasan Hutan/IPPKH*) that was first introduced in

1978.⁸ Since then, the scope of IPPKH has expanded in terms of activities, areas, types of permits, and issuing authorities, and it is regulated in various regulations and laws. Between 1999 and 2019, there were two amendments through government regulations and eleven other changes through ministerial regulations.

In 2021, GR No. 23 of 2021 on Forestry decreed in Article 94 that usage of forest areas must be based on a Forest Area Use Approval (*Persetujuan Penggunaan Kawasan Hutan/PPKH*), thus doing away with the IPPKH permit.⁹ This alteration has considerable consequences. Whereas the IPPKH permit holder had eighteen obligations to meet, an PPKH approval holder only has eight. For instance, a PPKH approval holder is no longer required to deliver a periodic report every six months detailing forest usage, nor are they required to actively implement measures to prevent forest and land fires. Also, a PPKH approval holder has no obligation to allow environment and forestry officials of any level of government to access mining grounds for the purpose of monitoring and evaluating a site.

The Minister of Forestry evaluates the PPKH once every five years or whenever needed. The minister can delegate this task to an appointed official or governor. This official may come from the national MoEF or from technical implementing units at the provincial-level of MoEF, such as the Center for Forest Zone Stabilization (*Balai Pemantapan Kawasan Hutan/BPKH*) or the Center for Watershed and Protected Forest Management (*Balai Pengelolaan Daerah Aliran Sungai dan Hutan Lindung/BPDASHL*). If a PPKH area is located within the concession of a State-Owned Forestry Company Unit (*Perum Perhutani*), the supervising official must be from that unit.

The change from IPPKH to PPKH thus brought a centralization in supervisory authority and a reduction of obligations for the approval holder. At the provincial level a governor may carry out supervision only if this is delegated by MoEF. Regional governments have no such means whatsoever.

3.5 The environmental damage: legal uncertainty and failing supervision

The licensing governance in the coal mining sector allows overlapping land use with other areas designated for plantations, agriculture, and settlements as stated

⁸ IPPKH is a permit granted to use a forest area for development purposes outside forestry activities without changing the function and designation of the forest area.

⁹ PPKH is an approval for the use of part of a forest area for development purposes outside of forestry activities without changing the function and designation of the forest area.

in the 2009 Mining Law (as amended by the 2020 Mining law) and GR Nr. 23 of 2010 concerning Implementation of Mineral and Coal Mining Business Activities.¹⁰ Both regulations oblige the permit holder to settle with any land title owners before commencing mining activities. Article 134 (3) of the 2020 Mining Law even states that mining activities can be performed in prohibited places (*tempat yang dilarang*) after obtaining a license from the government agency following the laws and regulations.

The term 'prohibited places' is vague. There is no explanation of the meaning, not even in the article's elucidation. Referring to the existing legislation, the prohibited places in the context of the 1999 Forestry Law are forests with a conservation function. Dealing with agriculture, Law Nr. 41 of 2009 concerning The Protection of Sustainable Food Agriculture Land declares that the place that could not be converted into a mining area is land for sustainable food agriculture.¹¹ Concerning settlement, MoE Nr. 4 of 2012 states that the distance of a mining pit must be at least 500 meters from settlement areas. Based on those laws, the provisions contained in Article 134 (3) of the 2009 Mining Law contradict the other sectors, which explicitly banned the activities that can change the landscape and function of the areas.

To illustrate how the uncertainty of regulations can lead to environmental degradation, we discuss three cases in the villages of Mulawarman, Kertabuana, and Sungai Nangka, all situated in the Kutai Kartanegara district.

3.5.1 Mining in Mulawarman village

Mulawarman Village was founded in 1981 with 263 families of transmigrants from Java forming the population. The distance from Mulawarman village to the capital of Kutai Kartanegara district (Tenggarong) is ± 47 km, while the distance to the capital of East Kalimantan province (Samarinda) is ± 45 km. The village's territory covers 18 thousand hectares: 15.6 thousand hectares (87 percent) are classified as forest zone, 2.4 thousand hectares (13 percent) as a non-forest zone that can be allocated for agriculture and settlement. By 2013, all of the village's territory had been allotted to coal mining companies in nine mining concessions (DRD Kukar, 2013).

The coal mining operations in Mulawarman village impacted the environment in several ways. First, wastewater ponds are not managed according to environmental

¹⁰. This GR has revoked by GR No. 96 of 2021 concerning the Implementation of Mineral and Coal Mining Business Activities. Under this GR, the permit holder is required to settle the land rights in the concession with the land rights holder before carrying out mining business activities.

¹¹. It is a field of agricultural land determined to be protected and developed consistently to produce staple food for national food self-reliance, security, and sovereignty.

regulations, so that these frequently overflow and pollute the agricultural and settlement area. Wastewater also pollutes the water sources commonly used for irrigation canals and the daily needs of the villagers. Second, as the village head informed us, mining dust caused air pollution and respiratory issues among residents. Third, vibrations caused by mine blasting have cracked houses and made them dangerous to live in. In February 2020, for instance, 68 families had to evacuate to the village office as mining activities caused landslides that damaged and buried their residencies (Tribun Kaltim, 2020).

With regards to environmental damages, the villagers have also complained about their cases to the Regional People's Representative Council of Kutai Kartanegara district or the district government. In January 2011 and March 2012, the Environmental Agency (*Badan Lingkungan Hidup*) of the Kutai Kartanegara district subsequently warned and imposed a temporary suspension of activities. Still, the coal mining companies were not deterred: they ignored the suspension and kept repeating the violations (DRD Kukar, 2013). Under the 2009 Environmental Law, if a government institution responsible for licensing fails to enforce regulations, the higher level of government administration can intervene and take action against the violator(s). In this instance, even though the community had reported it to the provincial government, no further action was taken.

Since 2008, Mulawarman villagers have been taking their plights to the regional and central governments. In 2010, they even proposed relocating the village (Sunan, 2017), but the provincial government refused because of the expense involved and the lack of available land (Humas Provinsi Kaltim, 2017). Several regional politicians (province and district) have since visited the village and promised to take care of the problem, but so far to no avail (Setiyono, 2021). In February 2017, they brought their case to the Executive Office of the President (KSP) (KSP, 2017). However, the suggested solution of relocating the village proved too challenging to be implemented as no suitable new location could be found.

According to D'Hondt (2019; 80), such a situation is caused by vagueness and inconsistencies in the legal framework, reducing the chances for the complainant to hold the government accountable for safeguarding the public interest in maintaining a clean environment. It includes the government's enforcement ability to stop violations and restore the environment to its original state.

The latest attempt to negotiate a solution took place between the villagers and the mining company (PT. KPUC) in February and March 2019, but these meetings

also ended in a deadlock. The company referred to the fact that in 2012 most villagers had already received USD 22 per family head '*uang debu*'--dust money--by way of compensation (Muhdar et al., 2020), but no other compensation has been forthcoming since. Nevertheless, this limited settlement and ongoing repairs to the damaged houses were deemed sufficient by authorities to allow mining activities to continue, notwithstanding the pollution and other environmental damages.

Regarding land acquisition, we would like to highlight how companies proceeded. For example, a villager told us that the mining company had offered him some money as compensation, but still, he refused to sell his land. Although the company did not force him to leave, he felt intimidated because the company carried out activities just behind the fence around his house. Moreover, several surrounding houses that the company had obtained, were demolished. His son, a member of the military in the district, had protested against the mining activities. Shortly after the protest, his son was transferred outside of Kalimantan. According to this villager this was possible because the mining companies operating in his village were affiliated with several retired military generals.¹²

3.5.2 Mining in Kerta Buana village

Like Mulawarman, Kerta Buana is a transmigration village. It was founded in 1980, with an initial population of 430 families coming from Bali, West Nusa Tenggara, and some local transmigrants (Purba et al., 2018). This village is 31 km away from Tenggarong, the district capital, while the distance to the provincial capital (Samarinda) is about 28 km. The territory of the village covers 23,350 hectares (BPS Kukar, 2019). There are two mining companies active in the village: PT. Mahakam Sumber Jaya (since 2004) and PT. Kitadin (which began operations in 1982). The village has around 398 hectares of fertile rice fields. Residents owned some 80 hectares of these, the rest is owned by the mining companies who allow residents to farm the land as long as the companies do not require the fields for mining (Johansyah & Bahri, 2011; Purba et al., 2018).

Coal mining has severely impacted the environment in Kerta Buana. Mining activities damaged and contaminated agricultural irrigation, causing a decrease in productivity. Wastewater polluted both agricultural land and the settlement area (Greenpeace, 2016), causing a lack of clean water for the community (Hardjanto, 2016). Blasting activities caused landslides and damaged residents' houses (Muliawan, 2019).

¹² Interview, 31 May 2019 (see also (Tempo, 2012))

In November 2017, around 50 villagers held a demonstration and closed PT Kitadin's access road to protest the overflow of mud from mining activities which damaged their rice fields (Koran Kaltim, 2017). In response to the demonstration, the MI and EI visited the village to inspect the contamination. Both considered that there was no environmental violation in this case, as pollution levels were within permissible limits, so they did not proceed further. Not satisfied with the inspection result, in December 2017, villagers brought the case to the district police, which refused to investigate it. They referred to the EI examination, which stated that pollution was still below the contamination index. If the villagers still claimed it was pollution, the police asked them to prove it. Given the limited knowledge and funds, the villagers finally agreed to negotiate with the company through mediation by the police. The company promised to stop dumping wastewater into the villagers' rice fields.¹³

As in Mulawarman village, the environmental pollution and damage in Kerta Buana was not followed up by the MI and EI, even though the villagers requested this several times. The MI and EI stated to the villagers that as long as the companies were willing and able to meet community demands for compensation or restoration of damaged environments, no further action was required.¹⁴ In this regard, D'Hondt (2019, pp. 117, 121-122) highlights that the government's tendency to act as a mediator instead of enforcing the law is a way for the government to escape its responsibility to take adequate action to protect the interests of the environmental community.

3.5.3 Mining in Sungai Nangka

Sungai Nangka is a hamlet (*dusun*) in Kutai Kartanegara district. The hamlet was founded in 1970 as a community of 27 households, but as per 2014 only four families remain (Tempo, 2018a). The district capital Tenggarong is 73 km from this hamlet, the provincial capital Samarinda is 56 km away.

Villagers and media have reported water pollution caused by PT Kutai Energi since 2015. Wastewater from mining activities ran off into and damaged the villagers' plantations and fish ponds (Prokaltim, 2015b). On May 19, 2015, upon a request from JATAM (Mining Advocacy Network), East Kalimantan's Health Laboratory unit (BLUD-UPTD) tested the river water's acidity near the company's void. The results indicated manganese and iron levels of respectively three and eight times the tolerated limit (JATAM et al., 2019).

¹³. Interview with villager (28/09/2021)

¹⁴. Interview with villager (28/09/2021)

These findings rebutted a claim made by the provincial environmental service a week earlier when it stated there was no pollution from the mining activities of Kutai Energi in the Sungai Nangka (Prokaltim, 2015a). Nearly a year later, in October 2016, the provincial environmental service took new samples, which confirmed high acidity and severe pollution of Sungai Nangka (JATAM et al., 2019). The pollution is still ongoing. In 2019, residents reported pollution of the Pelupu river and several other water sources near the village. Following up on this report in April 2019, the East Kalimantan Regional Police and the Kutai Kartanegara District Environmental Agency (DLH) inspected suspected river pollution by PT Kutai Energi. However, as in the previous incident, there was no follow-up action taken.¹⁵ At the time of writing (November 2022), there is no information on the progress of handling the case from the East Kalimantan Regional Police who state that the investigation is still ongoing. Unlike the previous two cases, Sungai Nangka villagers used a litigation approach by reporting the case to the police. Whereas this could potentially have brought more legal certainty, the case seems to be stalled with no end in sight.

We underline three issues from these three cases. First, the provisions that regulated coal mining land in the 2009 Mining Law are inconsistent with Law Nr. 41 of 2009, which explicitly banned coal mining activities from sustainable food agriculture land. It is also inconsistent with MoE Nr. 4 of 2012, which states that the distance of a mining pit must be at least 500 meters from settlement areas. The rules are also incomplete because they do not provide guidelines that anticipate a situation when the parties are unable to reach an agreement about compensation. The 2009 Mining Law and its implementing regulations only order the permit holder to settle the concession area with the land rights' holders, which presupposes the agreement of all the parties. The lack of established norms for situations where parties cannot agree on compensation creates legal ambiguity surrounding the rights of both parties. It includes uncertainties around how long a company must wait to commence operations and uncertainties for landowners regarding the legal protection of their land if an agreement cannot be reached.

In response to land use overlaps, the government issued GR Nr. 43 of 2021 concerning Settlement of Incompatibilities Relating to Spatial Planning, Forest Areas, Licenses, or Land Rights. This GR stipulates that where permits are issued in an area in which other permits or land titles have previously been allocated, the overlapping part should be excluded from the new permit. In regard to land acquisition for coal mining operations, GR Nr. 96 of 2021 concerning the Implementation of Mineral and Coal Mining Business Activities provides solutions. Under this GR, if the parties

¹⁵ Interview with villager (11 May, 2021)

fail to reach an agreement, the central government undertakes to resolve their case through mediation coordinated by the MoEMR and the MoAASP/NLA. The regional government will also be involved in the mediation. The central government may provide recommendations for resolving land rights issues in mediation. At the time of writing we have not found cases in which these new regulations were applied.

The second issue is the supervision of mining activities. Above we mentioned the insufficient numbers of MI and EI, but these inspectors seem also unable to bring their authority to bear in settling cases. Ideally, MI and EI should be able to identify any violations and provide a prompt and definite response to the violations, as Santosa pointed out 20 years ago (Santosa, 2001). However, in the three cases discussed, MI and EI failed to do both. For example, in the cases of Mulawarman and Kerta Buana, MI and EI agreed to conduct negotiations or mediate in the process to resolve pollution and stop further damage. In contrast, they had the authority to impose administrative sanctions or bring the cases to the district court, given that compensation payments or reparation of damaged housing and other facilities cannot exclude the imposition of administrative or criminal sanctions. Adopting a non-litigation approach to settle environmental pollution and destruction contradicts the 2009 Environmental Law, which states in Article 85 that a non-litigation approach cannot be applied to criminal acts. It is crucial to acknowledge that handling environmental cases requires specialized knowledge of complex (and constantly changing) legal and technical matters, which may not always be readily available at the local levels of municipalities and districts (Niessen, 2006, p. 177-178).

A final issue related to this non-litigation approach concerns some "big names" behind the mining companies. In an investigative report, the *Tempo* magazine (2012) revealed that the names of generals were often mentioned when supervisors handled the cases. Generally, supervisors are reluctant to process violations by companies with such parties behind them. Hiding behind the names of some army or police generals continues to happen when law enforcers confront the violators (Kompas, 2022). In addition, some of the owners or investors of coal mining companies in East Kalimantan belong to the inner circle of local politicians and provide funding for their election campaigns. A study conducted by an NGO coalition confirmed this and indicated that the number of local government coal mining permits increased significantly around the regional heads' elections (JATAM et al., 2019). This close relationship between miners and local authorities often makes supervisors unwilling to enforce the law firmly.

3.6 Conclusion

This study contributes to a better understanding of the supervision of environmental management in coal mining areas by providing four insights. First, legislation in this area is sectoral-based, while the governance of the sector is organised at multiple levels (central, provincial, district or municipal). As a consequence, its development is very dynamic, with fast-growing legislation resulting in uncertainty of the law regarding supervision of environmental management in coal mining areas. Second, this study identified that such uncertainty of law is manifest especially in inconsistent and incomplete regulations and ambiguous and vague provisions. Third, by studying the implementation of mining supervision in three locations in the province of East Kalimantan, we found that incomplete regulations lead to a legal vacuum at the implementation level. It occurs because implementing regulations or technical provisions ordered by higher regulations are unavailable or are yet to be stipulated. Meanwhile, inconsistent, ambiguous, and vague norms may cause uncertainty because it creates different understandings when performing supervision of environmental management in coal mining areas. Fourth, changes in policies related to mining supervision also result in uncertainty in the operational budget of supervision. Besides, these dynamics may also raise the misunderstanding of the provincial government regarding the transfer of supervisory authority.

This study also highlighted that the capacity of the MI and EI to carry out mining supervision is another challenge in performing supervision of environmental management in coal mining areas. Both types of supervisors tend to ignore environmental violations as soon as a permit holder has agreed to settle with the community. The MI and EI do not follow up such cases, even though alternative dispute resolution does not necessarily resolve environmental destruction or pollution and no settlement may be reached. This action contradicts the 2009 Environmental Law, which states that a non-litigation approach cannot be applied to criminal acts regulated in the law (i.e. environmental pollution and destruction). We found indications that there is a possibility of choosing an out-of-court settlement due to the influence of the owners or shareholders of mining companies affiliated with "the inner circle" of authority, both in local and central governments. In addition, the limited number of MI and EI to perform supervision also impacts this lack of action.

These circumstances also benefit the permit holders. It is, for instance, demonstrated by the ambiguity in regulations prescribing the percentage of mining area that can be left without reclamation that allows permit holders to circumvent their responsibility to do so. In addition, the misunderstanding of the provincial government regarding

the transfer of supervisory authority also exacerbated the situation. As a result, permit holders who commit violations feel "safe", because the provincial government states they can no longer supervise coal mining activities. At the same time, the central government has limitations (personnel, budget, and access to mining sites) in monitoring violations.

Finally, in a broader context, this study demonstrated that the legal uncertainty and lack of supervisory capacity have led to the destruction of settlements and agricultural areas, generating considerable environmental damage and pollution in the villages surrounding the mining operations. This ecological degradation may also trigger conflicts between coal mining companies and communities.

Chapter 4

Challenges in Supervising Oil Palm Plantations In Indonesia: Government Obligations and Incompleteness of Law

This chapter is adopted and modified from:

Nasir, M., Bakker, L. & van Meijl, T. (2024). Government Supervision of Oil Palm Plantations in Indonesia: Legal Issues and Proposed Remedies. *Law and Development Review*.

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This chapter explains how the current legal framework limits the government's ability to supervise oil palm plantation operations. It also discusses the connection between the laws and the societal and environmental issues that arise in areas used for oil palm plantations.

By investigating these issues, this chapter demonstrates that the governmental supervision of plantation companies' activities on the ground frequently fails, leading to environmental damage and conflict between companies and communities. Subsequently, this study found that the legal framework of the development of oil palm plantations is imprecise, unclear, and incomplete and, consequently, causes the government's weakness in supervising oil palm plantation operations.

We discovered three leading causes of this incompleteness of law in supervising oil palm plantations: the delay in establishing the implementing regulations, the absence of sanctions in case of non-compliance, and the use of imprecise words and complex terms and language. In addressing such incompleteness, this study suggests drafting more detailed rules to minimize delegation to lower regulations, using more precise terms and concepts, and considering sanctions for officials who do not carry out their obligations. Furthermore, discretion can be an alternative to overcome legal incompleteness in supervising oil palm plantation operations.

4.1 Introduction

Palm oil provides significant economic benefits for Indonesia. Between 2017-2021, it has contributed 3.5 percent to the country's Gross Domestic Product (GDP) on average (BPS, 2022, p. 683). In addition, the national palm oil industry supports poverty alleviation (M. Mardiharini et al., 2021) and offers employment to more than 16 million workers.¹ Indonesia has become the world's largest exporter of palm oil. In 2022, Indonesia produced 46,500 metric tons (USDA, 2022). Such production requires large areas of oil palm plantations. In December 2019, the Ministry of Agriculture (MoA), in decree Nr. 833 of 2019, declared that oil palm plantations had reached 16,381 million hectares spread over 26 provinces.

Given that the global palm oil market is expected to grow further, rapid oil palm plantation expansion will continue to be a significant feature of land use and land cover (LULC) change in Indonesia (Yu Xin & Hansen, 2021). Oil palm plantations are a major driver of deforestation in Indonesia (Austin et al., 2019; Gaveau, et al., 2021). 3.4 million hectares, or 20.2 percent of the total plantation areas, are in forest areas (Nugraha, 2019). In 2021, the Audit Board of the Republic of Indonesia reported that by 2020 there were around 2.9 million hectares of oil palm plantations in forest areas without forestry permits (BP, 2022, p. 26).

Such expansion causes conservationists and environmental organizations to raise the alarm about its devastating effects on the environment, such as threats to biodiversity and increased greenhouse gas emissions (Paterson, 2020; Purnomo et al., 2020). Oil palm plantation expansions also limit the land available to local communities, triggering land conflicts between communities and companies (Berenschot et al., 2021; Nanggara, et al., 2017). These issues drove the central government to introduce a moratorium² on the expansion of oil palm plantations through Presidential Instruction Nr. 8 of 2018 on Postponement and Evaluation of Palm Plantation Permits and Increasing Productivity of Palm Plantations. This moratorium intends to halt new permits, to evaluate existing permits, and to increase the productivity of existing palm plantations.

¹ See Press Release of Coordinating Ministry for Economic Affairs, Nr. HM.4.6/316/SET.M.EKON.3/09/2021, 5 October 2021, available at: <<https://www.ekon.go.id/publikasi/detail/3349/industri-kelapa-sawit-nasional-perkuat-kemitraan-petani-sawit-untuk-masa-depan-sawit-indonesia-yang-berkelanjutans>>, accessed January 2, 2023.

² The moratorium is intended to solve problems common to the palm oil industry, such as plantations laid out in protected forest areas, land clearing in High Conservation Value (HVC) areas, and overlapping policies and regulations.

Current studies of oil palm plantations in Indonesia focus predominantly on four main issues. First, the impact of oil palm plantations on the environment. The oil palm expansion has replaced tropical forests with monoculture crop systems and caused deforestation, clearing peatlands, forest fires, and biodiversity loss (Gaveau et al., 2019; Bakhtiar et al., 2019; Meijaard et al., 2020). Second, a strong focus is placed on human rights issues. The expansion of oil palm plantations in Indonesia has adversely affected indigenous people's rights and access to natural resources such as forests, livelihood, food, and water (Andrianto, Komarudin, and Pablo Pacheco, 2019; Human Rights Watch, 2021). Third, the development of oil palm plantations frequently gives rise to land conflicts. Disputes over boundaries, lack of consultation, land grabbing, and broken promises by companies often trigger conflicts between communities and oil palm companies (Semedi & Bakker, 2014; Rutten et al., 2017; Li & Semedi, 2021). Fourth, the laws and policies governing plantations often overlap with those of the environmental, forestry, agrarian, and spatial planning sectors (Daemeter Consulting, 2015; Khatarina, 2018; Schouten & Hospes, 2018). As a result, it causes legal uncertainty and governance complexities.

This study examines to what extent the development of policies regarding oil palm plantations contributes to the government's weakness in controlling the activities of oil palm plantation companies. We argue that the legal framework of the development of oil palm plantations is imprecise and also incomplete and, as a consequence, causes the government's weakness in supervising oil palm plantation operations. In addressing those issues, this article explores the legal issues of this supervisory shortfall within the legislation monitoring oil palm plantations. Second, it investigates the practice of oil palm plantation supervision, the obstacles, and what alternative solutions can be taken.

The following section presents a legal review of the government's authority (central, provincial, and district) in supervising oil palm plantations. Section three investigates how the district government oversees large private plantations, covering about 88 percent of the total oil palm plantations in the Kutai Kartanegara district, East Kalimantan. Finally, we conclude this paper by discussing the implications and contributions of such legal uncertainty to the district government's performance weakness and commitments to supervise oil palm plantations.

4.2 Methods

4.2.1 Research approach

This study adopted a socio-legal approach to address the research questions. By employing this approach, we examine the law as the norm as it is perceived in legislation and as a social phenomenon (Cownie & Bradney, 2013, p. 35). To collect data and information about the research object, we carried out a desk review. At this stage, we identified and made an inventory of laws and regulations related to the supervision of oil palm plantation operations at the central, provincial, and district levels. In addition, we gathered and reviewed several licensing documents, reports from related government agencies, newspaper articles, and other media reports to further comprehend events in these cases.

The second step constituted a field study of oil palm plantation supervision. We focused on a holding company with eight subsidiaries that operated the most extensive oil palm plantations, or 64 percent of the total large private plantations in the district. Investigating the supervision of a holding company, we aimed to obtain a thorough understanding of how the district government performed its obligations. We collected our data through field visits where we investigated the state of oil palm plantations in several locations, conducted interviews, and had shorter conversations with the stakeholders involved. We also observed how the legal texts were understood and applied at the research site (Taherdoost, 2021, p. 23). In order to analyse the data, we began with a doctrinal analysis by identifying and reviewing the legal framework of the supervision of oil palm plantations. Finally, we linked the analysis results to the dynamics of the implementation of the legal text in the social, cultural, economic, and political context and the actors influencing its implementation (O'Donovan, 2016, p. 110).

4.2.2 Study site

We conducted our research in the district of Kutai Kartanegara, East Kalimantan province. This district has the second-largest oil palm plantation area in the province³, but was the first to initiate its policy instruments for oil palm plantation governance.⁴ In 2014, to follow up on higher regulations, the district promulgated two local regulations; one on plantation governance and the other on environmental

³ In 2020, the top five districts with the most extensive oil palm plantations area were East Kutai district (459.593 hectares), Kutai Kartanegara district (231.958 hectares), Paser district (183.575 hectares), West Kutai district (145.175 hectares), and Berau district (135.092 hectares)

⁴ The West Kutai district has a policy on partnership plantations (2017), and Berau District established a regulation on sustainable plantations at the end of 2019. While at the provincial level, the policy on sustainable plantations was regulated through local regulations in early 2018.

management guidelines for oil palm plantations. These were followed by Regent Regulation Nr. 1 of 2016 regarding Plantation Business Partnership, which obliges a permit holder with more than 25 hectares to, among others, establish partner farmers' plantations on at least 20 percent of the total permit area and improve their partner's capacity to manage their plantation.⁵

4.3 Theoretical framework

Regional decentralization, which started in Indonesia in 1999, is the background and starting point of this study to investigate the dynamic of laws and policies regarding the supervision of oil palm plantations. Under a decentralization framework, the authority for issuing permits for plantations and overseeing their operations was divided between the central government and regional authorities at the provincial, district, and municipal levels. It also endows them with legislative and executive lawmaking powers to formulate policies and laws under their jurisdiction (Butt, 2010, p. 2). This approach has made the governance of plantations a dynamic sector, but also one that is challenging to predict and keep track of (Nasir, Bakker, & van Meijl, 2022, p. 54), which has created a widening gap in each policy-making process (Putri, et al., 2022, p. 6). In addition to its tiered structure, the legislation of the governance of palm oil plantations is complex because it is simultaneously interconnected with other sectors, such as the environment, land, and forestry, resulting in sectoral-based legislation.

As a result, policies and laws regulating natural resources evolve rapidly in response to the dynamics of each sector and each level of government. The overlapping responsibilities between various tiers of government and sectors can also blur the distinction between national and local duties, which may lead to adverse environmental (Cisneros, Kis-Katos, & Nuryartono, 2020; Human Rights Watch, 2021) and social consequences (Bakker, 2023; Negara, Anggoro, & Koeswahyono, 2023). Indeed, this situation caused decentralization to increase the opportunities for existing district elites to extract resources and expand their businesses under district regulations. In this sense, rather than establishing a new system, regional autonomy extended well-established district modes of clientelism (McCarthy, 2004, pp. 1216-1218). Simarmata (2019, p. 109) has also demonstrated that decentralization has

⁵ A partner farmer is a local farmer who manages plantations with an area of fewer than 25 hectares or a farmer who has been approved to be included in the plantation development partnership program as a candidate for the recipient of the fostered plantation from the oil palm plantation company. The district government needs to organize partnerships to increase income and create job opportunities for communities around oil palm plantations.

provided opportunities for local bureaucrats to influence the law-making process to serve individual and group interests. Lund (2020, 2023, p. 12-17) illustrated this as the paradox of law and power. Implementing the law requires the redoubtable powers of enforcement of the state, but, at the same time, the state can make non-statutory claims, rules, and forms of access appear legal and may give them the same status and enforcement.

Regarding the legal framework of oil palm plantations, we argue that the tiered and sector-based legislation has created the incompleteness of provisions, which in turn has led to legal uncertainty in the supervision of oil palm plantation operations. According to Pistor and Xu (2003, pp. 931-932), a law may be incomplete for two primary reasons. Firstly, it may not encompass all the actions under its purview. Secondly, it may employ open-ended and vague language, making it challenging to demarcate the law's boundaries precisely. Such incomplete laws cannot be implemented in cases without clarifying the meaning of the law.

It is worth noting that the term 'incomplete' can also pertain to instances where the required regulations or guidelines for implementation, as mandated by higher authorities, are absent. This can lead to a substantial degree of uncertainty, as noted by Waddell (2004, p. 186). Moreover, the absence of these regulations can result in a delay in their execution. In this regard, we argue that detailed or technical rules are necessary to implement general provisions accurately. Additionally, implementing regulations are required to prevent any subjective interpretation by the government. The government's unilateral action that puts its interpretation as a primary guideline in implementing a provision is not legally binding, because interpretation cannot be used as a legal basis to set out formulations that contain norms.⁶ Therefore, it is debatable, and has even been contested in the Constitutional Court to determine its validity.⁷

Furthermore, the tiered and sectoral-based legislation related to monitoring of the operation of oil palm plantations lead to inconsistencies in their execution. In implementing the rules, government agencies may take action that is not prescribed

⁶ See Appendix II of Law 12 of 2011 on Lawmaking.

⁷ It can be seen, for example, in the judicial review proposed by several NGOs and farmers' alliances against the 2014 Plantations Law to the Constitutional Court in October 2015. One of the articles tested for validity is Article 42, which states that a company plantation can perform its plantation operation once it has obtained a right to land and/or plantation license. The plaintiffs argue that the term "and/or" means cumulative (and), so a plantation operation must obtain rights to land and plantation license before commencing its activities. On the other side, the government and plantation companies consider "and/or" as alternatives (or). So, plantation activities could be carried out when they have a right to land or a plantation license. In this regard, the Constitutional Court declared that "and/or" means cumulative. See Constitutional Court decision Nr. 138/PUU-XIII/2015 concerning judicial review of Law Nr. 39 of 2014 concerning Plantations.

by law. For instance, the absence of sanctions may enable the licensor to refrain from exercising their authority to revoke the plantation permit, even if the permit holder has repeatedly violated their obligations. This action contradicts the original intention of granting the authority to cancel or revoke permits to prevent or stop violations (Hadjon et al., 1994, p. 247). This issue is further exacerbated by the fact that different institutions and officeholders often enact regulations that contradict one another. These contradictions may occur vertically, between hierarchically different legislation, and horizontally, between rules at equal levels (Butt & Lindsey, 2018, pp. 52-53). Such inconsistencies can lead to confusion and hinder the implementation of effective policies and measures.

4.4 The legal framework of oil palm plantations supervision in Indonesia

The 2014 Plantation Law (as amended by Law Nr. 11 of 2020 on Job Creation) and the MoA Regulation Nr. 98 of 2013 concerning Guidelines for Plantation Business Permit (last amended in 2017: the 2013 Plantation Permit Regulation) divide plantation permits into three types: plantation business permit for cultivation (*Izin Usaha Perkebunan untuk Budidaya*: IUP-B), plantation business permit for processing (*Izin Usaha Perkebunan untuk Pengolahan*: IUP-P), and plantation business permit (*Izin Usaha Perkebunan*; IUP).

In the case of cultivation carried out in an area of fewer than 25 hectares, an applicant only requires a Plantation Business Registry Certificate (*Surat Tanda Daftar Usaha Perkebunan Budidaya*: STD-B). It also applies to small processing businesses (see Table 1), where an applicant only needs to obtain a Plantation Processing Business Registry Certificate (*Surat Tanda Daftar Usaha Pengolahan*: STD-P). The following Table 5 shows the plantation businesses' classification and the required types of permits.

This article focuses on two main types of permits: IUP-B and IUP, because both require a large area of land and oblige facilitating the development of partner farmers' plantations on at least 20 percent of the total permit areas.

Table 5. Classification and Permit Type of Plantation Business

Classification of plantation business		Type of Permits	Validity Period
<i>Cultivation business of plantation plants</i>	Cultivation business of plantation plants with the size of land less than 25 hectares	Registry Certificate of Plantation Business (STD-B)	Valid as long as the company still carries out activities following technical standards, laws, and regulations.
	Cultivation businesses of plantation plants with the size of land 25 hectares or more	Plantation Business Permit for Cultivation (IUP-B)	
<i>Plantation product manufacture</i>	The plantation product manufacturing business has a capacity below five tons of fresh fruit bunch/hour	Registry Certificate of Plantation Product Manufacture (STD-P)	
	The plantation product manufacturing business has five tons or more capacity of fresh fruit bunch/hour.	Plantation Business Permit for Processing (IUP-P)	
<i>Cultivation business of plantation and integrated with plantation product manufacturing</i>	The cultivation business of plantation having a size of 1000 hectares or over and having a plantation processing unit	Plantation Business Permit (IUP)	

4.4.1 Complexity of supervision in the oil palm sector

Under Article 98 of the 2014 Plantation Law, the Minister of Agriculture (MoA), the Governor, or a regional head takes care of the supervision of oil palm plantations following their respective jurisdiction. The regent should supervise the IUP or IUP-B when a permit is in a district territory. The governor is authorized to control a license when the IUP or IUP-B is located in two or more districts or municipalities. If the permit is located in two or more provinces, the MoA has the authority to control it. Further, under Article 99, the supervision is carried out in two ways: first, evaluation of plantation company's performance by reviewing the permit holders' periodic report and, second, monitoring and evaluating plantation businesses' implementation and progress.

In addition to the 2014 Plantation Law, oil palm plantation permits are also subject to the Indonesian Sustainable Palm Oil (ISPO) standards and the Roundtable on Sustainable Palm Oil (RSPO). Both palm oil certification systems aim to set sustainable and environmental sustainability principles for all plantation companies. The RSPO is voluntary and can open up opportunities for Indonesian products made of Crude

Palm Oil (CPO) to be accepted in the international market (Rosyadi et al., 2020). The ISPO is mandatory. It aims to respond to the demands of international institutions, needs, and communities, requiring that the oil palm industry practices be more sustainable than before the ISPO is stipulated (Hidayat et al., 2018; Van der Elst, 2018).

ISPO obligations arise from the enactment of the MoA Regulation Nr. 19/Permentan/OT.140/3/2011 concerning Guidelines on Sustainable Palm Oil Indonesia, which was replaced by Presidential Regulation Nr. 44 of 2020 concerning the Certification System for Sustainable Palm Oil Plantation in Indonesia (the 2020 ISPO Regulation). According to this presidential regulation, the central and regional governments (governors and regents) supervise the implementation of ISPO certification for business actors under their duties, functions, and authorities. The supervision of oil palm plantations covers the performance of plantation companies as permit holders, the implementation of plantation businesses, and companies' compliance with ISPO principles and criteria.

Under MoA Regulation Nr. 7 of 2009 concerning the Guidelines of Plantation Business Assessment (the 2009 Plantation Assessment Regulation), this evaluation must occur during the development⁸ and operational⁹ phases. In addition, the assessment must occur at least once a year during the development phase (Article 5). Evaluation at this stage includes nine aspects: legality, management, settlement of land rights, realization of plantation development, facilities and infrastructure prevention and control of fires and plant pest organisms, implementation of environmental assessment, community empowerment, and reporting. During the implementation phase, the regent, governor, and director-general of the plantation, following their respective jurisdiction, delegate the assessment to the plantation business assessment team. During the development stage, the government must determine the category of the plantation and identify issues that may require improvement. This assessment determines whether the plantation company is classified as A, B, C, D, or E (Article 18 paragraph [1]).¹⁰

In cases where a plantation company is classified as class D or E, the licensor (regent, governor, or director-general of the plantation) will issue recommendations that the plantation company must address in order to improve its performance during the development stage. The regulation speaks of 'recommendations' (*rekommendasi*), but

⁸ The development phase is the period that starts with obtaining the permit (IUP or IUP-B) and ends once the company begins production.

⁹ The operational phase is the period during which the plantation is actually in production. It runs until the end of the permit.

¹⁰ Plantation companies are classified from A to E based on their scores. A is for >80-100, B is for >60-<80, C is for >40-<60, D is for >20-<40, and E is for 0-<20.

these are compulsory because non-compliance will entail sanctions. The licensor will give three warnings to a company with a D classification at four-month intervals if the company fails to follow up on these suggestions. On the other hand, a company that classifies as E will receive only a single notice when they fail to follow up on such instructions (Article 22). Furthermore, if D and E companies fail to implement the recommendations within the stipulated time frame, the licensor will revoke their plantation business permits (Article 26).

The next form of supervision is an assessment at the operational phase that must be performed at least once every three years. This evaluation largely concerns management, plantation, product processing, corporate social responsibility, and the environment (Article 6). As in the development stage assessment, the operational phase evaluation is carried out by the plantation business assessment team. Based on the result, plantation companies are classified as I, II, III, IV, or V (Article 18 paragraph [2]). This qualification is required to ensure regulatory compliance and identify potential areas of improvement. This classification will also enable the government to monitor the companies closely and hold them accountable for their actions. The assessment result also provides suggestions for improvement for plantation companies categorized in class IV or V. The licensor will give three warnings to a company under class IV with an interval of six months and a single notice to the companies under category V if they fail to act on these suggestions (Article 22). In addition, the licensor will revoke the plantation business permit if the company fails to comply (Article 26).

Supervision is also carried out on the performance of a plantation company. It aims to ensure company compliance with the obligations stated in the permit. As per the 2013 Plantation Permit Regulation, the governor or regent has the authority to supervise the performance of plantation companies. The implementation of this responsibility is assigned to the agency responsible for the plantation sector. Such an evaluation should be undertaken at least once every six months through a field inspection to investigate the suitability of the plantation business development report with the facts on the ground (Article 44 paragraph [4]). This evaluation examines the progress of licensing implementation, total production, the performance of partnerships, processing plants, marketing, and environmental management.

To evaluate compliance with ISPO guidelines, the 2020 ISPO Regulation introduced the ISPO Certification Body. Every year, this institution assesses the compliance of the holder of ISPO certificates with ISPO requirements. Based on the assessment results, this body can issue, temporarily freeze, or even cancel ISPO certificates (Article 7). However, it is essential to underline that apart from the ISPO Certification

Body, under Article 16, the MoA can also freeze or revoke ISPO certificates if the holder does not meet ISPO principles and criteria. In East Kalimantan, the provincial government promulgated regulation Nr. 7 of 2018 concerning implementing Sustainable Plantations (the 2018 Provincial Regulation). This regulation arranges supervision in Article 71, reiterating the higher regulation provisions that the control is conducted by examining the permit holder's periodic reports through monitoring and evaluating plantation business' implementation and progress. Further, the regulation states that more detailed provisions regarding evaluation will be set in a governor's regulation (Article 72), which was not available at the time of writing (October 2023). The absence of such regulation creates a legal gap in supervision and contributes to the ineffectiveness of supervision.

In Kutai Kartanegara, the local government enacted District Regulation Nr. 6 of 2014 concerning Plantation Governance (the 2014 District Regulation) to implement the district jurisdiction in plantations. Under this regulation, the regent conducts supervision through the relevant agencies. This district supervision is organized in two ways: direct monitoring and evaluation at the plantation location and by the periodic plantation assessment progress report. The regulation also accommodates the district's interests through additional obligations such as obtaining a land clearing permit, using local labor, and paying user charges (*retribusi*) to the district government. However, as with the regulation at the provincial level, the district level regulation does not explain in detail how supervision should be carried out. Without clarity and certainty of the monitoring mechanism, the district government cannot effectively control oil palm plantation operations.

4.4.2 Supervision by the environmental sector

Under the 2014 Environmental Law (as amended by Law Nr. 11 of 2020 on Job Creation), the Minister of Environment and Forestry (MoEF), the governor, and the regent are obliged to supervise permit holders' compliance with the conditions of environmental approval. However, they can delegate this authority to specific officials or the environmental inspector (EI), a specialized agency responsible for environmental protection and management.

The supervision of the environmental impact is regulated in GR Nr. 22 of 2021 concerning the Implementation of Environmental Protection and Management. This GR authorizes the EI to perform direct and indirect supervision. Direct supervision means the supervisor regularly or spontaneously visits the plantation areas to oversee the operations and ensure everything runs as expected. While for indirect control, the supervisor does this by reviewing the data from the permit

holder's regular reports or data in the environmental information system. Further regulation on EI supervision is set out in the Regulation of the Minister of State Apparatus Empowerment and Bureaucratic Reforms Nr. 22 of 2019 concerning The Functional Position of the Environmental Inspector and consists of direct and indirect supervision, law enforcement, and assessment and analysis.¹¹

The MoEF can supervise the compliance of environmental permit holders (as issued by local governments) if the MoEF considers severe violations have arisen from ongoing environmental management. The 2009 Environmental Law also introduces tough sanctions for government officers who intentionally fail to supervise the compliance of permit holders.¹² A government official found guilty may be sentenced to a maximum of one-year imprisonment or a maximum fine of five hundred million rupiahs.

4.4.3 Supervision by the land (agrarian) sector

A plantation permit holder must also hold the cultivation right (*Hak Guna Usaha*: HGU). The permit holder must apply for this right to the Minister of Agrarian Affair/ National Land Agency (MoAASP/NLA) in a separate procedure. The MoAASP/NLA regulates the supervision of the right to cultivation in Regulation Nr. 7 of 2015 concerning the Arrangement and Procedure for Establishing the Cultivation Right. This supervision is divided as follows:

- a. The Head of the Land Office (district level) supervises HGU of up to 25 hectares;
- b. The Head of Regional Land Office (provincial level) oversees HGU between 25 and 250 hectares; and
- c. The MoAASP/NLA manages HGU of more than 250 hectares.

Under Article 204 of the MoAASP/NLA Regulation Nr. 18 of 2021 concerning Procedures for Determining Management Rights and Rights to Land, monitoring and evaluation of HGU and land use for cultivation are carried out based on reports produced by holders of HGU, public complaints, or the results of supervision in the field, which are held periodically, starting one year after the certificate for an HGU has been issued. The article also stipulates that the minister supervises and controls cultivation rights through the provincial or district office. This supervision covers three main aspects: ensuring that land use conforms to land allocation and utilization planning documents, conformity with spatial planning, and compliance with any relevant obligations and prohibitions.

^{11.} For more details about the various forms of direct and indirect supervision, law enforcement, and assessment and analysis, please see Articles 7 and 8 of the Minister of State Apparatus Empowerment and Bureaucratic Reforms Regulation Nr. 22 of 2019.

^{12.} A government official is categorized as intentionally failing to supervise when a violation of laws or permits results in pollution or environmental damage that causes loss of human life.

4.4.4 Supervision by the forestry sector

The use of forest areas for oil palm plantations is allowed as long as the plantation company obtains approval of forest area release (FAR) from the MoEF. Under the MoEF Regulation Nr. 8 of 2021 concerning Forest Management, Preparation of Forest Management Plans, and Forest Utilization in Protection and Production Forests, to occupy a forest area for plantation, the company must apply for FAR to the MoEF. When the location is still covered with trees, the company also needs approval for the use of timber for non-forestry activities (*Pemanfaatan Kayu untuk Kegiatan Non-Kehutanan*: PKKNK) for land clearing to prepare the area for oil palm plantations. PKKNK holders must submit a monthly report on the realization of PKKNK production to the head of the provincial forestry agency, which supervises the implementation of the PKKNK.

In sum, the types of permits and certificates and the institutions that oversee their issuance are shown in Table 6.

Table 6. Type of permit or certificate and the supervisory agency

No	Permit/Certificate	Supervisor
1	Plantation permit	MoA and the provincial and district plantation offices
2	ISPO certificate	ISPO Certification Board and MoA
3	Environmental approval	MoEF, provincial and district environmental agencies
4	HGU certificate	MoAASP/NLA, the provincial land office, and district land offices
5	Approval on the release of forest areas	MoEF
6	PKKNK	the provincial forestry agency

4.5 The Implementation of supervision of oil palm plantation operation: an experience from Kutai Kartanegara district

The oil palm plantations in the Kutai Kartanegara district reach 231,958 hectares, consisting of both large private plantations (204,373 hectares) and smallholder plantations (27,585) (BPS Kaltim, 2021, pp. 385, 395, 397). In this section, we examine how the district government supervises 68 large private plantations, covering about 88 percent of the total area of oil palm plantations. Of these 68 companies, eight are members of a holding company called Borneo Investama (in short: BI). Five subsidiaries obtained their permits in 2006, one in 2007, and the remaining two in 2008, as presented in Table 7.

This section examines how the district government supervises BI subsidiaries, considering that this holding company operates the most extensive oil palm plantations, or 64 percent of the total large private plantations in the district. We selected this holding company's case to illustrate the complexity of supervision and shall identify structural problems.

Table 7. List of the sub-companies (pseudonyms) and size of permit and HGU areas

	Companies	Permit Areas	HGU Areas
1	PT. Borneo I	19.000 hectares	8.230 hectares
2	PT. Borneo II	9.500 hectares	6.972 hectares
3	PT. Borneo III	20.000 hectares	8.349 hectares
4	PT. Borneo IV	21.000 hectares	9.766 hectares
5	PT. Borneo V	20.000 hectares	15.136 hectares
6	PT. Borneo VI	18.000 hectares	6.756 hectares
7	PT. Borneo VII	20.000 hectares	15.371 hectares
8	PT. Borneo VIII	21.000 hectares	8.294 hectares
	Total	148.500 hectares	78.874 hectares

4.5.1 Evaluation of the implementation of plantation businesses

The supervision of oil palm plantations' activities is conducted along two axes. First, it is carried out by each level of government (central, provincial, and district/municipal) under their respective jurisdiction. Supervision oversees the technical aspects of plantations during the development and operational stages. Second is sector-based supervision, performed by sectors related to plantations, such as the environment, land, and forestry. Supervision is carried out by the relevant ministries representing the central government (MoA, MoEF, and MoAASP/NLA), the provincial governor through the local plantation and environmental agencies, and the regent through the district plantation and environmental agencies.

The complexity of these rules and the division of supervisory authority give rise to conflicts in carrying out supervision, as we will show below. Furthermore, the regulations made by these various sectors also tend to be incomplete and often create a legal gap in supervision. It may, for example, lead to an invalid investigation because the wrong supervisor or institution carried it out.

4.5.1.1 Supervision at the plantation development stage

Within three years of obtaining the permits, none of the eight subsidiaries had facilitated the development of community plantations. Neither did the companies

fulfill their obligations to establish partnerships with smallholders, employees, and surrounding communities. Six of the eight plantation companies planted oil palms outside their permit areas (2,017 hectares). Furthermore, the plantation companies failed to periodically report their activities to the Kutai Kartanegara district plantation agency. Based on our review of licensing documents, the companies submitted their last report in November 2015.

The district plantation agency issued three warnings to the eight plantation companies in response to such violations. On 7 November 2016, the first warning addressed the companies' negligence in realizing the planting in the designated area. Regarding the remaining land of the permit areas that cannot be cultivated, the plantation agency advised the companies to apply to the regent for permission to reduce the required planting area. The letter also warned the company not to carry out plantation development activities outside the permit area. The second warning was given on 29 August 2017. The content of this letter was the same as the first notice. Since the companies ignored both letters, the plantation agency was given a third warning on 6 February 2018. This third notice repeated the previous two letters' contents and reprimanded the companies' attitudes for not complying with the earlier letters.

We underline three issues regarding the district government's response to these violations. First, the district government did not determine the class of these eight companies, whether included in the A, B, C, D, or E classifications, as stated in Article 18 of the 2009 Plantation Assessment Regulation. It is crucial to define the plantation class as it relates to recommendations about the issues that need to be improved by plantation companies during the development stage. Without identifying the plantation classes, it becomes challenging to stipulate the factors that require improvement. It is also vital to highlight that under Article 19 of the 2009 Plantation Assessment Regulation, if the regent does not set the plantation class within two months after receiving the assessment results, the plantation business is considered Class A. This, in turn, has a significant consequence, especially considering that the eight subsidiaries of BI have failed to comply with most of their obligations during the development stage.

The second issue is that the warnings contained some inaccuracies, which caused legal uncertainty. For instance, it is shown by the first warning issued to PT. Borneo II which mentioned that the company had planted 2,078 hectares, but the subsequent letters mentioned only 1,804 hectares. Further, in issuing the second and third warnings, the plantation district agency was also imprecise in referring to the letters'

reference numbers. Such errors occurred in almost all second and third warnings to all companies. Third, given that the third warning letter was dated 6 February 2018, the licensor should have revoked the plantation business permits in June 2018 since the companies did not implement the recommendations within the stipulated warning period. However, the district government has not repealed the permit even though the deadline has passed, without any apparent reason.

On the ground, the companies seem not to have been operational in the last few years, and the plantations appear neglected and abandoned. The head of Loa Tebu village, Tenggara sub-district, confirmed this: "I even helped with the costs of treating some employees who could not afford to pay a doctor and medicines," he said.¹³ In Jembayan village, Loa Kulu sub-district, villagers have started reclaiming their land in the company's concession area because it has been abandoned for years.¹⁴

The district government's inaccuracy in issuing the warning letter is in violation of the principles of good governance, particularly the principles of accuracy and legal certainty. Our earlier research in reviewing administrative court decisions regarding plantation and mining permits in Kukar (2002-2008) demonstrates that the Kutai Kartanegara district government's loss in the administrative court cases was mainly due to their non-compliance with these two principles (Nasir, 2010, pp. 87-106).

4.5.1.2 Supervision at the operational stage

Dealing with the operational stage, the plantation agency conducted a series of plantation business assessments between April and June 2018. Based on the assessments, in September 2018, the regent issued decree Nr. 525 of 2018 regarding the Determination of Plantation Class Based on the 2018 Plantation Business Assessment Results. The decree classified the companies as grade V (fail). Subsequently, on 17 December 2018, the regent issued a notice that ordered the companies to improve their management, corporate social responsibility, regional economic, environmental, and reporting aspects of their operations. It also mentioned that if the companies did not comply with the order within six months, the regent would revoke the plantation permits on 17 June 2019. However, when this date arrived, the district government decided without any explicit consideration not to revoke the eight companies' plantation permits, even though the companies had failed to implement the recommendations.

¹³. Interview with the head of Loa Tebu village, Tenggara sub-district (April 2019).

¹⁴. Interview with the head of Jembayan village, Loa Kulu sub-district (April 2019). At the time of writing (October 2023), such repossessed lands remained in use by these villagers.

In terms of authority, the district government can revoke the plantation permits considering that since February 2019, the vice-regent (previously acting regent) has been appointed as the definite regent, as explained above. The regent argued that the companies' management had requested that the permits not be revoked and promised to reorganize the companies.¹⁵ According to the Head of Business And Counselling of the District Plantation Agency, in March 2020, the agency submitted technical advice concerning the revocation of the permits to the District One-stop Investment and Integrated Services Agency – which organizes integrated licensing services in the district.¹⁶ In June 2021, on behalf of the regent, the District One-stop Investment and Integrated Services Agency revoked all of the plantation permits of BI's subsidiaries.

This case demonstrated that the district government did not comply with the period of imposition of sanctions as stipulated in the legislation. The district government should have revoked the permits for the eight subsidiaries in June 2019, but the sanctions were only imposed two years later, in June 2021.

4.5.2 Evaluation of the performance of plantation companies

Under the 2013 Plantation Permit Regulation, the performance evaluation of the plantation company is carried out based on a plantation business development report. Evaluation is held through a field inspection to ascertain whether the report is aligns with the facts on the ground.

After November 2015, the district government did not evaluate the performance of BI subsidiaries because the companies had never submitted their report to the district government. In that last evaluation, the district government had warned the BI subsidiaries about two issues: the companies' negligence in submitting reports on plantation business developments and the poor financial performance of the companies.

Although the 2014 Plantation Law and the 2013 Plantation Permit Regulation oblige plantation companies to submit their plantation business development reports periodically, both regulations do not provide sanctions if they do not submit the reports. Also, when the company's performance evaluation result suggests recommendations for performance improvement, the laws do not provide sanctions for a company that does not fulfil the recommendations. Thus, this situation is different from the evaluation of the implementation of plantation businesses, where

^{15.} Interview with the regent (14 November, 2019).

^{16.} Interview with the Head of Business and Counseling, The District Plantation Agency (17 April 2020).

the licensor can revoke the permit if the plantation company does not comply with the recommendations within a certain period.

4.5.3 Evaluation of the environmental permits

As set out in the 2009 Environmental Law, the regent can delegate the authority to supervise technical officials or agencies. For example, in the Kutai Kartanegara district, the environment and forestry agency was responsible for supervising environmental permit holders' compliance.

In the case of Borneo Investama, according to the environmental agency, they cannot carry out the monitoring. "The offices are more often closed than open. Even if the offices were open, we did not find anyone responsible for managing the companies' environment".¹⁷ In September 2014, based on reports from residents of Santan Ulu Village, Marangkayu District, the Environment Agency evaluated PT Borneo II for allegedly polluting the Panggul River. The alleged pollution was confirmed by the results of laboratory tests conducted by the Environmental Research Center at Mulawarman University, which indicated that the acidity of the Panggul River water was beyond the environmental quality standards. The district environmental agency then invited the company and the community to reach a case settlement. Despite being asked multiple times to clarify the alleged contamination, the company never came and even rejected the accusation of polluting the environment. However, the environmental agency head did not want to bring the case to court. According to him, the district government just attempted to mediate the dispute between the company and the community on pollution (Mubin, 2015). As indicated by D'Hondt (2019, p. 213), such an approach prevented the government from taking potentially controversial enforcement measures. Officials preferred to avoid confrontations with licensees and other stakeholder government institutions.

Furthermore, in March 2020, the environmental agency suspended PT Borneo III's environmental permit. This administrative sanction was based on two reasons. First, PT Borneo III did not manage the waste following the procedures set out in the environmental permit. Second, the company's owner was transferred to another management, but the license still contained the identity of the former licensee. Therefore, in the case of changes to company ownership, the company should also make adjustments to the environmental permit document (Pahlevi, 2020).

In sum, the supervision of the BI subsidiaries demonstrates three issues: the first is that the control carried out by the district government violated good governance

¹⁷. Interview with the environmental agency's head of environmental law enforcement (17 April 2019).

principles, mainly the principles of accuracy and legal certainty, as stipulated in Law Nr. 30 of 2014 concerning Government Administration. For example, the regent was authorized to revoke the plantation permits, but he did it only two years after issuing the third and final warning letter (June 2019). The second issue is the incompleteness of supervisory norms exemplified by the absence of sanctions for local governments who are late in imposing sanctions on plantation permit holders. In addition, in the case of plantation performance evaluation, the company's obligation to submit reports on the progress of plantation activities is not accompanied by sanctions for violators. The last issue is the opportunity to exploit legal incompleteness for the company's benefit. Without sanctions for district governments that do not impose sanctions for companies that violate rules, it provides opportunities for plantation companies to influence local governments in making decisions regarding permits. In the context of the Kutai Kartanegara district, this needs to be underlined, considering also that the previous regent was dismissed due to a bribery case related to plantation licensing (Tempo, 2018).

On the other hand, in certain situations, implementing the supervision of oil palm plantations becomes complex because it is also related to other regulations governing the authority. For example, as we explained above, the central government, through Law Nr. 30 of 2014 and GR Nr. 6 of 2005, states that in the case of a district being led by an acting regent, he is not authorized to take strategic decisions or actions that impact changes in legal status, such as revocation of permits. So, when permit violations occur in the Kutai Kartanegara district, the acting regent cannot revoke the license. This situation constitutes a legal vacuum in the necessary supervision of oil palm plantations.

4.6 Challenges in oil palm plantation supervision: between the weakness of regional government commitments and legal uncertainty

In November 2019, the President of Indonesia issued Instruction No. 6 of 2019, which outlines the National Action Plan for Sustainable Palm Oil Plantations 2019-2024. This move serves as a significant stride towards promoting sustainable practices within the country's palm oil industry. This instruction emphasizes the need to enhance planters' capacity and capability, carry out environmental management and monitoring, improve plantation governance and legalize land ownership, promote palm oil as a renewable energy, and prioritize diplomacy to achieve sustainable palm oil plantations.

The five priorities above show that the government places great emphasis on the development of oil palm plantations due to its significant economic, socio-cultural, and ecological impact, surpassing that of other plantation commodities. It is made apparent through various government policies, including a privilege under Law Nr. 11 of 2020 on Job Creation and Government Regulation Nr. 24 of 2021, which covers the procedures for imposing administrative sanctions and non-tax state revenue originating from administrative fines in the forestry sector. This industry is granted the privilege of “amnesty” from criminal penalties under Law Nr. 41 of 1999 on Forestry and Law Nr. 18 of 2013 on Prevention and Eradication of Forest Destruction. The imposition of criminal sanctions under these two laws has been replaced with the obligation to pay fines, which are calculated based on the applicable regulations. This policy also covers the plan to legalize 3.3 million hectares of oil palm plantations situated in forest areas (Nababan, 2023). This action is actually not that surprising, as Greenpeace (2021, pp. 60-61) reported that the Indonesian government had also granted such an “amnesty” to oil palm plantations in forest areas in both 2012 and 2015.

This sector’s protection by the government is also demonstrated by the MoAASP/NLA’s reluctance to provide data and information about HGU for plantations in Central, West, East, South, and North Kalimantan, despite a Supreme Court order on March 26, 2020, requiring them to do so for Forest Watch Indonesia. Even in December 2022, the Ombudsman of the Republic of Indonesia declared that the MoAASP/NLA’s actions constituted maladministration.¹⁸ The Minister of AASP/NLA has declined to comply, stating that the information is not meant for public consumption. The Minister believes that if the HGU data is made public, it could pose a risk to national interests, particularly the palm oil industry (CNN Indonesia, 2019).

In East Kalimantan, the provincial government launched the Green Kaltim program in 2010, intending to promote a green economy. One way to achieve this goal was by encouraging the development of sustainable oil palm plantations in the region. Oil palm is the primary plantation commodity in East Kalimantan, which spans a staggering 1.41 million hectares of land in 2022. Plantations have substantially bolstered the region’s economy, representing around 4.5 percent of its Gross Regional Domestic Product (GRDP) between 2018 and 2022 (BPS Kaltim, 2023, pp. 671). Considering the significant contribution of oil palm plantations to the economy of East Kalimantan, the governor rejected European Union (EU) propaganda, which stated that oil palm plantations cause damage to forests and

¹⁸. See: Ombudsman Republik Indonesia, Rekomendasi Nomor: 0002/RM.03.01/0750.2017/XII/2022. available at: https://ombudsman.go.id/produk/lihat/767/16_file_20230328_094150.pdf, accessed October 17, 2023

ecosystems. He argued it is merely a business strategy of the EU because Europe is the leading sunflower oil producer (Nasrul, 2023).

Furthermore, to follow up the national action plan, in July 2022, the governor of East Kalimantan issued Regulation No. 19 of 2022, which outlines the regional action plan for sustainable palm oil plantations in the province for 2019-2024. It is noticeable that the policy was released more than two years after the president's initial instructions. It raises concerns about the policy's effectiveness since the action plan will only be in effect for just over two years, as it was enacted in July 2022 and is set to end in 2024.

The dynamics of oil palm plantation developments as explained above demonstrate that the government's commitment to execute plantation governance in the oil palm industry is often overshadowed by the interests of investors who claim to act in the name of the national economy (See, for instances, BersihkanIndonesia, 2020; Riyanto et al., 2020). The development of policies in the industry are dynamic and unpredictable since they reflect the constant struggle between the government's vision of sustainable and socially responsible development on the one hand, and the investors' short-term economic goals on the other. We argue that the tendencies and policy choices shown by the central and provincial governments when faced with non-compliance with plantation companies become precedents or preferences for district governments in overseeing oil palm plantation activities within their respective regions.

As discussed above, legislation concerning the supervision of oil palm plantation operations is also spread across various sectors, such as agriculture, forestry, environment, and land. One ministry is unlikely to pay regard to a statute primarily directed at regulating the portfolio of another. In performing its function, for example, MoA is likely to primarily refer to the regulations in their jurisdiction rather than other environmental, forestry, and spatial planning regulations, even though such related rules might also be related to plantation issues. Besides, it is also regulated by central, provincial, district, or municipal governments. The consequence of sector-based and tiered legislation is the incompleteness of provisions, often leading to a lack of supervision of oil palm plantation operations.

4.6.1 The causes of legal incompleteness

This research identified three main causes of this incompleteness of law. *First* is the delay in establishing implementing regulations. Most of the laws that regulate the supervision of oil palm plantation operations only provide general provisions of supervision and monitoring, and they require the government (central, province, and district) to issue further regulations. In many cases, these implementing regulations

also need further regulations to implement them. For example, a government regulation always requires another instrument, such as presidential or ministerial regulations, for its implementation. At the regional level, provincial or district regulations entail regulations and decisions from the governor or regent.

The problem in practice is that often there is a long delay in providing the implementing regulations, if they are issued at all. For example, the 2018 Provincial Regulation delegated the formation of 13 gubernatorial rules and one decree. As of October 2023, of the thirteen delegated regulations, the provincial government has only issued three, two concerning management and criteria for areas with HCV (2021) and the other regarding sustainable plantation communication forums (2018). Also, to follow up on the National Action Plan for Sustainable Palm Oil Plantations 2019-2024, the governor of East Kalimantan issued Regulation No. 19 of 2022 in July 2022, which outlines the regional action plan for sustainable palm oil plantations in the province for 2019-2024.

It is worth noting that the policy was released more than two years after the president's initial instructions. It raises concerns about the policy's effectiveness since the action plan will only be in effect for just over two years, as it was enacted in July 2022 and is set to end in 2024. In another example from Kutai Kartanegara district, the 2014 District Regulation requires 15 head of district regulations and two decrees. At the time of writing, the district government had only promulgated one head of district regulation concerning plantation business partnerships in 2016. For law enforcement, this delay in establishing the implementing regulations creates a risk that the provisions of the regional regulations will remain inoperable.

The *second* factor is the absence of sanctions. Many, if not most laws and regulations in Indonesia set government obligations without being accompanied by sanctions if the government fails to fulfill them. In terms of plantation supervision, as illustrated in the case in Kutai Kartanegara district, the regent did not revoke the plantation permit even though the permit holders had violated their obligations and the procedural requirements for revocation had been met. Additionally, we perceive the regent's reluctance to revoke the permits due to economic considerations, given that this holding company holds 64 percent of the total large private plantations in the district (BPS Kaltim, 2021).

The choice was also influenced by the policy's model of the central government in addressing plantation companies' violations at the national level. It is, for instance, demonstrated by the central government's plans to legalize 3.37 million hectares of

illegal plantations under a sweeping amnesty program introduced under the 2020 Job Creation Law. The proposal suggests that companies be given a three-year grace period to obtain the necessary permits, including rezoning their operational area to allow palm cultivation and paying any required fines to resume their operations (Jong, 2023).

Similarly, with regard to the responsibility of preparing delegated regulations, various levels of government or related agencies sometimes neglect the need to draft such implementing regulations despite acknowledging that technical regulations are necessary for effective rule enforcement. Moreover, applying a regulation without accompanying implementing rules may lead to legal uncertainty, as subjective interpretations of its execution may arise. This situation may also result in law enforcement breaches due to incomplete guidelines (Yusuf, 2022, p 84). By the same token, whereas some regulations contain deadlines by which implementing regulations must be enacted, those regulations rarely impose any consequences for breaching the time limits. The absence of sanctions allows the government to ignore deadlines which creates a risk that provisions cannot be appropriately implemented (Hadjon, 1993, p 56).

Further, the style of legal drafting is a *third* factor that creates legal incompleteness. Laws and even (implementing) regulations in Indonesia commonly consist of statements of principle or policy rather than rules and tend to avoid precise rule formation. It is, for example, indicated by the term ‘reward’ in Article 12 of the 2014 Plantation Law. This term refers to something indigenous peoples receive when they allow their land to be used as a plantation area. The article’s explanation stated ‘rewards’ as, among other things, money or shared ownership. However, the term ‘reward’ is not entirely clear since, in several cases, the plantation company determines the type and amount of reward without the communities’ consent (Sholikin, 2016, pp. 26-29). Therefore, the Agency of National Law Development (BPHN) has recommended replacing the term ‘reward’, because it can be misused to advance specific interests and lead to an abuse of power (BPHN, 2016, pp. 56).

The legal drafting style often employs imprecise or ambiguous words, complex terms, and language that is hard to understand, even in the elucidation of a regulation. Whereas the elucidation serves to clarify complex terms used in the legislation, it is often limited to simple phrases such as ‘sufficiently clear’ (*cukup jelas*), even though the term’s meaning is unclear and needs clarification. Take, for example, Article 37 (1) of the 2013 Plantation Permit Regulation. Under this provision, one of the reasons for rejecting an application for plantation business diversification is if the business to be carried out is contrary to public order (*ketertiban umum*). This

regulation does not clarify, not even in its elucidation, what public order means and when and in what cases a business can be categorized as disturbing public order. Incomplete norms due to complex terms are also found in Article 31 (2) of the 2018 Provincial Regulation. This clause states that the plantation permit is granted upon consideration of the technical aspects of the plantation and economic, social, and environmental feasibility. However, no clarification as to what constitutes 'feasibility' is given, neither in the clause, nor in the article's elucidation.

4.6.2 The impacts of legal incompleteness

The incompleteness of legal norms on supervision prevents local governments from optimally supervising oil palm plantation activities and even has them decide to not, or to postpone, revoking plantation permits. This study identified that such weaknesses in supervision due to the incompleteness of provisions causes *environmental damage*. If the provisions regarding supervision are general statements lacking technical instructions as to when, how, and who is authorized to control plantation activities, provisions regarding supervision cannot be appropriately implemented. In the case of Kutai Kartanegara district discussed above, the district government preferred an out-of-court settlement when a plantation company was suspected of committing pollution. Even when the plantation company failed to honour the government's mediation invitation, the government did not impose any sanctions on the company. The absence of implementing regulations regarding supervision made the district government hesitant in taking firm action against the company suspected of polluting the environment.

The second consequence of incomplete norms is *conflict between plantation companies and communities*. For instance, in Kutai Kartanegara district such conflict arose through environmental damage caused by oil palm plantation activities. As explained above, the local government's indecisiveness to act against palm oil companies triggered protests from the impacted communities, causing conflicts between them and the companies (Human Right Watch, 2021, pp. 57-60; Berenschot, 2021, pp. 17-18). Another cause of company-community conflict is the failure of a company to fulfill its promise to develop partnership plantations. In the case of Kutai Kartanegara district, villagers reclaimed land that will be used for an oil palm plantation because the company did not meet its promise to facilitate the development of partnership gardens around the plantation concession.

4.6.3 Overcoming legal incompleteness

In order to ensure that supervisory regulations are accurate and comprehensive, the government should provide more detailed rules, which can reduce the number of

delegated regulations. This has been demonstrated over the last three years, when government regulations, such as implementing regulations of the 2020 Job Creation Law, have contained detailed rules in hundreds of articles. This legal drafting style can also be adopted at the provincial and district levels by making laws more detailed so that they do not require further arrangements in gubernatorial and head of district regulations or decrees. When delegation to regional head regulations is unavoidable, the preparation of implementing regulations can be drafted simultaneously with provincial or district regulations so that they can be enacted in a short period following the provincial or district regulations promulgation.

Furthermore, drafters should avoid complicated terms that require further clarification in drafting regulations. If these cannot be avoided, then the article's elucidation must explain what is meant. Finally, drafters need to include sanctions for officials who do not carry out obligations stipulated in regulations. Without such sanctions, it will become a voluntary rather than mandatory option if they do not.

Meanwhile, to address the existing legal incompleteness, discretionary power might be an alternative. Under Law Nr. 30 of 2014 concerning Government Administration, discretion is a government official's deed or decision to overcome concrete problems faced in the administration of government in terms of laws and regulations that provide choices, do not regulate, are incomplete or unclear, or when there is government stagnation. In order to avoid misuse, government officials should ensure that employing discretion in overcoming legal incompleteness follows statutory provisions and good governance principles, is based on objective reasons, does not cause a conflict of interest, and is carried out in good faith (Article 24).

4.7 Conclusion

This article has highlighted a series of problems in the existing legal framework of the development of oil palm plantations that regulate and supervise the activities of oil palm plantation corporations in Indonesia, especially in the Kutai Kartanegara district. The regulation on supervision of oil palm plantations spans multiple levels of government (central, provincial, and district) that all hold relevant authority. The control is also cross-sectorally based since plantation permit holders are subject to environmental permits, ISPO certification, HGU certification, PKKNK, and MoEF approval on FAR. Each permit and certificate imposes different obligations, the implementation of which is supervised by various agencies from the plantation, environmental, land, and forestry sectors. The consequence of sector-based and

tiered legislation is the incompleteness of provisions, overlaps, and also a lack of clarity about respective authorities, which makes the supervision overly complicated.

This research discovered three main causes of this incompleteness of law in supervising oil palm plantations: the delay in establishing the implementing regulations, the absence of sanctions in case of non-compliance, and the use of imprecise or ambiguous words and complex language. This kind of incompleteness of norms gives rise to legal uncertainty in supervising oil palm plantations, weakens governmental supervision of oil palm plantations and can lead to environmental damage and conflict between oil palm plantations and villagers.

Furthermore, this legal incompleteness benefits oil palm plantation companies. Although government agencies undertake a series of supervisions, these are hampered by the incompleteness of regulations. The district government, for instance, can consider delaying or not imposing penalties for permit violations in light of the absence of consequences to the district government in cases they do not revoke the permits.

In order to address such incompleteness, this study proposed preventative action in drafting regulations. This strategy entails crafting more comprehensive guidelines to reduce the need to delegate authority to lower levels of government. When such delegation is necessary, implementing regulations can be developed along with the parent regulation to expedite their implementation soon after the higher rule is promulgated. Subsequently, drafters should avoid complicated terms that require further clarification in drafting regulations. If it cannot be avoided, then the article's explanation must explain what the word or concept means. Finally, drafters need to consider sanctions for officials who do not carry out the obligation as stipulated in regulations. Furthermore, concerning the existing legal incompleteness, government officials should be able to apply discretion to address the legal gap. This policy instrument is designed to overcome laws and regulations that provide choices, do not regulate, are incomplete or unclear, or when there is government stagnation.

Chapter 5

Protecting Forested Areas in Non-Forest Zones through The Ecological Fiscal Transfer Scheme in Indonesia: A case study from Kutai Timur district

This chapter is adopted and modified from:

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Kutai Timur is a district in East Kalimantan province with the largest forested areas in its non-forest zone (APL). Several large-scale land-based activities, such as oil palm plantations and coal mining, threatened the remaining forested areas in Kutai Timur's APL. The opportunity to convert forested areas in this APL through these two activities is widely-opened, considering that both are the main pillars of the district's economy. The plantation areas are expected to grow, considering that the grand design of long-term development mandates that the district become an agribusiness and agro-industry region. Besides, the district provides about 1.2 million hectares for oil palm plantations in its Spatial Plan document (2016-2036). Approximately 852 thousand hectares of this area are in the district's APL (Herlambang et al., 2020).

This chapter will explore the opportunities and challenges of adopting the Ecological Fiscal Transfer (EFT) scheme as a policy instrument to safeguard the forested areas in APL in the Kutai Timur district. These forested areas are presently facing significant risks from activities like coal mining and oil palm plantations that are putting them in danger.

This section demonstrates that the Kutai Timur district government can adopt the EFT scheme, given that they have the authority to manage the APL and village funds allocation. In order to adopt the scheme, the district government should develop criteria and indicators by considering the goals and priorities of district development, the data availability, and the opportunity for every village to implement it. These criteria and indicators must be prepared in a participatory and accountable process to be well accepted by the stakeholders. Further, the district government requires the integration of the EFT scheme into district village fund allocation policies. The district government can encourage village governments and villagers to protect and manage forested areas by implementing the EFT scheme.

5.1 Introduction

Our planet's climate is rapidly changing (Eckstein et al., 2019; World Economic Forum, 2020), and many countries, including Indonesia, increasing face environmental risks--both in terms of their frequency as well as the impact of these risks. Indonesia is a country that is particularly prone to ecological disasters, such as floods, droughts, and rainstorms (BKF, 2019), and the United States Agency for International Development (USAID) estimates that the damage of ecological disasters to be borne by Indonesians will reach a staggering IDR 132 trillion (the equivalent of approximately USD 9,2 trillion) in economic losses by 2050 (Hecht, 2016, p. 24).

Climate change is a negative externality from economic activities that decrease the community's welfare (Hallegatte et al., 2016; Stern, 2007). These negative externalities from economic activity continue to accumulate, triggering an increase in the concentration of greenhouse gas (GHG) emissions, which are the main source of climate change (BKF, 2019). In practice, the social and environmental externalities are often hidden, since they are commonly not addressed (GGGI, 2016), causing the risks to fall upon the shoulders of the community or government. These externalities create costs for restoring and preserving the environment, often borne by the government. In budgeting policies, these costs become a component of government spending allocated in the State Revenue and Expenditure Budget (*Anggaran Pendapatan dan Belanja Negara/APBN*) or Regional Revenue and Expenditure Budget (*Anggaran Pendapatan dan Belanja Daerah/APBD*).

In an effort to manage climate change risks by 2020, Indonesia established policies to mitigate GHG emissions and to better adapt to the impact of climate change. Their plans were outlined in the National Action Plan for Reducing Greenhouse Gas Emissions (*Rencana Aksi Nasional Untuk Penurunan Emisi Gas Rumah Kaca/RAN GRK*) and the National Action Plan for Climate Change Adaptation (*Rencana Aksi Nasional Adaptasi Perubahan Iklim/RAN API*). Their efforts became supported through an allocated budget, however, such funding-related efforts need to be further supported by looking at opportunities for alternative sources of financing. Some of these alternative sources can come from government fiscal policies, such as environmental taxes (green tax), village funds, special allocation funds (*Dana Alokasi Khusus/DAK*), regional incentive funds (*Dana Insentif Daerah/DID*), green bonds, green *Sukuk*,¹ and others through investment schemes by private parties, such as biodiversity offsets and private equity. Moreover, this crossover between

¹. Green *Sukuk* is a shari'ah compliant investment in renewable energy and other environmental assets. It addresses Shari'ah concern for protecting the environment.

governmental and private financing (quasi-fiscal) includes environmental trust funds (UNDP, 2018, p. 9). To help reward governments that undertake initiatives to improve the environment and prevent climate change risks, several countries have developed an incentive scheme, through the regulation of fiscal transfers known as ecological fiscal transfers (EFT) (Erbaugh & Nurrochmat, 2019; Nurfatriani et al., 2015; Sheriffdeen et al., 2020). First developed in the early 1990s in Parana, Brazil, the scheme was promoted to overcome the scale mismatch between the environmental benefits and the economic costs of ecosystem conservation (Busch et al., 2021; De Paulo & Camões, 2021; Ring, 2004).

The discourse on EFT in Indonesia has developed over the last five years. The Research Center for Climate Change, University of Indonesia (RCCC UI), proposed the forest area as a variable in distributing the General Allocation Funds (*Dana Alokasi Umum/DAU*) to regions. The Biodiversity Finance Initiative (BIOFIN), initiated by the United Nations Development Programme (UNDP), encourages a Regional Incentive Funds (*Dana Insentif Daerah/DID*) scheme for biodiversity (BIOFIN, 2018, 2021; UNDP, 2018). In the Heart of Borneo, the World Wide Fund for Nature (WWF) conducted a study on ecological indicators for regional fiscal transfer schemes. This research focused on High Conservation Value (HCV), which may become an instrument for assessing the ecological benefits of an area in the East Kalimantan province (WWF Indonesia, 2019). Then The Asia Foundation (TAF) and civil society networks promote EFT through three schemes, namely the Ecology-based District Budget Transfer (TAKE), the Ecology-based Provincial Budget Transfer (TAPE), and the Ecology-based National Budget Transfer (TANE) (Putra et al., 2019). Such initiatives show that the fiscal transfer schemes in the EFT take various forms: from the central government to the regions, from the province to the districts, and from the district to the villages. The EFT also has multiple criteria and indicators, depending on what issues in the environmental and forestry sectors will be prioritized, protected, and managed (see Di Gregorio et al., 2017; Rossita et al., 2021; Yovi & Nurrochmat, 2018).

The district governments have an opportunity to protect forested areas outside the forest zone, known as other areas of use (*Areal Penggunaan Lain/APL*), using the EFT scheme, since that APL is under the district government's authority. Forested areas in APLs provide an essential role in community life support systems by: maintaining microclimates, being a habitat for wildlife, reducing pollution, and supporting community livelihoods, as well as potential non-timber forest products (Herman et al., 2019). The Ministry of Environment and Forestry (MoEF) notes that many forest covers in APLs are found scattered throughout Indonesia (Nurrochmat et al., 2020). The total forest cover area in APL until 2018 was around 7.9 million hectares

(Ditjen PKTL, 2019, p. iv). The most extensive forest cover of 2.5 million hectares is in Kalimantan and the province with the most significant forest cover in APL is East Kalimantan with 996 thousand hectares (Herman et al., 2019, p. 23).

This study examines the EFT scheme's possibilities to protect forested areas in Kutai Timur's APL (Figure 2). The author selected this district because it has one million hectares of APL (the largest in East Kalimantan) and a forest cover of about 161 thousand hectares (Herman et al., 2019). Several land-based activities on a large scale, such as oil palm plantations and coal mining, threatened the remaining forested areas in Kutai Timur's APL. The opportunity to convert forested areas in this APL by these two activities are great considering that both are the main pillars of the district's economy. Coal mining, for instance, constituted a significant 77.74 percent of the GRDP in 2020. Following the mining industry, the second highest contributing sector was oil palm plantations with a contribution of 9.6 percent to GRDP (BPS Kutim, 2021; Pemkab Kutai Timur, 2021).

Coal mining permits in this district account for 1.6 million hectares or about 46 percent of the district's total area (Maulana, 2019). As for plantation, the planted areas are 483,751,97 hectares, and oil palm plantations take up most of this, constituting 94.99 percent of the total plantation area (BPS Kutim, 2021), and it puts Kutai Timur as the largest oil palm plantation area in East Kalimantan (BPS Kaltim, 2021). The plantations areas are expected to continue to grow, considering that the grand design of long-term development mandates that the district becomes an agribusiness and agro-industry region (Diskominfo Perstik Kutim, 2021). Besides, the district provides about 1.2 million hectares for oil palm plantations in its Spatial Plan document (2016-2036). Of this area, approximately 852 thousand hectares are situated in the district's APL (Herlambang et al., 2020, p. 14).

Discussion of the implementation of the EFT scheme is essential considering that the three EFT schemes initiated by BIOFIN, WWF, and TAF (TANE, TAPE, and TAKE) do not specifically encourage the protection of forested areas in the APL. This study is significant considering that the district government can protect the forested areas in this non-forest zone. Moreover, because it is legally not categorized as a forest zone, the opportunity to convert it into plantations, mining areas, and settlements is widely open. By proposing the EFT scheme, the district government can encourage village governments to protect and manage forested areas in their village. In this context, corrective policies are required to seek a breakthrough in preserving the remaining forests in the district's APL and to reduce deforestation and biodiversity loss, maintain carbon sequestration, and provide a better ecological balance.

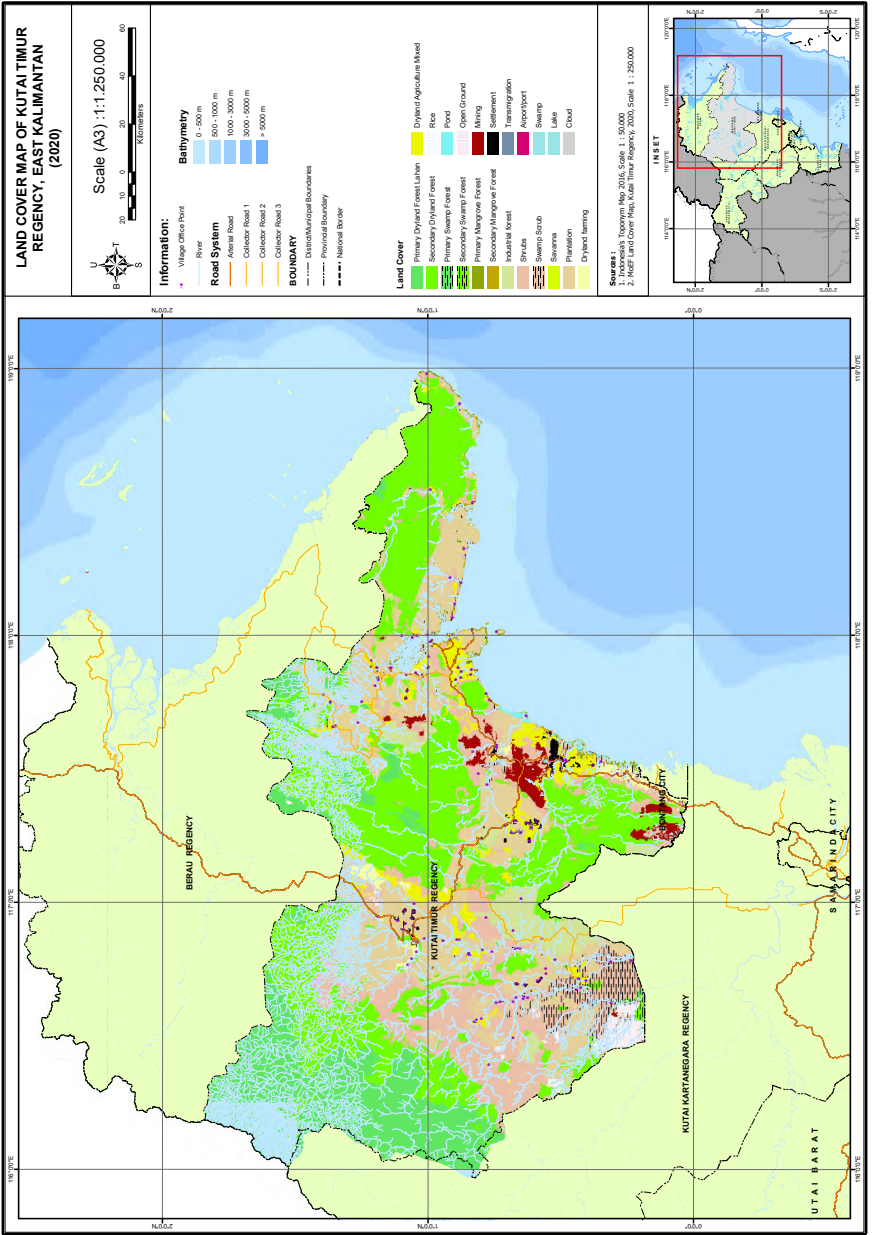


Figure 2. Study site (Kutai Timur district)

This paper aims to understand how the EFT scheme can be a policy instrument to maintain the forested areas in Kutai Timur's APL, East Kalimantan. In particular, this article investigates the following research questions: Can the EFT scheme become a useful instrument to protect forested areas in the district's APL? If so, what should the district government do to implement it? What are the challenges in implementing it, and how should they be addressed?

5.2 Methods

This study applied an interdisciplinary approach that is common in the discipline that has come to be known as the field of socio-legal studies (Banakar, 2019; Schrama, 2011). This manuscript follows a two-step approach. The first step involved a desk study analyzing the related regulations, such as forestry, environment, finance, regional governance, and literature on EFT schemes. Secondly, five focus group discussions (FGDs) were organized via zoom meeting to investigate the current situation of the forested areas in Kutai Timur's APL. The online FGDs identified items that can be used as EFT criteria and indicators and examined opportunities and challenges in implementing the EFT scheme in the Kutai Timur district, East Kalimantan. Due to the COVID-19 pandemic, this study had to rely on online meetings because all travel and face-to-face interactions to collect data were not permitted.

This study uses a doctrinal legal approach to examine laws and regulations, comprising a critical conceptual analysis of all relevant legislation to reveal the meaning of provisions of the law pertinent to the matter under investigation (Hutchinson, 2016; Kharel, 2018), while the analytical steps refer to the regulatory simplification instrument. With this instrument, the regulatory analysis is carried out using legality, need, and situational criteria. By operationalizing these three criteria, a regulation that meets legality (not contradicting other rules, both vertically and horizontally), need (required by the community), and is business-friendly, can be assessed as a reasonable regulation (Sadiawati et al., 2015). Based on this method, the author proposes to amend the regency head regulation on village funds allocation (ADD).

This study evaluates the feasibility of implementing EFT by examining the legal framework of ADD in Indonesia. In doing so, this research reviews rules, opportunity, capacity, communication, interest, process, and ideology, also known as the ROCCPI method (Otto et al., 2008; Seidman et al., 2001). This method is applied to investigate problems not adequately identified yet in regulatory drafting (Hoesien, 2012, p. 317).

Investigating rules means to what extent the existing regulation of the village financial governance prescribes how actors (central, regional, village governments, and society) should behave. Meanwhile, discussing opportunities in this method looks at the environmental circumstances that allow the relevant actor to act as the law prescribes or vice versa. The next aspect is capacity. It refers to the relevant actors that possess the necessary knowledge, skills, and resources to behave as defined by the law or contrary to it. The ROCCIPI method also requires inquiry into communication aspects to see whether the actors know and understand the rules of the village financial governance. Moreover, interest, refers to the existing incentives that induce relevant actors to behave as they do. Further, this method examines the process, which refers to the situations by which the actors decide whether they (dis)obey the rules and, finally, ideology, which means the actors' values, beliefs, and attitudes that influence their behavior.

5.3 Results

5.3.1 Forested areas in APL in Kutai Timur district

Kutai Timur is the largest district in the East Kalimantan province, with 3,189,649 hectares, which makes up 24 percent of the province's total land area (BPS Kaltim, 2021). The district also has considerable potential for forest resources spread over 18 sub-districts. Forest resources are located both in the forest zone as well as APL and consist of the rain forest, karst forest, swamp forest, and mangrove forest. Rainforests are the dominant forest type and are present in all sub- districts except for the South Sangatta, North Sangatta, and Muara Bengkal sub- districts. Forests in the North Sangatta and South Sangatta sub-districts are mangrove forests, while forests in Muara Bengkal are swamp forests (Herman et al., 2019).

The APL area in the district spans 1,059,13 thousand hectares, and the forest still maintained is 161,374 hectares. The forested areas in APL are located in all sub- districts, with the largest areas located in the Muara Ancalong sub-district covering 31.429 hectares and in the Sandaran sub-district covering 28.240 hectares. The following Table 8 provides information on forested areas in APL in the Kutai Timur district.

Given its significant size, the forested areas in APL play a significant role in reducing carbon emissions. Compared to the forest zone in the Kutai Timur district, the forested areas in APL are the largest, comprising 31 percent of the total forest in the district (Amirta, et al., 2019a, p. 24). The district's comprehensive secondary dryland forest cover is both an opportunity and a threat to reduce emissions from deforestation and forest degradation. Poor forest governance, for instance, can have

an impact on the decline in the quality of forest cover into thickets, which has the potential to produce relatively large emissions.

Table 8. Forested areas in APL in the Kutai Timur district

Sub-district	APL Area (Ha)				Total	Non-forest	Total
	Forested Areas						
	Rain forest	Karst Forest	Swamp Forest	Mangrove forest			
Batu Ampar	564	-	-	-	564	7.590	8.154
Bengalon	11.229	19	19	925	12.192	114.113	126.305
Busang	10.186	161	-	-	10.347	26.924	37.271
Kaliorang	198	554	-	1.206	1.958	18.702	20.660
Karangan	11.886	4.015	406	-	16.307	57.720	74.027
Kaubun	9.461	1.286	-	3.128	13.875	63.149	77.024
Kongbeng	4.350	-	-	-	4.350	80.529	84.879
Long Mesangat	292	-	2.022	-	2.314	27.760	30.074
Muara Ancalong	3.548	-	27.881	-	31.429	83.708	115.137
Muara Bengkal	-	-	180	-	180	36.282	36.462
Muara Wahau	4.711	28	-	-	4.739	94.449	99.188
Rantau Pulung	4.246	-	-	-	4.246	60.804	65.050
Sandaran	20.854	2.628	18	4.738	28.238	64.541	92.779
Sangatta Selatan	-	-	-	79	79	6.099	6.178
Sangatta Utara	-	-	-	984	984	30.822	31.806
Sangkulirang	5.964	950	667	11.308	18.889	85.124	104.013
Telen	10.442	-	241	-	10.683	36.227	46.910
Teluk Pandan	-	-	-	-	-	3.216	3.216
TOTAL	97.931	9.641	31.434	22.368	161.3	897.7	1.059.1

[Source: (Herman et al., 2019)]

The conversion of secondary dryland forest into shrubs is the most significant contributor to GHG emissions in the district (81.14 percent), followed by deforestation of secondary dryland forest into plantations (7.41 percent). The expansion of plantation land (carbon stocks reached 65.6 tons/hectare), for example, is carried

out in abandoned areas, such as shrubs (carbon stocks around 29.9 tons/hectares), which can reduce GHG emissions 35.7 tons/hectare. However, if the plantation land comes from the conversion of secondary dryland forest (carbon reserves of 169,7 tons/hectares), it will contribute to GHG emissions of 104,1 tons/hectare (Amirta, et al., 2019b, p. 90).

5.3.2 Forested areas in APL: Why should they be protected?

There are two main categories of land in Indonesia: forest and non-forest zones, also known as APL (Siscawati et al., 2017). A forest zone consists of forest areas designated for conservation, protection, and production, while APL is mainly designated for non-forestry sector development. The MoEF has jurisdiction to govern the forest zone. In contrast, the management of APL is under the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (MoAASP/NLA) regional governments. From a spatial planning point of view, APL is a cultivation area designated for industry, fishery, plantation, settlement, food crops, and horticulture activities. With such a reputation, the forested areas in APL are very likely to be exploited.

Some APL land is forested, while many forest zones have been highly degraded with little or no forest cover remaining (Nurrochmat et al., 2020). Reforestation of degraded forests is expensive. Based on the Director-General of Watershed Control and Protected Forest's (PDASHL) regulation Nr. P.8 of 2017 concerning the Basic Unit Prices of PDASHL Activities in 2018, for example, the cost of replanting forests per hectare ranges from 11-19 million rupiah. These costs do not include maintenance, security costs, and the risk of crop failure.

There are at least four reasons why forested areas in APL need to be protected. Firstly, about 7.9 million hectares out of 67 million hectares of APL (11.7 percent) are forested (Ditjen PKTL, 2019). Therefore, maintaining the remaining forest at APL will reduce deforestation and biodiversity loss, maintain carbon sequestration, and provide a better environmental balance. When the remaining forest in APL can be maintained and appropriately managed, it can become a tangible and intangible regional investment.

Secondly, these forested areas are legally considered to be outside the forest zone, which will motivate local government or people to convert them into other land uses (deforestation). Legally, forests in APL can be converted into plantations, or mining areas, or be used for other non-forestry sector developments as long as they do not conflict with regional spatial plans. The motivation to exploit forested areas in APL follows four fundamental factors: 1) the high-cost economy, 2) the technical inefficiency

in forest resource utilization and processing of forest products and services, 3) the economic value of forest products/services low, and 4) the unequal distribution of forest resource benefits (KalFor, 2018; Rahmani et al., 2021; Yovi & Nurrochmat, 2018).

Thirdly, no policies or laws provide specific protections for the forested areas in the APL. Spatial planning regulations, both on central and regional levels, only preserve the forest cover area in APL as a green open space (*Ruang Terbuka Hijau*: RTH) when it is located in industrial and residential areas. Dealing with biodiversity, GR Nr. 18 of 2021 concerning Management Rights, Land Rights, Flat Units, and Land Registration, obliges holders of cultivation rights (*Hak Guna Usaha*: HGU) to manage and maintain the high conservation value areas in their concession.² Other regulations concerning forests in APL are not addressed explicitly, but their content relates to forests with High Conservation Value (HCV) either in forest zones or other areas of use or APLs.

Fourth and lastly, maintaining and protecting forested areas in APLs is essential to strengthen Indonesia's commitment to reducing GHG emissions, which cause global warming. This commitment, accompanied by actions to protect the remaining forested areas in APL, will further enhance trade negotiations for several leading commodities associated with environmental damage,³ mainly tropical forests in Kalimantan.

5.3.3 EFT scheme as an instrument to protect the forested areas in APL

The EFT scheme is an alternative financing source for environmental recovery and preservation. Such a mechanism is a policy instrument designed to redistribute central and local governments' revenues based on ecological indicators (Ring & Barton, 2015, p. 438). The EFT mechanism creates central and regional governments' inter-governmental fiscal transfer schemes by adding ecological indicators in the agreed formulation (Boadway & Shah, 2009, p. 113). Thus, EFT enables a fiscal capacity for regions to strike an excellent environmental balance between its use for the community's welfare as well as for ecological preservation efforts (Kettunen et al., 2017, p. 127).

² There are six values and categorization of HCV: species diversity (HCV 1), landscape-level ecosystems and mosaics as well as intact forest landscapes/IPL (HCV 2), ecosystems and rare habitats (HCV 3), ecosystem services (HCV 4), community needs (HCV 5), and cultural values sites (HCV 6) (Jennings et al., 2003; Senior et al., 2015; Stewart et al., 2008). There is even an effort to increase the HCV criteria to seven for the production of certified plantation crops (Edwards et al., 2012) and promote carbon management (Stewart et al., 2010).

³ Indonesia's leading commodities often associated with environmental damage and deforestation are oil palm and pulp and paper plantations. See: (Alisjahbana & Busch, 2017; Austin et al., 2019; European Commission, 2018)

The EFT scheme was first initiated in Parana, Brazil, in the early 1990s. In just eight years, the state succeeded in increasing the total protected area in Parana from 637 thousand hectares in 1991 to 1.69 million hectares in 2000 or increased by about 165 percent (Mumbunan, 2011; Ring, 2004). This success has inspired other states in Brazil as well as numerous other countries such as Portugal (Rodrigues, 2014), India, Germany, Australia, and Switzerland (Mumbunan, 2011; Mumbunan et al., 2012) to adopt the scheme in efforts to preserve the environment.

In Indonesia, the government accommodates the EFT scheme through the Minister of Finance Regulation (PMK) Nr. 160/PMK.07/2021 concerning Management of Regional Incentive Funds (DID). This PMK further elaborates the criteria for the government's public service performance as the basis for providing fiscal incentives in Law Nr. 6 of 2021 concerning the 2022 State Revenue and Expenditure Budget. Through this PMK, the government has included the environmental management performance category as part of the government's public service performance indicators. It expands on the previous one, which only used waste management performance indicators.

Meanwhile, the fiscal transfers between provinces to districts, district to villages, which adopted the EFT scheme, later became the policy instruments called TAKE and TAPE. Jayapura district is the first district to implement the TAKE scheme established by Regency Head Regulation Nr. 11 of 2019 concerning Village Funds Allocation (Lintas Papua, 2019). The regulation prioritizes the ADD used for sanitation, spatial planning, environmental management, and alternative energy. After Jayapura, the second district that established this policy, is Nunukan in North Kalimantan. This district implements the TAKE scheme through Regency Head Regulation Nr. 59 of 2019 concerning Amendment to Regency Head Regulation Nr. 15 of 2015 concerning Village Funds Allocation. The regulation provides the village fund for environmental protection at the village level, among others.

The third district to implement the scheme is Kubu Raya in West Kalimantan (Oxtora, 2020) through Regency Head Regulation Nr. 101 of 2020 concerning Procedures for Allocation, Determination, Distribution Village Funds Allocation, and Profit-Sharing Taxes and Regional Retribution for the Fiscal Year 2021. The Regency Head regulation provides incentives for village performance in using and protecting natural resources. The Siak district is the fourth district that adopted the scheme. The district enacted the green village index to be one of the indicators of the TAKE scheme through the Regency Head Regulation Nr. 135 of 2020 concerning Village Funds Allocation.

Meanwhile, at the provincial level, the TAPE scheme became implemented in the North Kalimantan province through Governor Regulation Number 6 of 2019 concerning Amendments to Governor Regulation Number 49 of 2018 regarding Procedures for Providing, Distribution, and Accountability for the Government of North Kalimantan Provincial Government Financial Assistance Expenditures (Gusti, 2019). The regulation stipulates a new allocation for ecologically-based financial assistance directed to five activities: forest fire prevention in APL, green open spaces' management (*Ruang Terbuka Hijau*: RTH), waste management, protection of water sources, and prevention of air pollution (Putra et al., 2019).

Referring to the explanation above, the opportunity to propose the EFT scheme to protect forested areas in APLs is available. At the district level, the local government can adopt it by modifying the policy on village funds allocation (ADD).

5.3.4 Opportunities and challenges when implementing the EFT scheme in the Kutai Timur district

Opportunities to implement the EFT scheme can be tracked in regulations regarding the authority of district governments related to ADD. According to Government Regulation Nr. 43 of 2014 concerning The Implementation of the 2014 Village Law (amended by GR Nr. 47 of 2015: GR Nr. 43 of 2014), the district government can manage the allotment and use of ADD. In the Kutai Timur district, the district government arranges the ADD through Regency Head Regulation Nr. 36 of 2019 concerning ADD Guidelines (amended by Regency Head Regulation Nr. 56 of 2020). This regulation determined the ADD distribution based on basic⁴ and proportional⁵ allocations. With such authority, the district government can reformulate the ADD distribution by adding affirmative⁶ and performance-based⁷ allocations on village performance achievements in the issue assessed, namely in protecting forested areas in APLs. This policy intervention can be carried out, considering that the district government annually amends the Regency Head regulation to determine the amount of ADD and its use in each fiscal year.

The district's Mid-Term Development Plan (2021-2026) also provides the opportunity to integrate the EFT scheme into district policies regarding ADD. Under the planning

^{4.} Basic allocation is the portion of ADD allocated to finance the fixed income of the village head and village officials. Under this basic allocation, all villages receive the same funds.

^{5.} Proportional allocation is ADD distribution based on population, the number of poor people, area, and geographic difficulties.

^{6.} Affirmative allocation is ADD distribution that intends to assist certain villages that require specific support, such as traditional villages, poor villages, and others.

^{7.} Performance allocation is the distribution of ADD based on village performance achievements in the issues/sectors being assessed.

document, the district government will, among other things, establish procedures regarding the mechanisms for sustainable management of the forested areas. Doing so requires synergy and integration between the government, the community, and the private sector; along with regulations on forestry management mechanisms that are environmentally friendly; and a mechanism that can ensure an increase in the welfare of the community around the forests (Pekab Kutai Timur, 2021).

Lacking quantity and quality of human resources causes sub-optimal monitoring of activities around forested areas in APL. One effort to overcome these limitations is to involve the communities. Given that the forested areas in APL are under the district's jurisdiction, integrating the EFT scheme into ADD will allow the district government to "share" their obligation to protect forested areas in APL with villagers. In addition, the village will receive compensation to protect forested areas in APL. In the long term, safeguarding forested areas in APL can reduce GHG emissions that cause global warming.

The opportunity to adopt the EFT scheme is in part also supported by the communities' traditional knowledge and longstanding customs related to forest preservation. For instance, in Wehea, Kutai Timur district, the community combines their local genius with the Wehea forest's resources to develop ecotourism, which is also intended to increase its economy around the forest area (Edwin et al., 2017, pp. 135-136). From the government side (district and villages), the protection of forested areas in APL implements sustainable development based on intra-generational and intergenerational equity principles (Maggio, 1996; Weiss, 2008). It is also part of the government's commitment to controlling climate change, considering that the Government of Indonesia has ratified the Climate Change Convention through Law Nr. 6 of 1994 concerning Ratification of the United Nations Framework Convention on Climate Change. Thus, Indonesia is officially bound by the obligation to achieve the convention's objectives (Triatmodjo, 2005, pp. 302-303).

In terms of challenges, the district government deals with the district's financial capacity to implement the EFT scheme. The determination of the ADD in 2020 experienced a significant decrease. In 2019, the ADD allocation was IDR 292.5 billion, and in 2020 the value of this allocation decreased to IDR 192.7 billion. There was a decrease of around Rp. 99.7 billion (34.11 percent). The decline in ADD determination was due to the emergence of the Covid-19 pandemic. The district government has since refocused its budget distribution to handle and prevent Covid-19 (Pekab Kutai Timur, 2020). Besides, the EFT scheme is designed to be part of the ADD, whose allocation is mandatory in the budgeting policy. However, the central government policy on increasing the number of fixed incomes for village heads and apparatuses

can reduce the proportion of ADD for performance-based incentives if not followed by adequate financing from the DAU (Putra et al., 2019).

Another constraint in adopting the EFT scheme is data availability. The characteristics of the data used in the preparation of criteria and indicators of the EFT scheme should be omnipresent and available on an ongoing basis. The standards and indicators are valid in each village and periodically available (Halimatussadiah et al., 2021; Putra et al., 2019). Other obstacles are apparatus capacity and commitment. The actors who play a role in this are varied, such as the Village Community Empowerment Service, the Regional Development Planning Agency, the Environment Service, the Regional Financial and Asset Management Service, the Legal and Natural Resources Divisions of the Regional Secretariat, and the village government. These actors should know their duties and functions in performing the EFT scheme. In addition, implementation of the scheme also requires a high commitment from the government apparatus since, for example, there are still village government officials who commit ADD corruption at the village level in the Kutai Timur district (Teras Kaltim, 2021).

5.4 Discussion

To implement the EFT scheme, the district government should set up criteria and indicators of EFT and integrate them into district policies and regulations related to village funds. The following explanation indicates how to perform both steps and the opportunities and challenges that may be encountered in its implementation.

5.4.1 Developing criteria and indicators of the EFT scheme to protect the forested areas in APL in the Kutai Timur district, East Kalimantan

There is no specific standard as a reference in developing criteria and indicators of the EFT scheme. The initial scheme was related to biodiversity conservation (De Paulo & Camões, 2019; Droste, 2017). Still, over time, ecological criteria and indicators are dynamic and developed, such as water conservation policies (De Paulo et al., 2020), solid waste management, reforestation, and fire control (De Paulo & Camões, 2021; Haryanto, 2016).

In developing an EFT scheme in Kutai Timur district, this study argues that an incentive scheme, such as the EFT, requires criteria and indicators that can measure and indicate the performance of the village government in protecting its environment. The district government should provide these criteria and indicators and update them annually to measure village government performance. The complexity of

criteria and indicators used will affect the village government's performance assessment. Therefore, the district government should involve the relevant regional apparatus organizations to develop the EFT criteria and indicators. In general, there are two development models that the district government can choose between: first, a model with single data as criteria and indicators, meaning the EFT uses only one data type owned or compiled by the government, such as data on the forest cover in APL or on waste management; second, a model using multiple data as criteria and indicators of EFT, namely the preparation of the EFT index based on various data where each index has its score (Putra et al., 2019).

Adopting this scheme will help protect forested areas in APL, especially since the EFT is institutionally easier to implement than other programs that require approving new, additional, annual budget outlays (Busch et al., 2021). There are three requirements in setting up criteria and indicators for the EFT scheme at the district level: relevant to the goals and priorities of district development, the availability of data, and the opportunity for each village to implement it (Putra et al., 2019). By referring to those standards and discussions with stakeholders in the Kutai Timur district,⁸ this article proposes several criteria and indicators of the EFT formulation in the district. Both are dynamic and flexible, and after a year of implementation, the district government can evaluate and improve these criteria and indicators.

This study promotes the existing forested areas in the village as the first criterion to measure the village's performance in the EFT scheme. The forested areas become an option considering it has a significant role in addressing climate change (Brack, 2019; Streck, 2009). Approximately 2.6 billion tons of carbon dioxide, one-third of the CO₂ released from burning fossil fuels, is absorbed by forests every year (IUCN, 2021). In the case of Kutai Timur district, many forested areas in its APL are in good condition, storing carbon stocks and having high biodiversity (Amirta, et al., 2019b). Including this issue as a standard will encourage the village government to identify and protect the forested areas in the APL. The district government will compare it to the village data. It is also required to examine whether the size of the forested lands in the village increases, remains, or decreases.

The second criterion is village policies to protect forested areas in APL. Under Law Nr. 6 of 2014 concerning Village (the 2014 Village Law), the village can arrange

⁸ The stakeholders consist of the district government; such as regional development planning agencies, environmental services, community empowerment and village government services, plantation services, agriculture services, land and spatial planning services, district secretariat (legal division, economic division and natural resources division); representatives of village government; NGOs; and universities.

regulations to govern forest resources optimally and equitably to improve the welfare of local communities around the forest area (Christmas et al., 2021; Zunnuraeni & Zuhairi, 2018). The district government can measure their commitment to protect the forested areas by examining whether the village has regulations intended to protect forested areas. The criterion could also be verified through the village's spatial plan regulating space allocation for forested areas in APL and its use.

The third criterion is a local genius⁹ in protecting forested areas in APL. Villagers play an essential part in safeguarding forested areas in APL. For the Dayak communities in Kalimantan, the role is generally based on knowledge or traditions that have been inherited from generation to generation (Anau et al., 2019; Bakker, 2005; Ifrani et al., 2019; Leo et al., 2022). Therefore, in assessing this criterion, it is necessary to identify the local genius related to forest resources in a village. The local understanding can be in the form of knowledge or practices intended to protect forested areas, including endemic biodiversity, that have been going on for a long time.

The fourth criterion is the activities performed by the villagers to protect forested areas in APL. Community involvement in forest protection developed for decades and is also known as community-based forest management (CBFM) (Wahyu et al., 2020). This scheme provides the opportunity for the community and government to achieve sustainable forest management. Additionally, it also aims to reduce the rate of deforestation (Fisher et al., 2019; Safitri, 2010). Integrating the CBFM as a criterion for the EFT scheme will reward villagers' initiatives in protecting forested areas. The EFT scheme also needs to consider community activities to protect forested areas in the APL in their village, such as patrols, installing signs prohibiting illegal logging, and boundary markings.

The final criterion is forest and land fire prevention in APL. This criterion refers to the fact that simple rules aimed at fire prevention in forests managed by communities in East Kalimantan have existed for many decades (Karki, 2002; Nanang & Devung, 2004; Siombo, 2021; Suhardiman et al., 2002). Adopting this criterion also takes into consideration the satellite monitoring that shows many fire-prone regions have been found in the district. According to The District Disaster Management service, all sub-districts in the Kutai Timur are prone to fire disasters; 50 percent have a vulnerable status, half of which are in the very vulnerable category (Pemkab Kutai Timur, 2021). The district government should explore how villagers carry out

⁹ Local genius is the values and norms that become a guideline for a community in carrying out their daily activities. It refers to what humans know, how they behave, and what strategies they develop to sustain their existence where they live (Bakker, 2009b; Sartini, 2010; Tahir et al., 2021).

land-clearing practices related to this criterion. It is also crucial to check whether there are firebreaks around forested areas, including fire prevention efforts through installing signs and warning boards for land fire prevention. Moreover, it should also be observed whether there are assistance and guidance services that help prevent land fires in the village, as well as how to increase the capacity of the villagers to prevent and control forest and land fires themselves. The following Table 9 presents the proposed criteria and indicators for the protection of forested areas in APL.

Table 9. Criteria and indicators for the protection of forested areas in APL

No.	Criteria	Indicators
1.	Forested areas in APL in the village area	a. Percentage of forested areas in the APL compared to the village's size; b. an increase or decrease in forested areas in APL
2.	Village policies to protect forested areas in APL	a. village regulations related to the protection of forested areas in APL; b. village regulations regarding the village's spatial plan; c. village regulations regarding the protection of cultural sites in the APL (for certain villages)
3.	Local genius to protect forested areas in APL	a. longstanding customs/practices intended to protect forested areas in APL; b. traditional knowledge maintaining endemic biodiversity/flora and fauna
4.	The villagers undertake activities in protecting forested areas in APL	a. villagers' initiatives in protecting forested areas in APL (e.g., Patrol); b. signs and warning boards for illegal logging; c. boundary markings for forested areas in APL
5.	Forest and land fire prevention in APL	a. the practice of land clearing without burning; b. firebreaks around forested areas; c. signs and warning boards for land fire prevention; d. socialization and counseling on land fire prevention through various methods; e. capacity building of villagers for the prevention and control of forest and land fires

5.4.2 Integrating the EFT scheme into district policies on village funds allocation

To implement the EFT scheme properly, the district government should integrate it into district policies on ADD. This step consists of the following six stages.

5.4.2.1 Internalization

Understanding the EFT concept within the Kutai Timur district government and other stakeholders is necessary. At this step, the proponent disseminates the EFT concept

to the stakeholders in the district government. This step is significant because the EFT mechanism can only be well adopted if local stakeholders are well-informed about the benefits that can be derived from the EFT scheme (Ring & Barton, 2015, p. 442).

5.4.2.2 Development of criteria and indicators

At this phase, the following activities must be performed:

- identify and list the strategic issues in the environment and forestry sectors that will be used as criteria and indicators;
- select and establish criteria and indicators to assess village government performance;
- develop the EFT formulation and index based on the chosen criteria and indicators; and
- perform simulation.
- These stages are essential to ensure the quality of criteria and indicators. Qualified and acceptable criteria and indicators can improve the effectiveness of the EFT's implementation (Loft. et al., 2016, p. 9), particularly for village's social and environmental co-benefits.

5.4.2.3 Coordination

The coordination stage is intended to facilitate a discussion about the EFT scheme to receive input and support from the district apparatus organizations and village governments. The main issue will be how the stakeholders will understand and support the scheme, especially with regard to the use of criteria and indicators, and their impact on the number of funds received by each village. Coordination is required to ensure accountable and transparent information sharing about the qualifying criteria and indicators and to increase the efficiency and equity outcomes in the disbursement and spending of EFT funds.

5.4.2.4 Drafting instrument

The initial step to introduce the scheme into the Regency Head's ADD regulation is by reformulating it by adding the Affirmation Allocation and Performance-Based Allocation criteria.

5.4.2.5 Dissemination

It is necessary to disseminate the Regency Head's ADD regulation (and also regulations concerning the EFT) to the relevant district apparatus organizations, village governments, and other stakeholders. This dissemination must provide an overview of the EFT scheme stipulated in the Regency Head regulation.

5.4.2.6 Monitoring and Evaluation

Upon the implementation of the EFT, it is furthermore necessary to develop a monitoring and evaluation mechanism to measure its effectiveness in improving the village's performance in relation to ecological criteria and indicators. This stage is essential to ensure that the EFT scheme can be well executed and to help strengthen its implementation. Moreover, monitoring sessions and evaluations are required to examine how effective the EFT is in positively changing the behavior of village governments. Does the scheme enhance efforts to protect forested areas in APL and the environment for the better? The monitoring and evaluation results will serve as input for further developments of the concept and implementation of EFT. The following Chart 3 visualizes and describes the stages of EFT integration into district policies.

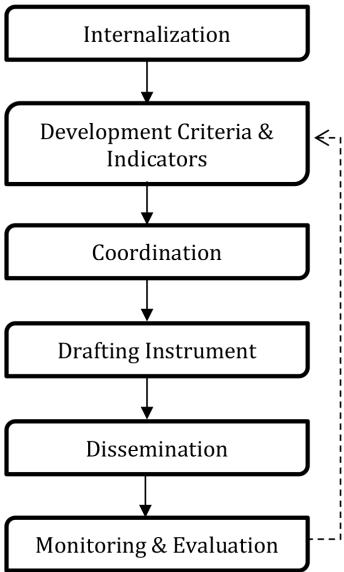


Chart 3. Stages of integrating the EFT scheme into district policies on ADD

5.4.3 The feasibility of implementing an EFT scheme in the Kutai Timur district

In terms of the scope of this research, this chapter focuses on the legal framework of ADD to investigate the feasibility of adopting the EFT scheme as a policy instrument to protect forested areas in the Kutai Timur district's APL. Based on the previous description, by applying the ROCCIPI method, this research discerns seven aspects of ROCCIPI into subjective and objective factors (Giri, 2016, p. 88).

The subjective factors deal with the actors' mindsets, which are influenced by interests and ideology. In this case, maintaining the forested areas gives the villages awards or compensation from the district government. With regards to their ideology, preserving the forested areas in APL is part of communities' longstanding traditional knowledge and customs. Besides, the effort to maintain forested areas in APL implements sustainable development and the government's commitment to controlling climate change. In the long term, safeguarding forested areas in the APL can reduce GHG emissions which cause global warming.

Meanwhile, the objective factors consist of rules, opportunities, capacity, communication, and processes. These five factors are related to the causes of institutional behavior that support or hamper achieving the goals set out in the regulation. Examining the rules shows that under GR Nr. 43 of 2014, the district government authorizes determination of ADD distribution and use. Moreover, the district's Mid-Term Development Plan (2021-2026) provides the opportunity to integrate the EFT scheme into district policies regarding the ADD. The opportunity to adopt the EFT scheme is available. The district government annually amends the Regency Head regulation to determine the amount of ADD and its use in each fiscal year. The district government can reformulate ADD distribution by granting affirmative and performance-based allocations to village performance achievements that help protect forested areas in APL. The EFT scheme does not increase the amount of ADD but rather reformulates the allocation mechanism.

When looking at capacity, there are three issues to be dealt with. The first concerns budget capacity. An urgent situation or need can make the district government reduce ADD allotment. In addition, the dependence of the district government on the fiscal transfer from the central government causes the financial capacity of the district to be vulnerable. Predominantly if the central government reduces or is late in transferring funds to the regional government. The second issue concerns data availability. The preparation of criteria and indicators of the EFT scheme should be supported by omnipresent data and remain available on an ongoing basis. The third issue concerns the local government capacity and commitment. Implementation of the EFT scheme requires adequate knowledge of the government apparatus, both on the district and village levels. Additionally, this also requires accountability to manage the EFT budget transparently and responsibly.

From a communication perspective, integrating the EFT scheme into ADD requires two steps. First, the scheme's internalization by the district and village apparatus. The internalization aims to promote a shared understanding of why the Kutai Timur

district needs to adopt an EFT scheme to protect the forested areas in its APL. The second step involves determining the criteria, indicators, and scores of each of those criteria and indicators. In the establishment of these three items, the district government should consider the goals and priorities of district development, the availability of data, and the opportunity for each village to implement it. Furthermore, with regards to the process, the stakeholders involved in the implementation of the EFT scheme are varied, making it a mandatory requirement to establish guidelines for the duties and functions of each of these actors. The guidelines should also explain the mechanism that enables the assessment of the performance of forest area protection in APL.

The above explanation shows that the opportunities for integrating the EFT scheme into the ADD regulation are available. Under the law and regulations pertaining to the village, the district government has jurisdiction to determine its allocation and distribution to each village. The possibility to accommodate the EFT scheme into the Regency Head's ADD regulation will improve through the reformulation of the budget by adding affirmative and performance-based allocations. Both criteria do not increase the number of existing ADD but rather reformulate its distribution. In the Kutai Timur district, the opportunity to accommodate the EFT scheme in the ADD is possible through amendments to Regency Head Regulation Nr. 36 of 2019 concerning ADD Guidelines (amended by Regency Head Regulation Nr. 56 of 2020). This policy intervention can be carried out since the district government annually amends the regulation to determine the ADD and its distribution in each fiscal year.

For most villages in Kutai Timur district, protecting the forest is a part of villagers' local wisdom and longstanding customs. It also reflects the government's commitment to implement sustainable development in an effort to help mitigate and control the consequences of climate change. The integration of the EFT scheme into the ADD regulation can encourage community participation in protecting the forested areas in APL, and help reduce GHG emissions.

The challenge in developing the EFT scheme is budget sustainability. Central government's ADD budget policies often change due to political or social dynamics. The government's decision to increase budget allocation for a village apparatus, for example, will affect the other allocations. Likewise, when the central government refocuses the budget to manage the consequences of Covid 19, this affects budget revenues on the regional level. For sustainable funding, the district government should integrate the protection of forested areas in the APL into medium and long-

term planning documents, not only for those related to the district's environment, but also those related to natural resources, and development programs.

Given that the EFT scheme is a new instrument introduced in ADD regulation, many actors do not understand the mechanism. This misunderstanding could be an obstacle to implementing the EFT scheme in the Kutai Timur district. To address this issue, the district government should provide guidelines for the EFT scheme that describe the actors' role and the mechanism for assessing affirmative and performance-based allocations. Another challenge is data availability. Developing criteria and indicators should be based on regularly available data. The criteria and indicators are valid in each village and available periodically. That said, in many cases, both district and village governments do not have accountable records management on their programs and activities. The criteria and indicators should consider three points: whether they are relevant to the goals and priorities of regional development, whether they can be applied in each village, and if they can be realized by the village authority. The lack of data can be anticipated by asking each village to fill out a form of assessed criteria and indicators, which the district government can then verify.

5.5 Conclusion

The forested areas in APL play a significant role in maintaining biodiversity and reducing greenhouse gas emissions. The Kutai Timur district government should protect these areas through comprehensive financial policies using the EFT scheme. By implementing this scheme, the district government can encourage and support village governments and villagers to preserve the remaining forests in the APL and in doing so help reduce deforestation and biodiversity loss, maintain carbon sequestration, and provide a better ecological balance.

Under GR Nr. 43 of 2014, the Kutai Timur district government could adopt the EFT scheme in the ADD regulation. The feasibility of this implementation is real because the district government annually amends the Regency Head regulation to determine and adjust the amount of ADD and its use in each fiscal year. The possibility to adopt the EFT scheme is also supported by the fact that the maintenance of forests is already an integral part of communities' traditional knowledge and longstanding customs. Additionally, the village will receive compensation for their participation in protecting forested areas in the APL and thus financially benefit from this. Furthermore, maintaining forested areas in APL can help reduce emissions, which

is in alignment with the government's efforts (central and regional) to fulfill its commitment to help mitigate and manage the effects of climate change.

To make the EFT scheme an interesting endeavour for stakeholders and to ensure its continued implementation in the Kutai Timur district, the district government should internalize the scheme. Apart from providing an overview of what the EFT entails, the district government should identify stakeholders' responses to the scheme, including the obstacles encountered and even the possibility of rejection. Using this information, the district government should develop criteria and indicators that take into consideration the goals and priorities of district development, the data availability, and the opportunity for each village to implement it. Once completed, coordination should be carried out, mainly on how the stakeholders understand the EFT scheme's criteria and indicators, and once this has been finalized the next step entails the integration of the scheme into ADD district policies.

The district government could reformulate the ADD by adding affirmation and performance-based allocation. After amending such a regulation, it is necessary to disseminate it to the relevant district apparatus organizations, village governments, and other stakeholders. Finally, the last step is monitoring and evaluation. Both activities are required to examine how effective the EFT scheme is in strengthening village governments' and villagers' efforts to protect forested areas in APL and the environment for the better. The monitoring and evaluation results will serve as input for further developments of the concept and implementation of EFT.

To overcome obstacles related to the lack of data availability, the preparation of EFT criteria and indicators should examine the goals and priorities of district development, village capacity and authority. In the assessment process, such obstacles could be addressed through self-assessment by the villages. Concerning budget sustainability, the district government needs to integrate its commitment to maintain the environment, natural resources, and development programs in relation to the APL's forested areas in its district development plan, both for the foreseeable future and in the long-term.

Conclusion

This thesis describes a study of the dynamics of natural resource management in East Kalimantan, Indonesia, by examining the decentralization and centralization of government authority in coal mining and oil palm plantations and other related industries, such as the environment, forestry, spatial/land planning, and investment. It highlights the impact of decentralization and centralization, which generates three significant effects. The first effect is an increase in disharmony among different levels of government, resulting in more conflicts between the central and local jurisdictions. This is true in cases or sectors where the central government wants to assert dominance, mainly where the relevant laws and regulations are ambiguous, inconsistent, and incomplete (see also Daemeter Consulting, 2015b; Fünfgeld, 2016; Stedman & Green, 2018, 2019).

Second, managing natural resources has become a point of contention due to decentralization and centralization of authority. There are two types of disputes that arise as a result. The first is a conflict between local communities, the state, or a company over land ownership. The second type of dispute occurs among local communities competing for a larger share of the benefits derived from natural resources. With more companies extracting natural resources like coal and oil palm plantations, coupled with the uncertainty of laws and policies, the number of disputes between companies, local communities, or among communities has increased (Muhdar et. al., 2020; Berenschot et al., 2021).

As this thesis identifies, the third effect is that companies' involvement has intensified in conflicts in claims over land use and environmental degradation. It also indicates an amplified part of companies, businesses, and the international market in East Kalimantan's natural resource industries, particularly coal mining and oil palm plantations. These circumstances lead to the fact that the exploitation of natural resources is not only seen as an economic activity but also has far-reaching social, cultural, political, ecological, and economic implications (Toumbourou et al., 2020; Li & Semedi, 2021).

Also, it can be argued that regarding such dynamics, it is critical to address how to govern natural resources, as shifting authority from the central government to the regions and vice versa creates ambiguity, inconsistency, and incompleteness of laws, leading to legal uncertainty and opportunism.

Research Findings

In this conclusion, I argue that the dynamics of natural resource management policies generate two distinctive features of the law governing natural resources: sectoral-based and multi-level regulations. Such dynamics result in legal uncertainty, demonstrated by three indicators: the ambiguity of provisions, inconsistency, and incompleteness of rules. In practice, these three forms of legal uncertainty contribute to the lack of supervision of permit holder activities in the coal mining and oil palm plantation sectors. In addition, the dynamics of natural resource management authority also generate issues with the lack of human resources (both quality and quantity) and the distribution of the supervision budget (Suastha & Kandi, 2016b).

Such circumstances make that the license instrument and related legislation have not been and are not successful in protecting all parties (Iskandar, 2019; Lund, 2021, 2022), as the nature of the permits and regulations in many situations lead to two significant issues. Firstly, there are conflicts over land use between the company and the government, the company and the community, coal mining and oil palm plantation companies, or among coal mining companies or oil palm plantation companies. Secondly, there is environmental damage, which leads to conflicts between the company and the community.

In the following sections, these main findings are elaborated in more detail in several sub-conclusions, while the main research questions of this thesis will also be answered.

The legal framework of coal mining and oil palm plantation in Indonesia

The first sub-question to examine in this thesis is: *What laws and regulations are available that regulate coal mining and oil palm plantation activities?* In Indonesia, the legal framework of natural resources management regarding coal mining and oil palm plantations is based on the state's right to control (*hak menguasai negara*), as stated in Article 33 paragraph (3) of Indonesia's 1945 Constitution. The Indonesian Constitutional Court ruled that the right means that on land and natural resources, the state holds the authority to make policies, administer, regulate, manage, and supervise. The jurisdiction should be performed to achieve the greatest prosperity of the people.

Article 33, paragraph (3) of the constitution also implies that the state must ensure that the utilization of natural resources is for the well-being of the people. This obligation covers protecting individuals in their access to natural resources and

providing for a safe and healthy environment. It is confirmed, in turn, by Article 28H paragraph (1), which states that every person should have the right to enjoy a proper and healthy environment. Under both provisions, the state is responsible for providing a legal instrument to respect, protect, and fulfill these rights.

Concerning coal mining, this industry operates under the 2009 Mining Law, which has undergone three amendments: the 2014 Regional Government Law, the Mining Law, and the 2020 Job Creation Law. In addition to these laws, some government and presidential regulations are also in place to regulate the main issues in the law, and the MoEMR has established more detailed rules to implement them. As for the oil palm plantations, the 2014 Plantation Law, as amended by the 2020 Job Creation Law, governs this sector, followed by various government, presidential, and MoA regulations that serve as implementing rules. In practice, performing coal mining and palm oil plantation activities is also linked to regulations in other sectors such as environment, forestry, spatial/land planning, and investment.

In regard to the legal framework of the governance of both sectors, I also raised another sub-question: *How do these laws and regulations divide authority in these matters among the different levels of government?* The coal mining sector has experienced dynamics of authority transfer in its legislation. Initially, based on the 2009 Mining Law, national, provincial, and district or municipal governments had jurisdiction to regulate and grant permits. This was amended with the 2014 Regional Government Law, which stripped the regent and municipal governments of their authority in the coal mining sector. Through Law Nr. 3 of 2020, the central government centralized the coal mining sector, where the authority to manage and grant permits lies only with the central government.

On the other hand, unlike the coal mining sector, the authority to regulate and grant permits for oil palm plantations, as stated in the 2014 Plantation Law, has yet to be amended. The central, provincial, and district or municipal governments are authorized to regulate and issue permits for oil palm plantations under their respective jurisdictions. The division of authority, as explained above, demonstrates that the laws and regulations governing coal mining and oil palm plantations have a multi-level feature. The central, provincial, and district governments can set their policies and regulations in this regard.

The second feature is sectoral based, meaning that coal mining and oil palm plantations are related to other sector regulations such as environment, spatial planning/land, and forestry (Figure 3 and 4). In this case, the relevant ministries

are able to draft regulations about coal mining and oil palm plantations. In order to conduct coal mining activities, the permit holder must comply with various regulations laid out by other sectoral authorities. These regulations include conducting environmental impact analyses as directed by MoEF and adhering to the regional spatial planning directives ordered by MoAASP/NLA. Suppose the concession is situated in a forest area; the coal mining company must apply for a borrow-to-use forestry approval (previously known as a borrow-to-use forestry permit) from the MoEF.

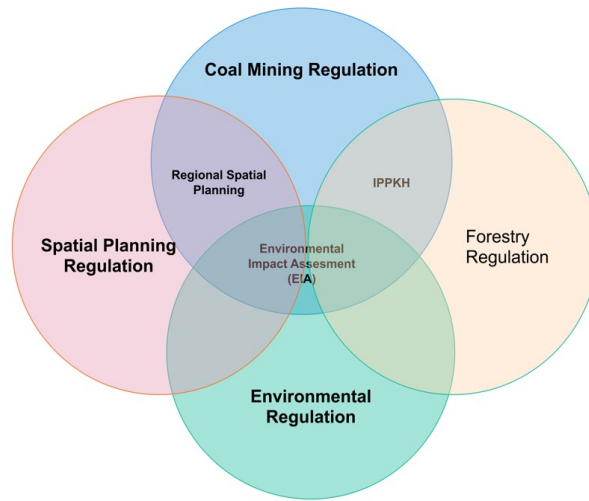


Figure 3. Overlaps in Sectoral-Based Regulation in Coal Mining

Likewise, in the oil palm plantation industry, a company must obtain a location permit from the local government and a Right of Cultivation (HGU) from the MoAASP/NLA. Additionally, the company must comply with the regulations set by MoEF to provide an environmental impact analysis. The company must also fulfill its obligation to perform corporate social responsibilities to the surrounding community per the requirements set by the MoA, such as facilitating the development of plantations for smallholder farmers. When a company intends to establish its operations in a forest area, it must seek approval from MoEF by applying for a forest area release (FAR). In addition, the company must obtain Timber Utilization Permits (*Izin Pemanfaatan Kayu/IPK*) from the MoEF to clear the land in the forest area for oil palm cultivation.

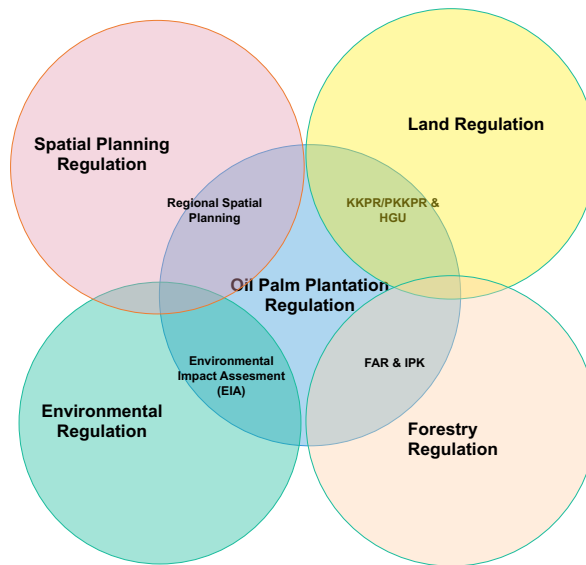


Figure 4. Overlaps in Sectoral-Based Regulation in Oil Palm Plantations

These two features create competition between the central and regional governments and among the various ministries responsible for natural resource sectors, such as MoEMR, MoA, MoEF, and MoAASP/NLA. This competition often raises ego-sectoral, leading to uncoordinated law-making among levels of the governments and the ministries/sectors. Consequently, it generates legal uncertainty, both in the provisions of legislation and its implementation.

Uncertainty of the legal framework of coal mining and oil palm plantation and its causes

This thesis also investigated a second sub-question: *Do existing laws and regulations cause legal uncertainty regarding authority in coal mining and oil palm plantation activities, and if so, what are its causes?*

The tiered and sector-based legislations of coal mining and oil palm plantations may create legal uncertainty due to ambiguous provisions. It arises when a word or term has an uncertain meaning or intention. It is then interpreted differently by regulations at different levels (central, provincial, and district) and in different sectors (coal mining, plantation, environment, forestry, spatial planning, and land). The ambiguity in laws and regulations can undermine their application and the ability to comply with them.

In coal mining, a clause guarantees holders of mining permits for exploration the ability to obtain a production permit. However, it is unclear whether the licensor must issue the production permit unconditionally or if there are conditions that must be met as outlined by law. Similarly, the 2014 Plantation Law requires plantation companies to consult with indigenous communities that hold *ulayat* land rights before transferring land for plantation. However, the term "land transfer" is ambiguous and requires clarification to avoid the potential release of land rights and the termination of legal relationships between indigenous peoples and their land. This ambiguity puts customary law communities at risk, as their recognition hinges on the existence of their territories. If *ulayat* land rights were transferred, it could lead to the loss of their territories and their associated communal identity.

The second consequence of tiered and sector-based legislation is inconsistent regulation. Different sectors of governments manage the same object based on their level of interest or industry. This circumstance leads to inconsistent laws and regulations, sometimes even negating one another. This is apparent in the mining industry when it comes to reclamation and post-mining restoration. While the Mining Law of 2009 and GR Nr. 78 of 2010 on Reclamation and Post-mining require mining companies to fill open mining pits after operations are complete, MoEMR Regulation Nr. 7 of 2014 set otherwise by allowing companies to leave open holes designated for residential areas, tourism, water sources, or cultivation areas. It has led to companies neglecting their responsibility to restore the environment and ecosystem. Inconsistencies in regulation are also found in the plantation sector, specifically regarding the obligation of a plantation company to facilitate community plantations. The 2014 Plantation Law mandates that a company develops community plantations that cover at least 20 percent of their plantation permit area. However, MAASP/NLA Regulation Nr. 18 of 2021 orders the development of a surrounding community plantation for a minimum of 20 percent of the total HGU area. It raises the question of whether the 20 percent figure refers to the area of permits or HGU.

The incompleteness of law is the third consequence of tiered and sector-based legislation. It may arise when a higher regulation delegates further arrangements regarding a provision to a lower regulation, although such a regulation has never been made. The incompleteness of norms can also occur if the applicable regulations do not anticipate some developments or situations. When laws and regulations are incomplete, they cannot be applied to cases without clarifying their meaning.

In the coal mining sector, it is indicated, for instance, by the absence of the settlement of conflict over land use, mainly when the community or person and company are

unable to reach an agreement. The 2009 Mining Law and its implementing regulations mandate a permit holder to settle the concession area with land rights holders, but this assumes mutual agreement between all parties. The legislation of this sector does not provide resolution norms in case of disagreement about compensation or when a mining company cannot acquire land from an unwilling owner. To address this issue, the government has released GR Nr. 96 of 2021, which outlines that the central government will facilitate mediation through the MoEMR and the MoAASP/NLA if parties are unable to resolve the matter. However, there have yet to be any reports of the new regulations being implemented. In the plantation sector, the lack of several regulations to implement the 2014 Plantation Law is a concern. The law required 32 implementing regulations, comprising 21 government and 11 ministerial regulations. The law stated that all implementing regulations should be put into effect within two years of its introduction. However, since its promulgation, only one of the 21 government regulations, i.e., Government Regulation Nr. 24 of 2015 concerning the Collection of Plantation Funds, has been enacted. At the time of writing, the MoA has yet to promulgate any of the 11 ministerial regulations mandated by the 2014 Plantation Law.

The lack of clarity, consistency, and completeness in the laws governing coal mining and oil palm plantations has resulted in legal uncertainty for all stakeholders involved. It seems like there are varying interpretations of the laws by the government and the companies or communities implementing them, which makes it challenging for them to follow the rules. The inconsistent provisions need to be clarified to determine which rules should be applied by the stakeholders. Moreover, incomplete norms often do not include the necessary technical rules, leading to a legal vacuum. As a result, the licensing governance of coal mining and oil palm plantations has become uncertain, causing conflicts between companies, companies versus government, companies versus local communities, or between local communities, as well as environmental degradation.

The existing legal framework hampers the government's authority in supervising coal mining and oil palm plantation activities

The third sub-question that this thesis seeks to answer is: *To what extent does the existing legal framework hamper the government's authority in supervising coal mining and oil palm plantation activities?*

The legal uncertainty in the legal framework of the coal mining and plantation sectors creates a lack of supervision by central and regional governments. Ambiguous provisions have led to various interpretations among the government, permit

holders, and communities in its implementation. In addition, there are numerous regulatory inconsistencies, especially between the mining and plantation industries and other sectors, such as the environment, land use, spatial planning, and forestry. Different settings for the same object can trigger a debate on which rules should be applied.

At the same time, incomplete provisions cause a legal vacuum at the implementation level because the guidelines or more detailed directions to implement a regulation are unavailable, and it hampers adequate supervision in both sectors. This legal uncertainty in supervising coal mining and oil palm plantation activities may degrade the environment and trigger conflicts over land use between communities and coal mining and oil palm plantation companies.

Furthermore, the lack of supervision has caused coal mining and oil palm permit holders to benefit most. For instance, a clause in coal mining regulations permits companies to keep mining pits open if they are too large to fill or for other technical reasons that are not specified. This rule can result in permit holders evading their responsibility for reclamation and post-mining activities. Additionally, the misunderstanding surrounding the transfer of supervisory authority by the provincial government has led to permit holders who violate regulations feeling "safe," as the government claims to no longer have the ability to oversee coal mining activities. Likewise, in plantation legislation, the absence of guidelines regarding supervision in plantation laws presents a challenge for local authorities to oversee oil palm plantation operations effectively. Despite the local government's attempts to control these activities, they are hampered by the incompleteness of regulations. For instance, the district government might choose to postpone or not impose sanctions for violations committed by permit holders because of the absence of sanctions for the district government if they do not revoke the permits of violating companies.

Societal and environmental problems emerge in coal mining and oil palm plantation concession and its correlation with the law and its implementation

In order to explore the impact of legal uncertainty, this thesis poses the fourth sub-question: *What societal and environmental problems emerge in areas used for coal mining operations and oil palm plantations, and how do these relate to law and its implementation?*

The communities around concessions of coal mining and oil palm plantations face two significant problems: land use conflicts and environmental damage.

Conflicts in the coal mining and oil palm plantation sectors are generally triggered by land acquisition for mining and plantation activities. The leading cause is the government issuing coal mining and oil palm plantation permits in settlements or agricultural areas.

Conflict arises in terms of land use for coal mining and oil palm plantation activities due to two main reasons. Firstly, communities often resist releasing their land for these activities. For instance, in Mulawarman village, Kutai Kartanegara district, a villager who refused to sell his land to the company was intimidated by the mining company by demolishing his neighbor's houses that had been sold to the company. Moreover, the company also conducted activities just behind the fence around his house. Secondly, a community and one or more mining and plantation companies did not agree on compensation or the land's selling price. When companies and community members hold different views on land rights, the latter may resort to blockades and protests. However, the former often respond by pressing criminal charges against those who persist in asserting their land rights. The companies accuse protesting communities of obstructing or interfering with mining operations, as prescribed by the 2009 Mining Law and are typically upheld by the court. Although this approach may end the blockades, it does not address the underlying conflict or foster better relationships between the parties concerned.

Mining activities cause environmental damage by destructing and contaminating agricultural irrigation, polluting agricultural and settlement areas and leading to a lack of clean water for the community. It triggers conflicts between communities and coal mining companies. Similarly, ecological damage caused by oil palm plantation activities can lead to disputes between the communities and the plantation companies. The local government's indecisiveness in acting against palm oil companies has led to protests from impacted communities, further intensifying the conflicts. However, the authorized agencies suggest that as long as the companies are willing and able to meet communities' demands for compensation or restoration of damaged environments, no further action is required.

Ambiguous and inconsistent norms can create a situation where the government and companies interpret laws unilaterally. Communities that lack access to policymakers and knowledge of their rights are often disadvantaged, making it challenging to understand and interpret regulations. Companies, on the other hand, are typically well-connected to political circles at both local and national levels, giving them an advantage in negotiations. Furthermore, when there are inconsistencies in licensing provisions, companies may apply rules that protect their interests rather than those

of the community. In terms of incomplete provisions, companies may exploit this to carry out mining or plantation activities, even if it causes damage to the environment or conflicts with local communities.

Promoting more balanced and integrated natural resource policies and regulations in East Kalimantan

With regards to the opportunities in the regional government's law-making process on natural resource management, this thesis examined the fifth sub-question below: *Which interventions can be suggested to develop more balanced and integrated natural resource policies and regulations in East Kalimantan?*

In order to create a well-balanced and integrated natural resource legislation and policies in East Kalimantan, the regional governments must establish regulations on natural resource management that are equitable, sustainable, and provide opportunities for public participation, as per their jurisdiction.

At the district level, the government can implement the Ecological Fiscal Transfer (EFT) policy, which would redistribute revenue from a district to village governments based on ecological indicators. This policy is essential for safeguarding and managing forested areas outside the forest zone, also known as other areas of use (APL). These areas play a critical role in supporting community life systems by preserving microclimates, providing habitats for wildlife, reducing pollution, and supporting community livelihoods. However, APL is not legally classified as a forest zone, so it is vulnerable to conversion into plantations, mining areas, and settlements.

The opportunity to implement the EFT scheme relates to the authority of district governments related to village funds (ADD). According to Government Regulation Nr. 43 of 2014, as amended by GR Nr. 47 of 2015, district governments have been granted the authority to manage the allocation and utilization of ADD. Each district is responsible for preparing the ADD, which is updated annually through a regent regulation to determine the amount of ADD and its utilization in each fiscal year.

I proposed this approach for the Kutai Timur district in East Kalimantan, as it aligns with the local communities' traditional knowledge and customs of preserving forests. Additionally, the village will receive compensation for protecting forested areas in the APL, providing them with financial benefits. Furthermore, maintaining forested areas in APL can help reduce emissions, in line with the national and regional government's efforts to mitigate and manage the effects of climate change.

District governments in East Kalimantan, and even across Indonesia, can adopt the EFT scheme to protect the environment and natural resources from degradation. The criteria and indicators can be tailored to the specific conditions of each region, making the approach flexible. Furthermore, managing and allocating the use of village funds is under the authority of the district government.

General Remarks and Recommendation

This thesis considers the study of legal uncertainty significant for two reasons. First, to examine internal aspects of regulations that may pose challenges to their enforcement. Concerning this reason, I found that norm ambiguity, inconsistency, and rule incompleteness can contribute to legal uncertainty. Second, to investigate the impact of legal uncertainty on the society where the regulation is implemented—something that can only be identified by understanding its socio-legal context.

In this regard, this thesis demonstrated that legal uncertainty regarding the governance of coal mining and palm oil plantations can harm the environment and lead to conflicts over land rights claims (cf. Lund, 2021). It is important to note that companies are able to handle legal uncertainty more effectively than individuals or groups who lack influence in the law-making process and may not have access to the necessary information regarding legal changes (Otto et al., 2008; Paoli et al., 2013; Simarmata, 2019). This circumstance gives companies an advantage in utilizing legal uncertainty to their benefit.

This thesis contributes to studying the legislation of natural resource management in Indonesia by providing three valuable insights: firstly, it illuminates how the regulations governing coal mining and oil palm plantations, as well as related areas encompassing environmental, forestry, spatial planning, land, and investment, can generate legal uncertainty resulting from ambiguity, inconsistency, and incompleteness. Secondly, it analyzes this legal uncertainty's impact on these sectors' licensing governance, including its supervision. Finally, it investigates the ways in which this uncertainty can lead to environmental degradation and land use conflicts in the coal mining and oil palm plantation sectors.

In addition, such a legal uncertainty issue highlighted earlier cannot be effectively addressed through gradually centralizing government authority in the coal mining sector, just as it cannot be solved by decentralizing jurisdiction in the oil palm plantation sector. I argue that this is because the regulation of other related industries,

such as environment, forestry, spatial planning/land, and investment, has not been wholly integrated into a comprehensive natural resource management policy.

Furthermore, in the New Indonesian Frontiers framework, I propound that decentralization is not the only policy that puts the mechanisms and legal instruments for managing and controlling natural resources in a "grey area" (Peluso & Lund, 2011; De Jong et al., 2017). It is also generated by the centralization of authority and the lack of integration of natural resource management into a comprehensive policy. These unclear mechanisms and legal instruments have led to East Kalimantan becoming an area where various social, cultural, socioeconomic, and economic-ecological practices, discourses, and traditions compete, particularly over natural resources.

In addition to legislation on natural resources, regional governments can simplify regulations by adopting the omnibus method to harmonize statutory regulations to avoid ambiguous, inconsistent, and incomplete regulations. This method can reduce sectoral egos or differences in views from different levels of government that often create conflicts between statutory regulations. Since harmonizing regulations on natural resources at the regional level involves many sectors and interests, the preparation must be transparent, accountable, and participatory.

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Declaration data management

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Laws and Regulations

Mining

- Law No 4 of 2009 concerning Mineral and Coal Mining (amended by Law Nr. 20 of 2020)
- Government Regulation No 22 of 2010 concerning Mining Area
- Government Regulation No 23 of 2010 concerning Implementation Of Mineral and Coal Mining Business Activities, last amended by Government Regulation No 8 of 2018
- Government Regulation No 55 of 2010 concerning the Development and Control of Management of Mineral and Coal Mining
- Government Regulation No 78 of 2010 concerning Reclamation and Post-mining
- Minister of Energy and Mineral Resources Regulation No 37 of 2013 concerning Technical Criteria for Mining Allocated Areas
- Minister of Energy and Mineral Resources Regulation No 37 of 2013 concerning Delegating Authority to Grant Mineral and Coal Mining Licensing Authority for The Implementation of Single Submission Services to The Head of The Investment Coordinating Board.
- Minister of Energy and Mineral Resources Regulation No 43 of 2015 concerning Evaluation Procedures for Issuing Permits of Mineral and Coal Mining
- Minister of Energy and Mineral Resources Regulation No 34 of 2017 concerning Mineral and Coal Mining Permits

Minister of Energy and Mineral Resources Regulation No 25 of 2018 concerning Exploitation of Mineral and Coal Mining, last amended by Minister of Energy and Mineral Resources Regulation No 11 of 2019

Minister of Energy and Mineral Resources Regulation No 26 of 2018 concerning the Implementation of Good Mining Rules and Supervision of Mineral and Coal Mining

Minister of Energy and Mineral Resources Regulation No 70 of 2020 concerning Procedures for Granting Areas, Licensing, and Reporting on Mineral and Coal Mining Business Activities

Minister of Energy and Mineral Resources Decree No 1827 of 2018 concerning Guidelines for Reclamation and Post-Mining Implementation in Mineral and Coal Mining Business Operations.

Minister of Energy and Mineral Resources Decree Nr. 1827 of 2018 concerning The Guidance of The Implementation of Good Mining Practice.

Minister of Energy and Mineral Resources Decree Nr. 2303 of 2017 concerning The Work Guidelines of The Mining Inspector.

Circulate Letter of Directorate General of Mineral and Coal of, Ministry of Energy and Mineral Resources No 04. E/30/DJB/2015

Plantation

Law Nr. 39 of 2014 concerning Plantation (last amended in 2020)

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Declaration Data Management PhD Thesis

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Appendices

Summary

Samenvatting

Acknowledgements

About the author

Summary

This study investigates the distribution of authorities in natural resource management during the decentralization era in Indonesia, with the East Kalimantan Province as main study site. This research focuses on the coal mining sector and oil palm plantation sectors. The focus on the coal mining and oil palm plantation sectors is based on four purposive criteria. First, coal mining and oil palm plantations play a vital role in the provincial economy. The second is their environmental impacts. The expansion of coal mining and oil palm plantations generates devastating effects on environmental conditions, such as threats to biodiversity and increased greenhouse gas emissions. Third, land conflicts have emerged concerning coal mining and oil palm plantations, while the political change in natural resource management concerns the fourth consideration.

Since November 2014, the 2004 Regional Government Law has been substituted by the 2014 Regional Government Law. The new law transfers the authority over coal mining from the district government to the provincial government. In contrast, the authority to govern and control the activities of oil palm plantations remains in the district. Comparing the policies and decisions at these two levels of authority following the 2014 Regional Government Law provides new insights into the interests and operations of these different levels of government authority. This distinction between the governance of coal mining and oil palm plantations is compounded by developments in the coal mining sector that need to be taken into account, namely the amendment of the 2009 Mining Law with Law No. 3 by the central government in 2020. An important point of this law was the centralization of the coal mining authority, shifting the provincial jurisdiction to the central level. It made the central government the sole authority in the coal mining sector.

In addition, it is noted that the development of laws and policies in the coal mining and oil palm plantation sector is very dynamic, which often leads to ambiguity, inconsistency, and incompleteness of legislation. It causes confusion and unclear regulations and policies in local politics, the economy, and society, since it brings widespread legal uncertainty and opportunism.

Against this background, this thesis aims to investigate how the government regulates coal mining and oil palm plantations operations in East Kalimantan and what the effects are of the legal uncertainty that ensues from the regulations outlined above. This central research question has been articulated in five subquestions addressed in the various studies reported on in this thesis and described in the following chapters.

Chapter one focuses on the following sub-questions: 1) *What laws and regulations are available that regulate coal mining activities, and how do laws and regulations divide authority in these matters among the different levels of government?* 2) *What types of legal uncertainty exist within laws and regulations regarding authority in coal mining activities, and what are its causes?*

In addressing these questions, this chapter describes the decentralization of the authority to manage coal mining. Taking the East Kalimantan province as the research site, this study demonstrates that mining governance rests with different levels and institutions of government, which have divided and delegated government authority and efficiency, which is compounded by the fact that revisions of relevant laws fail to consider this complexity. As a corollary, coal mining governance is hampered by the law's ambiguity, inconsistency, and incompleteness, causing legal uncertainty for the stakeholders. Furthermore, this part describes its consequences, namely that conflicts among companies or between companies and local communities are frequently plaguing mining operations. The role of legal ambiguity, inconsistency, and incompleteness in these conflicts will be shown, while it is argued that it is, in fact, a factor that causes conflict.

Chapter two aims to answer the following sub-questions: 1) *What laws and regulations are available that regulate oil palm plantations activities, and how do laws and regulations divide authority in these matters among the different levels of government?* 2) *What types of legal uncertainty exist within laws and regulations regarding authority in oil palm plantations activities, and what are its causes?*

This chapter focuses on the authority of governing oil palm plantation licensing and finds that it is intertwined with other sectors of legislation, such as land, spatial planning, environment, and forestry. In addition, the governance of these sectors is arranged at multiple levels, including the central, provincial, and district governments that can all regulate it under their respective authorities. This chapter describes how the complexity of the governance of oil palm plantation licensing leads to ambiguity, inconsistency, and incompleteness of provisions. An ambiguous norm causes different interpretations by the government and plantation companies that are implementing them. At the same time, inconsistent provisions are confusing for the execution stage as it is not always clear, which rules should be applied by the government or plantation companies considering that two or more different regulations govern a particular object inconsistently. Furthermore, norms are frequently incomplete to the extent that technical rules are not available, thus creating a legal vacuum. These three factors create legal uncertainty in oil palm plantation licensing governance.

The main discussion in **chapter three** concerns the complexity of supervising the environmental management of coal mining areas in East Kalimantan. This chapter addresses two sub-questions: 1) *To what extent does the legal uncertainty affect the government's authority in supervising coal mining activities?* 2) *What problems emerge for local populations in East Kalimantan living in areas used for coal mining operations, and how do these relate to legal uncertainty?*

This chapter finds that the current cross-sectoral and multi-level arrangement of mining supervision leads to uncertain regulations regarding the supervision of the environmental management of coal mining operations. This study also shows that incomplete provisions lead to a legal vacuum at the implementation level. Inconsistent, ambiguous, and vague norms cause uncertainty and, as a consequence, different understandings of how supervision of environmental management in coal mining areas is to be performed. Moreover, supervisors are limited by a lack of capacity, funding, and personnel. Mining and environmental inspectors tend not to follow up on environmental damage if permit holders assure them of their intentions to address such issues. This chapter concludes that mining permit holders benefit most from this situation. The legal uncertainty and lack of supervisory capacity have destroyed settlements and agricultural areas, generating considerable environmental damage and pollution in the villages surrounding the mining operations. This ecological degradation may also trigger conflicts between coal mining companies and communities.

Chapter four addresses the following sub-questions: 1) *To what extent does legal uncertainty affect the government's authority in supervising oil palm plantations activities?* 2) *What problems emerge for local populations in East Kalimantan living in areas that have been used for oil palm plantations, and to what extent do these follow from legal uncertainty?*

This chapter highlights a series of problems in the legal framework that is in place to govern and facilitate governmental supervision of the activities of oil palm plantation corporations. The regulation on supervision of oil palm plantations spans multiple levels of government (central, provincial, and district) that all hold relevant authority. Control is also cross-sectorally based since plantation permit holders are subject to environmental, land, and forestry sectors. The consequence of sector-based and tiered legislation is the incompleteness of provisions and overlaps between respective authorities, making the supervision overly complicated and confusing in practice.

This study finds that the legal framework of oil palm plantation supervision suffers from legal incompleteness, which causes legal uncertainty and hampers adequate

control. We identify three leading causes of the incompleteness of law in supervising oil palm plantations: the delay in establishing implementing regulations, the absence of sanctions in case of non-compliance, and the use of imprecise words and complex terms and language. Furthermore, incomplete regulations on supervision in this sector allow the local government to refrain from revoking the plantation permit even when permit holders have violated their obligations and the procedural requirements for revocation have been met. As illustrated in the case of the Kutai Kartanegara district, when an oil palm plantation company contaminated water sources, the local government did not impose sanctions on the company concerned. Such circumstances may degrade the natural environment and trigger conflicts between communities and oil palm plantation companies.

Chapter five discusses how to protect the remaining forested areas in the non-forest zone (APL) from the threat of land-based activities on a large scale, such as oil palm plantations and coal mining. This topic is intended to address the sub-question: *Which interventions can be suggested to develop more balanced and integrated natural resource policies and regulations in East Kalimantan?*

This study proposes the Ecological Fiscal Transfer (EFT) as a policy instrument to protect the forested areas in APL in the Kutai Timur district—which has the largest area in APL in East Kalimantan, Indonesia. This chapter demonstrates that the Kutai Timur district government can adopt the EFT scheme, given that they have the authority to manage the APL and village funds. In order to adopt the scheme, the district government should develop criteria and indicators by considering the goals and priorities of district development, the availability of data, and the opportunity for every village to implement it. Furthermore, the district government requires integrating the EFT scheme into district village fund allocation policies. By implementing this scheme, the district government can encourage village governments and villagers to protect and manage forested areas in their region.

In the **conclusion**, this study presents its main findings and offers a concluding discussion around the research questions. It summarizes that legislation regarding coal mining and oil palm plantation is also intertwined with other sectors, such as the environment, spatial planning, land, and forestry. In addition, the governance of the sectors is organized at multiple levels (central, provincial, district, or municipal). Consequently, its development is very dynamic, with fast-growing legislation resulting in uncertainty of the law, which manifests itself primarily in ambiguous provisions, and inconsistent and incomplete regulations.

The ambiguous and inconsistent provisions may cause uncertainty because they create different understandings when supervising coal mining and oil palm plantations operations. At the same time, incomplete regulations lead to a legal vacuum at the implementation level. It occurs because implementing regulations or technical provisions ordered by higher regulations are unavailable or yet to be stipulated.

This study also concludes that the legal uncertainty generates considerable environmental damage and pollution in the villages surrounding coal mining and oil palm plantations operations. The ecological degradation may also trigger conflicts between coal mining and oil palm plantation companies and communities. The legal uncertainty has generated regulations and permits as instruments that facilitate coal mining and oil palm plantation activities, with due consequences for the environment and often leading to conflicts with communities. The license instrument and related regulations have not protected and are not successful in protecting all parties, as the nature of the permits and regulations in many situations leads to environmental damage as well as conflicts around the coal mining and oil palm plantations areas. Furthermore, the regulations and permits have not led to a sustainable use of natural resources and fail to fulfill the constitutional mandate to reach the greatest prosperity of the people.

This dissertation proposes the EFT scheme as a policy instrument for developing more balanced and integrated natural resource legislation and policies in East Kalimantan. Through this scheme, the district government can integrate the EFT scheme into policy regarding district village fund allocation to conserve the forested areas in the district jurisdiction. By implementing this instrument, the district government can encourage village governments and villagers to protect and manage forested areas in their village areas. In addition to legislation on natural resources, the district government should establish a policy on community empowerment, particularly related to the indigenous people around coal mining and oil palm concessions or locations designated to both sectors in spatial planning.

Samenvatting

Deze studie onderzoekt de verdeling van bevoegdheden betreffende het beheer van natuurlijke hulpbronnen gedurende het decentralisatietijdperk in Indonesië. De provincie Oost-Kalimantan is de belangrijkste studielocatie. Het onderzoek richt zich op de steenkoolmijnsector en de oliepalmlantagesector. De focus op deze twee sectoren is gebaseerd op vier criteria. Ten eerste spelen de mijnbouw en oliepalmlantages een cruciale rol in de provinciale economie. Het tweede criterium is de impact op het milieu. De uitbreiding van de steenkoolmijnbouw en oliepalmlantages heeft verwoestende gevolgen voor het milieu, bedreigt de biodiversiteit en verhoogt de uitstoot van broeikasgassen. Ten derde hebben de steenkoolmijnbouw en oliepalmlantages aanleiding gegeven tot landconflicten, terwijl de politieke verandering in het beheer van natuurlijke hulpbronnen het vierde criterium vormt.

Sinds november 2014 is de regionale overheidswet uit 2004 vervangen door de regionale overheidswet uit 2014. Deze nieuwe wet draagt het gezag over de steenkoolwinning over van de districtsregering naar de provinciale overheid. Daarentegen blijft de bevoegdheid om de activiteiten van oliepalmlantages te besturen en te controleren bij het district berusten. Het vergelijken van het beleid en de beslissingen van deze twee overheidsniveaus volgend op de regionale overheidswet van 2014 leveren nieuwe inzichten op over de respectievelijke belangen en activiteiten. Dit onderscheid tussen het bestuur van steenkoolmijnbouw en oliepalmlantages wordt nog verergerd door ontwikkelingen in de steenkoolmijnsector, namelijk de wijziging van de Mijnbouwwet uit 2009 met Wet nr. 3 door de centrale overheid in 2020. Een belangrijk punt van deze wet was de centralisatie van de mijnbouwautoriteit, waardoor de provinciale jurisdictie naar het centrale niveau werd verschoven. Het maakte de centrale overheid tot de enige autoriteit in de kolenmijnsector.

Bovendien dient te worden opgemerkt dat de ontwikkeling van wetten en beleid in deze twee sectoren zeer dynamisch is, wat vaak leidt tot dubbelzinnigheid, inconsistentie en onvolledigheid van de wetgeving. Zij veroorzaakt verwarring en onduidelijke regelgeving en beleid in de lokale politiek, de economie en de samenleving, omdat ze wijdverbreide rechtsonzekerheid en opportunisme met zich meebrengt.

Tegen deze achtergrond heeft dit proefschrift tot doel te onderzoeken hoe de overheid de steenkoolmijnbouw en oliepalmlantages in Oost-Kalimantan reguleert

en wat de effecten zijn van de rechtsonzekerheid die voortvloeit uit de hierboven geschetste bestuurlijke verdeling. Deze centrale onderzoeksvraag is verwoord in vijf deelvragen, die worden beantwoord in de verschillende onderzoeken waarover in dit proefschrift wordt gerapporteerd en die in de volgende hoofdstukken worden beschreven.

Hoofdstuk één richt zich op de volgende deelvragen: 1) Welke wet- en regelgeving is beschikbaar voor de regulering van mijnbouwactiviteiten, en hoe verdelen wet- en regelgeving de bevoegdheden in deze zaken over de verschillende bestuursniveaus? 2) Welke soorten rechtsonzekerheid bestaan er binnen wet- en regelgeving betreffende het gezag over mijnbouwactiviteiten, en wat zijn de oorzaken ervan?

Bij het beantwoorden van deze vragen beschrijft dit hoofdstuk de decentralisatie van de bevoegdheid om de steenkoolwinning te beheren. Door de provincie Oost-Kalimantan als onderzoekslocatie te nemen, toont deze studie aan dat het bestuur van de mijnbouw berust bij verschillende niveaus en instellingen van de overheid, die het overheidsgezag en efficiëntie hebben verdeeld en gedelegeerd, wat nog wordt verergerd doordat herzieningen van relevante wetten geen rekening houden met deze complexiteit. Als gevolg hiervan wordt het bestuur van de steenkoolmijnbouw belemmerd door de dubbelzinnigheid, inconsistentie en onvolledigheid van de wet, waardoor rechtsonzekerheid voor de belanghebbenden ontstaat. Daarnaast beschrijft dit hoofdstuk de gevolgen van deze situatie, namelijk doordat mijnbouwactiviteiten vaak geteisterd worden door conflicten tussen bedrijven of tussen bedrijven en lokale gemeenschappen. De rol van juridische ambiguïteit, inconsistentie en onvolledigheid in deze conflicten wordt aangetoond, en er wordt beargumenteerd dat dit in feite de oorzaak van conflicten is.

Hoofdstuk twee heeft tot doel de volgende deelvragen te beantwoorden: 1) Welke wetten en regels zijn beschikbaar om de activiteiten van oliepalmlantages te reguleren, en hoe verdelen deze wetten en regels de autoriteit in deze zaken over de verschillende bestuursniveaus? 2) Welke vormen van rechtsonzekerheid bestaan er binnen wet- en regelgeving betreffende de autoriteit op het gebied van activiteiten op oliepalmlantages, en wat zijn de oorzaken daarvan?

Dit hoofdstuk concentreert zich op de bevoegdheid om vergunningen voor oliepalmlantages te verlenen en constateert dat deze verweven is met andere sectoren van de wetgeving, zoals land, ruimtelijke ordening, milieu en bosbouw. Bovendien is het bestuur van deze sectoren over meerdere niveaus verdeeld, waaronder de centrale, provinciale en districtsoverheden, die hier allemaal over

regulerende autoriteit beschikken. Dit hoofdstuk beschrijft hoe de complexiteit van het beheer van vergunningen voor oliepalimplantages leidt tot dubbelzinnigheid, inconsistentie en onvolledigheid van bepalingen. Een dubbelzinnige norm veroorzaakt verschillende interpretaties door zowel de overheid als door de plantagebedrijven die de norm moeten implementeren. Daarnaast zijn inconsistente bepalingen verwarrend voor de uitvoeringsfase, omdat het niet duidelijk is welke regels door de overheid of plantagebedrijven moeten worden toegepast. Bovendien zijn normen vaak onvolledig in die zin dat technische, implementerende regels niet beschikbaar zijn, waardoor een juridisch vacuüm ontstaat. Deze drie factoren zorgen voor rechtsonzekerheid in het vergunningenbeheer voor oliepalimplantages.

De belangrijkste discussie in **hoofdstuk drie** betreft de complexiteit van het toezicht op het milieubeheer van steenkoolmijngebieden in Oost-Kalimantan. In dit hoofdstuk worden twee deelvragen beantwoord: 1) In welke mate beïnvloedt de rechtsonzekerheid de autoriteit van de overheid bij het toezicht op de steenkoolmijnactiviteiten? 2) Welke problemen ervaart de lokale bevolking in Oost-Kalimantan die in gebieden woont waar mijnbouwactiviteiten plaatshebben, en hoe houden deze verband met rechtsonzekerheid?

In dit hoofdstuk wordt vastgesteld dat de huidige sector overschrijdende en multi-level regeling van mijnbouwtoezicht leidt tot onzekere regelgeving betreffende het toezicht op het milieubeheer van steenkoolmijnactiviteiten. Uit dit onderzoek blijkt ook dat onvolledige bepalingen leiden tot een juridisch vacuüm op uitvoeringsniveau. Inconsistente, dubbelzinnige en vage normen veroorzaken onzekerheid en, als gevolg daarvan, verschillende interpretaties van de uitvoering van toezicht op het milieubeheer in steenkoolmijngebieden. Bovendien worden toezichthouders beperkt door een gebrek aan capaciteit, financiering en personeel. Mijnbouw- en milieu-inspecteurs hebben de neiging milieuschade te negeren indien vergunninghouders hen verzekeren van hun intenties om dergelijke problemen aan te pakken. In dit hoofdstuk wordt geconcludeerd dat houders van een mijnbouwvergunning het meeste profijt hebben van deze situatie. De rechtsonzekerheid en het gebrek aan toezichtcapaciteit hebben nederzettingen en landbouwgebieden vernietigd, waardoor aanzienlijke milieuschade en vervuiling is ontstaan in de dorpen rondom de mijnactiviteiten. Deze ecologische achteruitgang kan ook conflicten tussen steenkoolmijnbedrijven en gemeenschappen veroorzaken.

Hoofdstuk vier behandelt de volgende deelvragen: 1) In welke mate beïnvloedt rechtsonzekerheid de autoriteit van de overheid bij het houden van toezicht op de activiteiten van oliepalimplantages? 2) Welke problemen ervaart de lokale bevolking

in Oost-Kalimantan die in gebieden woont die zijn gebruikt voor oliepalimplantages, en in hoeverre zijn deze het gevolg van rechtsonzekerheid?

Dit hoofdstuk belicht een aantal problemen binnen het juridische kader gericht op het besturen en vergemakkelijken van het overheidstoezicht op de activiteiten van oliepalimplantagebedrijven. De regelgeving over het toezicht op oliepalimplantages omvat meerdere bestuursniveaus (centraal, provinciaal en district), die allemaal relevante bevoegdheden hebben. De controle is ook sector overschrijdend, aangezien houders van een plantagevergunning onderworpen zijn aan de sectoren milieu, land en bosbouw. Het gevolg van sectorale en gelaagde wetgeving is onvolledigheid van bepalingen en overlap tussen de respectievelijke autoriteiten, waardoor het toezicht in de praktijk te ingewikkeld en verwarrend wordt.

In dit hoofdstuk wordt geconcludeerd dat het wettelijke kader voor het toezicht op oliepalimplantages te kampen heeft met juridische onvolledigheid, wat rechtsonzekerheid veroorzaakt en adequate controle belemmert. We identificeren drie belangrijke oorzaken van deze onvolledigheid: de vertraging bij het vaststellen van uitvoeringsregels, het ontbreken van sancties in geval van niet-naleving, en het gebruik van onnauwkeurige woorden en complexe termen en taalgebruik. Bovendien geeft de onvolledige toezichtregelgeving in deze sector de lokale overheid de mogelijkheid om af te zien van het intrekken van de plantagevergunning, zelfs als vergunninghouders hun verplichtingen hebben geschonden en aan de procedurele vereisten voor intrekking is voldaan. Zoals geïllustreerd in het geval van het district Kutai Kartanegara. Toen een oliepalimplantagebedrijf daar de waterbronnen vervuilde, legde de lokale overheid het bedrijf geen sancties op. Dergelijke omstandigheden kunnen de natuurlijke omgeving aantasten en conflicten veroorzaken tussen gemeenschappen en oliepalimplantagebedrijven.

Hoofdstuk vijf bespreekt hoe de resterende beboste gebieden in de niet-boszone (APL) kunnen worden beschermd tegen grootschalige landgebonden activiteiten zoals oliepalimplantages en mijnbouw. Dit hoofdstuk beantwoordt de subvraag: welke interventies kunnen worden voorgesteld om evenwichtiger en geïntegreerder beleid en regelgeving op het gebied van natuurlijke hulpbronnen in Oost-Kalimantan te ontwikkelen?

Deze studie stelt de Ecologische Fiscale Overdracht (EFO) voor als beleidsinstrument om de beboste gebieden in de APL zone in het district Kutai Timur te beschermen. Dit district heeft het grootste gebied in een APL zone in de hele provincie Oost-Kalimantan. Dit hoofdstuk laat zien dat de districtsregering van Kutai Timur het EFO-

programma kan overnemen, aangezien zij de bevoegdheid heeft om de APL en de dorpsfondsen te beheren. Om dit plan te implementeren moet de districtsregering criteria en indicatoren ontwikkelen gebaseerd op de doelstellingen en prioriteiten van de districtsontwikkeling, de beschikbaarheid van gegevens en de mogelijkheid voor elk dorp om deze uit te voeren. Daarnaast moet de districtsregering zorgdragen dat het EFO-programma wordt geïntegreerd in het beleid voor de toewijzing van fondsen aan districtsdorpen. Door dit plan uit te voeren kan de districtsoverheid dorpsbesturen en dorpelingen aanmoedigen om bosgebieden in hun regio te beschermen en te beheren.

In **de conclusie** presenteert dit onderzoek de belangrijkste bevindingen en biedt het een afsluitende discussie rond de onderzoeksvragen. Het vat samen dat wetgeving met betrekking tot de mijnbouw en de oliepalmlantage verweven is met andere sectoren, zoals het milieu, de ruimtelijke ordening, land- en bosbouw. Het bestuur van deze sectoren is op meerdere niveaus georganiseerd (centraal, provinciaal, arrondissement of gemeentelijk). De ontwikkeling ervan is dan ook zeer dynamisch, met snelgroeiende wetgeving die resulteert in rechtsonzekerheid, wat zich vooral uit in dubbelzinnige bepalingen en inconsistente en onvolledige regelgeving.

Dubbelzinnige en inconsistente bepalingen kunnen onzekerheid veroorzaken omdat ze tot verschillende inzichten leiden bij het toezicht op de activiteiten op het gebied van de steenkoolmijnbouw en oliepalmlantages. Tegelijkertijd leidt onvolledige regelgeving tot een juridisch vacuüm op uitvoeringsniveau. Dit komt voor doordat uitvoeringsvoorschriften of technische voorzieningen, opgelegd door hogere regelgeving, niet beschikbaar zijn of nog moeten worden vastgesteld.

Deze studie concludeert ook dat de rechtsonzekerheid aanzienlijke milieuschade en vervuiling veroorzaakt in de dorpen rond de mijnbouw en oliepalmlantages. Deze ecologische achteruitgang kan conflicten veroorzaken tussen bedrijven en gemeenschappen. De rechtsonzekerheid heeft geleid tot regelgeving en vergunningen als instrumenten die de mijnbouw en oliepalmlantageactiviteiten vergemakkelijken, met alle gevolgen van dien voor het milieu en vaak leidend tot conflicten met gemeenschappen. Het licentie-instrument en de daarmee samenhangende regelgeving hebben niet alle partijen beschermd en doen dat nu ook niet, aangezien de aard van de vergunningen en regelgeving in veel situaties leidt tot milieuschade en tot conflicten rond de mijnbouw- en oliepalmlantages. Bovendien hebben de regelgeving en vergunningen niet geleid tot een duurzaam gebruik van natuurlijke hulpbronnen en voldoen ze niet aan het constitutionele mandaat om de grootste welvaart van het volk te bereiken.

Dit proefschrift stelt het EFO-programma voor als een beleidsinstrument voor het ontwikkelen van meer evenwichtige en geïntegreerde wetgeving en beleid inzake natuurlijke hulpbronnen in Oost-Kalimantan. Via dit plan kan de districtsoverheid het EFO-programma integreren in het beleid betreffende de toewijzing van fondsen aan districtsdorpen teneinde de bosgebieden binnen de jurisdictie van de districtsoverheid te behouden. Door dit instrument te implementeren kan de districtsoverheid dorpsbesturen en dorpelingen aanmoedigen om bosgebieden in hun dorpsgebieden te beschermen en te beheren. Naast de wetgeving over natuurlijke hulpbronnen zou de districtsregering een beleid moeten opstellen inzake de *empowerment* van de gemeenschap, vooral met betrekking tot de inheemse bevolking woonachtig rondom concessies voor steenkoolmijnen en oliepalimplantages, of locaties die in de ruimtelijke ordening aan beide sectoren zijn toegewezen.

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"It is good to have an end to journey towards; but it is the journey that matters, in the end."~Ursula K. Le Guin

The Left Hand of Darkness (1969)

First and foremost, I would like to praise Allah the Almighty, the Most Gracious, and the Most Merciful, who has granted me countless blessings, knowledge, and opportunities so that I could accomplish this dissertation.

This PhD journey began with my involvement in the initial New Indonesian Frontiers (NIF) workshop in Samarinda, East Kalimantan, Indonesia, on 21-22 February 2012. My participation in the seminar then engaged me as a PhD researcher in the NIF project with a research topic about the contestation of natural resource management in East Kalimantan. This research project investigates the correlation between laws and policies concerning natural resource management and the exploitation of such resources in East Kalimantan.

This topic is interesting because, on the one hand, Indonesia strives to develop a clear and consistent legal system to govern its society and resources. Simultaneously, however, the laws and regulations on natural resources and the division of profits emanating from their exploitation are inconsistent, ambiguous, and incomplete. Moreover, the central government holds the authority to manage natural resources and enforce the law, previously in the hands of the regional government. Social, political, and power relations at these lower levels of government make the law and actual practices differ considerably. Here lies the double focus of this project, which examines, first, where and how inconsistencies, ambiguities, and incompleteness in the statutes give rise to competition between authorities and, second, how these legal shortcomings are employed locally to authorize specific constellations of control over resources and the profits they generate.

My involvement in this project has also been lengthy and tortuous. While most of the PhD candidates involved in the project had left for Nijmegen, the Netherlands, in 2013, I was still struggling to overcome my doubts about joining the project. My family and other considerations made me "half-heartedly" submit for a Dikti scholarship. Even the Project Leader, Edwin de Jong, asked me several times whether I would still participate in this project. Amid these doubts, Edwin visited East Kalimantan in the first week of July 2014 and invited me to meet at Sepinggan Airport, Balikpapan.

During the short meeting, Edwin offered a fellowship programme from Radboud University, a sandwich program enabling PhD students to stay three months each year in the Netherlands over a period of four years. Edwin's offer motivated me to keep participating in the NIF project. In March - April 2015, I left for Nijmegen to write a research proposal, while I started my first three-month period in September - November 2016.

Nanos gigantum humeris insidentes ('Standing on the shoulder of giants').

Such ancient wisdom taught me that every success does not stand alone. It is inseparable from the role of others. As said by Isaac Newton in his letter to Robert Hooke in 1675: "If I have seen further, it is by standing on the shoulders of giants." Preparing this thesis was undoubtedly one of my most challenging pieces of work. I deeply realized that completing this manuscript would not have been possible without the support and nurturing of many people. Throughout this dissertation's writing, I have received a great deal of support and assistance, and one of the excitements of completing the manuscript is looking back at everyone who has lent a hand to me over the past seven years.

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"So when you have finished [your duties], then stand up [for worship]. And to your Lord direct [your] longing." (The Qur'an--Ash-Sharh 94:7-8)

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ABOUT THE AUTHOR

Mohamad Nasir graduated with a Bachelor of Law from the Faculty of Law, Universitas Islam Indonesia, Yogyakarta (1997). He then studied environmental law in the Faculty of Law, Universitas Gadjah Mada, Yogyakarta, and was awarded a Master of Law in 2001.

He started his career as a lecturer at the Faculty of Law, Universitas Balikpapan, East Kalimantan, in September 2001. He has been teaching several subjects related to environmental and natural resources law. He also researched and was involved in advocacy efforts with several local, national, and international NGOs in East Kalimantan, mainly on environmental, natural resource management, good governance, and law-making issues.

In 2013-2019, as the Program Manager of the Prakarsa Borneo (NGO), he organized the SETAPAK program in East Kalimantan, which is supported by The Asia Foundation (TAF) and the British Government on Climate Change Unit (UKCCU). In 2017-2019, he managed the Tiram Research Project in East Kalimantan, Indonesia, jointly with Laurens Bakker (University of Amsterdam) and Muhamad Muhdar (Prakarsa Borneo). This project was funded by the International Development and Law Organization (IDLO). Both projects seek to develop and strengthen the participatory law-making capacities of government, CSOs, and local communities in regional resource management.

He has presented his research at several international conferences and has also (co-)published a number of articles in international journals, among which *Law and Development Review*, *Journal of Land Use Science, Society and Natural Resources*, the *Forest and Society Journal*, and the *Australian Journal of Asian Law*.

